

**T.C.
SAKARYA UNIVERSITY
SOCIAL SCIENCES INSTITUTE
INTERNATIONAL RELATIONS DEPARTMENT**

**STRATEGIZING STATE BEHAVIOR ON DOMESTIC AND
FOREIGN AFFAIRS: APPLYING GAME THEORY TO MEDIA
DISCOURSE, POLITICS, AND CONFLICT MANAGEMENT**

Mariam Mohamed Elshahawi Ibrahim Elhadidi ARIBA

DOCTORATE DISSERTATION

Supervisor: Prof. Dr. Ertan EFEGİL

SEPTEMBER - 2022

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Department: International Relations

“This dissertation on 21/09/2022 date was defended online, and by the jury members whose names are attached below, was accepted with the unanimity of votes.”

JURY MEMBER	HIS OPINION
Prof. Dr. Ertan EFEGİL	Successful
Doç. Dr. Fikret BİRDİŞLİ	Successful
Doç. Dr. Osama AMOUR	Successful
Dr. Öğr. Üyesi Avni Önder HANEDAR	Successful
Dr. Öğr. Üyesi Murat BAYAR	Successful

ETİK BEYAN FORMU

Enstitünüz tarafından Uygulama Esasları çerçevesinde alınan Benzerlik Raporuna göre yukarıda bilgileri verilen tez çalışmasının benzerlik oranının herhangi bir intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve Etik Kurul Onayı gerektiği takdirde onay belgesini aldığımı beyan ederim.

Etik kurul onay belgesine ihtiyaç var mıdır?

Evet ☐

Hayır ☒

(Etik Kurul izni gerektiren araştırmalar aşağıdaki gibidir:

- Anket, mülakat, odak grup çalışması, gözlem, deney, görüşme teknikleri kullanılarak katılımcılardan veri toplanmasını gerektiren nitel ya da nicel yaklaşımlarla yürütülen her türlü araştırmalar,
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- İnsanlar üzerinde yapılan klinik araştırmalar,
- Hayvanlar üzerinde yapılan araştırmalar,
- Kişisel verilerin korunması kanunu gereğince retrospektif çalışmalar.)

Mariam ARIBA

21/09/2022

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ABBREVIATIONS

(IR)	: International Relations.
(USSR)	: The Union Of Soviet Socialist Republics.
(EU)	: The European Union.
(UN)	: The United Nations.
(US)	: The United States.
(PDT)	: Perfect Deterrence Theory.
(TCG)	: The Tripartite Crisis Game.
(CDT)	: Classical (Or Rational) Deterrence Theory.
(DTD)	: The Decision-Theoretic Deterrence Theory.
(GP-A)	: Great Power A.
(GP-B)	: Great Power B.
(DHMIC)	: Deception Hypergame Model Of Interstate Conflict.
(HG)	: Hypergame.
(P-I)	: Power I In the International System Under A Conflict/Deterrence Situation With Power II.
(P-II)	: Power II In the International System Under A Conflict/Deterrence Situation With Power I.
(HG)₁, (HG)₂, (HG)₃	: The First (Perceived) Hypergame In A Hypergame Model, The Second, The Third, Etc.
(G)	: Game.
(G)₁, (G)₂, (G)₃	: The First (Perceived) Game In A Hypergame Model, The Second, The Third, Etc.
(DTD-AE)	: The Decision-Theoretic Deterrence & Asymmetric Escalation.
(CLRE)	: The Constrained Limited Response Equilibrium In (PDT).
(ELRE)	: The Escalatory Limited Response Equilibrium In (PDT).
(D)	: Defect.
(CC)	: Conditional Cooperation.
(C)	: Cooperation/Cooperate.
(C-C; D-D)	: Cooperate-Cooperate; Defect-Defect (In The (Tit-for-Tat) Strategy).

(C-D; D-C)	: Cooperate-Defect; Defect-Cooperate (In The (Tat-for-Tit) Strategy).
{(+ D) F}	: Deception Factor.
(- (D)_n F)	: No Deception Factor Existing In A Play I, Play II, Or Play III Of The Hypergame For A Player (Where (n) Is The Play Number 1, 2, 3, Etc.).
(+ (D)_n F)	: A Deception Factor Existing In A Play I, Play II, Or Play III Of The Hypergame For A Player (Where (n) Is The Play Number 1, 2, 3, Etc.).
{{(Actor I)/(A₁)/(A₁)/(a)}	: The International System's Power I "(P-I)."
{{(Actor II)/(A₂)/(A₂)/(b)}	: The International System's Power II "(P-II)."
(T_{A2})	: The Threat (T) Practiced By (A ₁) Versus (A ₂), Or The "(A ₂)-Directed-Threat."
(T_{A1})	: The Threat (T) Practiced By (A ₂) Versus (A ₁), Or The "(A ₁)-Directed-Threat."
{{(± D) F_n}	: The (Deception Factor) Used By (n) or (Number) of Actors, Either (A ₁), (A ₂), Or Both.
(E_a)^{±1}	: The Equilibrium (E) Achieved For (A ₁) Or (a).
{{(E_{va})^{±1}}	: The Equilibrium Value Of (A ₁) Or (a).
(T_{A2})²	: A Multiplied Threat (T ²) Practiced By (A ₁) Versus (A ₂), Or The "(A ₂)-Directed-Doubled Threat."
{{(A-M)_{A1}}	: The "Action(s) And Move(s)" Made By (A ₁) and Directed Towards (A ₂) Or Other Powers/States In The System.
{{(A-M)_{A2}}	: The "Action(s) And Move(s)" Made By (A ₂) And Directed Towards (A ₁) Or Other Powers/States In The System.
(- T_{A1})	: The "Non-Threat (-T) Practiced By (A ₂) Versus (A ₁)," Or The "(A ₁)-Directed-Disabled Threat."
{{(E_b)^{±1}}	: The Equilibrium (E) Achieved For (A ₂) Or (b).
{{(E_{vb})^{±1}}	: The Equilibrium Value Of (A ₂) or (b).
{{(CC)F}	: The (Capability and Credibility Factor Of Threat T).

{{(CC)F1}}	: The (Capability and Credibility Factor Of Threat T) For (A ₁).
{{(CC)F2}}	: The (Capability and Credibility Factor Of Threat T) For (A ₂).
{B_{A1}}	: The (Balance Of Powers Relations) Achieved For (A ₁).
(B_{v(A1)})	: The (Balance Of Powers Relations) Value Of (A ₁).
{B_{A2}}	: The (Balance Of Powers Relations) Achieved For (A ₂).
(B_{v(A2)})	: The (Balance Of Powers Relations) Value Of (A ₂).
{{(E_{a+b})⁺²}	: The (A ₁) And (A ₂)’s Equilibrium.
(B_{A1+A2})	: The (Mutually Balance Of Powers Relations) Achieved For (A ₁) And (A ₂).
(ISPCDR)	: Initial Stability In The (International System’s) Powers’ Conflict And Deterrence Relation.
(DEL)	: Deterrence Entanglement Law.
(B)	: Balance Of Deterrence.
(P / (p))	: The Probability.
(MAD)	: Mutually Assured Destruction.
(BMDs)	: Ballistic Missile Defense Systems.
{{(Tn), (UT), (NT), (Td)}	: {(Threaten); (Unthreatened); (Not Threaten); (Threatened)}, Respectively.
(B_{ab})	: The Balance Of Deterrence (B) For Power I/Actor I Or (a/A ₁), And Power II/ Actor II Or (b/A ₂).
(+D)	: A Deception (D) Case Of Inter-State Conflict Situations.
(-D)	: A Perception (Or Non-Deception/D) Case Of Inter-State Conflict Situations.
(AC-XY)	: Actor I’s Created Internal Enemy (X) And External Enemy (Y).
(PRC)	: The People’s Republic Of China/China.
(ROC)	: The Republic Of China/Taiwan.
(CCP)	: The Chines Communist Party.
(TP-A)	: A Triangle Pro-Alliance, Which Is Composed Of “Israel,

	Arab States, And Ramallah's Authority" As Three Angles Of The Triangle.
At The (TP-A)'s Angle (a)	: The (Institutional Decision & Alliance Effect) Possibility I.
At The (TP-A)'s Angle (b)	: The (Collectively Immediate & Extended Deterrence) Possibility II.
At The (TP-A)'s Angle (c)	: The (Gaza's Authority-Union Membership) Possibility III.
The (A) Sphere	: The Effect Of $(a + b)$ Causes, Where (N_1) Is The (Influence I) Of (A).
The (B) Sphere	: The Effect Of $(b + c)$ Causes, Where (N_2) Is The (Influence II) Of (B).
(TA-A)	: A Reversed Triangle-Anti-Alliance.
At The (TA-A)'s Angle $(-a)$	: The (Non-Institutional Decision & Non-Alliance Effect) Anti-Possibility I, Or The (Non-a).
At The (TA-A)'s Angle $(-b)$	: The (Non-Collectively Immediate & Extended Deterrence) Anti-Possibility II, Or The (Non-b).
At The (TA-A)'s Angle $(-c)$	: The (Non-Gaza's Authority-Union Membership) Anti-Possibility III, Or The (Non-c).
The $(-A)$ Sphere	: The Effect Of $\{(-a) + (-b)\}$ Causes, Where (N_3) Is The (Anti-Influence I) Of $(-A)$, And $(-A)$ Is The Opposite Of (A).
The $(-B)$ Sphere	: The Effect Of $\{(-b) + (-c)\}$ Causes, Where (N_4) Is The (Anti-Influence II) Of $(-B)$, And $(-B)$ Is The Opposite Of (B).
(W)	: Wave.
(CW)	: Counter-Wave.
(WP)	: A Wave Player.
(CWP)	: A Counter-Wave Player.
(NATO)	: North Atlantic Treaty Organization.
(FA-V)	: Future Advance Towards Victory.

(DU)	:The (Distance Unit).
(V/v)	: The (Value)
(+ ∞ DU)	: Infinite (Distance Unit).
(− ∞ DU)	: Minus Infinite (Distance Unit).
(WL)	: The (War Length) Factor.
(SWO)	: The (Stabilization of War Objectives) Factor
{DU (FA-V)}	: The (Distance Unit) For A Player From Its (Future Advance Towards Victory).
(LIs)	: Level I Strategies.
(LIIs)	: Level II Strategies.
(LIIs)	: Level III Strategies.
(Px)	: Player (x).
(Py)	: Player (y).
(DU)_v	: The (Distance Unit) Value.
(W₁)	: The First War-Wave.
(W₂)	: The Second War-Wave.
(W₃)	: The Third War-Wave.
(W₄)	: The Fourth War-Wave.
(A-D)	: The (Attack-Defense) Key Wave-Strategy.
(D-A)	: The (Defense-Attack) Key Wave-Strategy.
(CASO)	: The (Crimea), (Abkhazia), (South Ossetia), And (Odesa).
(BBC)	: The British Broadcasting Corporation.
(HG₁) And (HG₂)	: The Firstly Played Hypergame And The Secondly Played Hypergame, Consecutively, In An Actual Situation.
The (sv₁, sv₂)	: The Strategy Vector Of Actor I And Actor II, Respectively.
(HG)₁ And (HG)₂	: The First Hypergame Model, And The Second Hypergame Model, Respectively.
(G_{1.1}, G_{1.2})	: The Individually-Perceived And/Or Played Game

	Within The Entire First Hypergame Model (HG) ₁ Or A Firstly Played-Hypergame (HG ₁), By Actor I And Actor II, Consecutively.
(G_{2.1}, G_{2.2}, G_{2.3}, G_{2.4})	: The Individually-Perceived And/Or Played Game Within The Entire Second Hypergame Model (HG) ₂ Or A Secondly Played-Hypergame (HG ₂), By Actor I, Actor II, Actor III, And Actor IV, Respectively.
(G₁, G₂)	: The Perceived Game Of Actor I And Actor II, Consecutively, Under An Individually-Perceived And Played Hypergame Of An Actor.
(HG_{1.1}, HG_{1.2})	: The Individually-Perceived And/Or Played Hypergame Within The Entire First Hypergame Model (HG) ₁ Or A Firstly Played-Hypergame (HG ₁), By Actor I And Actor II, Respectively.
(HG_{2.1}, HG_{2.2}, HG_{2.3}, HG_{2.4})	: The Individually-Perceived And/Or Played Hypergame Within The Entire Second Hypergame Model (HG) ₂ Or A Secondly Played-Hypergame (HG ₂), By Actor I, Actor II, Actor III, And Actor IV, Consecutively.
The (O₁) and (O₂)	: The War Outcome I And War Outcome II, Respectively.
The (D₁, D₂, D₃, D₄, D₅, D₆)	: The First Dynamic, The Second, The Third, The Fourth, The Fifth, And The Sixth Ones, Consecutively, In A (‘Non-Chance Space’ Reduced War-Hexagon).
The (KS₁, KS₂, KS₃, KS₄)	: The (Key Strategy “KS”) Used In The First Four Dynamics Respectively.
(WFs)	: The Surrounding (War Factors).
{{(HDs)_x}	: The Player (x)’s War-Hexagon Dynamics.
{{(HDs)_y}	: The Player (y)’s War-Hexagon Dynamics.
(vf)	: The (Invariability Factors).
(O)	: The Outcome.
The (n & N)	: In The Framing Analysis, The (n) Is The Sub-Number

	Of Each Extracted Frame's Sample, And The (N) Is The Total Number Of All Extracted Frames Sample.
(CCG)	: The Clash Of Civilizations Game.
(CU)	: The (Cultural Understanding) Strategy.
The (CC) In (CCG)	: The (Cultural Conflict) Strategy In The (Clash of Civilizations Game).
(CU + HNERO)}	: {Culture Understanding + Hegemony With Non-Equivalent Representation Of The Other}.
(CU + BCERO)}	: {Cultural Understanding + Balance Of Culture With An Equivalent Representation Of The Other}.
(I) In The (CCG)	: The (Israelis) In The (Clash Of Civilizations Game).
(T) In The (CCG)	: The (Turks) In The (Clash Of Civilizations Game).
(A) In The (CCG)	: The (Arabs) In The (Clash Of Civilizations Game).
(K) In The (CCG)	: The (Kurds) In The (Clash Of Civilizations Game).
(NECR)	: The Non-Equivalent Cultural Representation.
(CS)	: Cultural Subjugation/Cultural Subjection.
(MCNE)	: The Mutual Cultural Non-Equivalency.
(PI)	: Parallel Ignoring.
(PB)	: Pushing Back.
(ECR)	: The Equivalent Cultural Reciprocity.
(CCM)	: Cultural Conflict Matureness.
(OCC)	: Omnipotent Cultural Conflict.
The (S), (I), And (H) Strategic Actions	: The (Subordination), (Isolation), And (Hostility), Respectively.
(occ_{1,2,3,4,5}; or_{1,2,3,4,5})	: The Outcomes I, II, III, IV, And V For Player I (i.e., The Occident/Israelis/Turks), And The Outcomes I, II, III, IV, And V For Player II (i.e., The Orient/Arabs/Kurds), Consecutively, In The (Clash Of Civilizations Game).
(GNF)	: The Game In The Normal Form.
(GEF)	: The Game In The Extensive Form.
The (T) In Figure 22 Only	: The Terrorists.

(P. B.)	:The Terrorists’ Popular Base.
(R-C. E. P.)	: Repeated-Cultivated Effect’s Process.
(CT-A)	: The (Critical Transformation-A).
(CT-B)	: The (Critical Transformation-B).
(CCT-AB)	: The (Center-Critical Transformation: A-B).
(N)	: The (Total Influence).
{E (S-CE)}	: The (Establishment Of A Secure-Cultural Environment).
(MB)	: The (Muslim Brotherhood) Movement.
(HRW)	: Human Rights Watch.
(IMT)	: International Mediators Team.
(LAS)	: The League Of Arab States.
(OIC)	: The Organization Of Islamic Cooperation.
(AU)	: The African Union.
(SAW)	: The State(s)/Entity Affected By The War/Conflict.
(PPHGM)	: The (Positivity Of Peace Hypergame Model).
(PPE)	: The Positivity Of Peace Equilibrium.
(GHP vs. RHW)	: Global Hegemony Of Peace Versus Realist Hegemony Of War’s Inevitability.
(EP-MIR)	: Elite-Publics’ Mutually Impact Realm.
(PPF)	: Peace-Public Flak.
{CC(Re-So-Rec)}	: Conventional Constructivist Strategies; Rehabilitation, Socialization, And Reconciliation.
(FPH)	: Fledgling Peace Hegemony.
(OPH)	: Omnipotent Peace Hegemony.
(PBD)	: Peace-Broker Discourse.
(ISOS)	: Input-Shifted-Output Strategies.
(GHG-D)	: Global Hegemonic Governance & Discourse.
(GP & SA)	: Global Publics & State-Actors.
(3P)	: Pressure-Practicing Powers.
(IMI)	: International Mediation Institution.
(±PSB)	: Neutralization of Peace Spoiling Behaviors.

(MD-PHNI)	: (Media Diplomacy + PH-NI), Media Diplomacy Of Peace-Hegemony-Oriented-(Re-perceived) National Interests.
(H-IPR)	: Hegemonic Institution, Perceptions And Predispositions, And Re-Perceived Reality.
(RCP)	: Re-Constructed Peace.
(IPC)	: Imposed Peace-Consensus.
(GTIR)	: Global Transformation Initial Realm.
(AD-G)	: An (Adoption and Gratification) Sphere.
(CL-D)	: Collective Diplomacy.
(COD)	: Coercive Diplomacy.
(MIR)	: A Peace-Hegemony-Oriented Mass-Ideological Rehabilitation.
(B-MNP)	: Bargaining Strategies Of Mediation, Negotiation, And Peace Talks.
(IEs)	: Interference Effects.
(SI¹)/(SI¹EE)	: (Strategic Interactions) ¹ /The (Strategic Interactions) ¹ Equilibrium Equation.
(A¹) And (A²)	: Actor I, And Actor II, Respectively, In The (Strategic Interactions) ¹ And (Strategic Interactions) ² .
The {(C) + (D) + (CC)}	: In The (PPHGM) Only, The (Cultivation; Disciplinization; And Conventional Constructivist Approaches).
(SI²)/(SI²EE)	: (Strategic Interactions) ² /The (Strategic Interactions) ² Equilibrium Equation.
The (ag)	: The (Absolute Gains) In The (Positivity Of Peace Hypergame Model).
The (CU)	: In The (PPHGM) Only, The (Collective Utility).
(U)	: Utility.
(PPEE)	: The Positivity Of Peace Equilibrium Equation.
(U²)	: Doubled Utility.
(U³)	: Tripled Utility

(CPRs)	: Conditional Parallel Relations.
(So; Sn; S)	: The (Strategy Outcome), (Strategy Numbers), And (Strategy), Consecutively.
(BPSHM)	: The (Balance Of Peace-State Hypergame Model).
(U_{-u})	: A Utility Of Minus Value.
(U_Z)	: A Utility Of Zero Value.
(U_L)	: A Utility Of Low Value.
(U_M)	: A Utility Of Mid Value.
(U_H)	: A Utility Of High Value.
(U₁)	: A Utility Of The Highest/Perfect Value.
(PA)	: Political Authority.
(DG)	: Dissident Group(s)/Movement(s).
(MP)	: Mediation Power.
(CP)	: Coercive-Diplomacy Power.
(V_{1.1}; V_{1.2}; V_{1.3}; V_{1.4})	: The Strategic Preference Vectors Of Player I, Player II, Player III, And Player IV, Respectively, As Perceived And/Or Played By One Of Which Under Its Understood Game Within The Entire First Hypergame Model Or (HG) ₁ .
(V_{2.1}; V_{1.2}; V_{2.3}; V_{2.4}; V_{2.5})	: The Strategic Preference Vectors Of Player I, Player II, Player III, Player IV, And Player V, Consecutively, As Perceived And/Or Played By One Of Which Under Its Understood Game Within The Entire Second Hypergame Model Or (HG) ₂ .
(BN)	: Branding And Naming.
(SP)	: Systematic Persecution.
(GR)	: Social, Political, And Diplomatic Integration.
(LPS)	: Limited Power-Sharing.
(IDD)	: Imposed Disciplinary Doctrine.
(RR)	: Rebellion/Revolution.
(RC)	: Regime Change.
(MSSEPS)	: Maintenance Of The State-System's Existing Political

	Structures.
(ERMLC)	: An (Existing Regime's Mass-Legitimization And Consensus).
(A-COD)	: Active-Coercive Diplomacy.
(P-CS/R-PP)	: Pro-Conflict Settlement/Resolution Policy-Making Participation.
(CO-EX)	: A (Conditionality Of Existence) Zone.
{{(S-PRS) PA's SPO}	: A Socio-Political Reconciliation Sphere's Political Authority (PA)'s Starting Point.
(N-PM)	: Neutral-Positive Mediation.
(PIRC)	: A (Possible-Instability And Resuming Conflict) Sphere.
{{(S-PRS) PA's EPO}	: A Socio-Political Reconciliation Sphere's (PA)'s Ending Point.
{{(S-PRS) DG's SPO}	: A Socio-Political Reconciliation Sphere's Dissident Group(s)/Movement(s) (DG)'s Starting Point.
(S-PB/SB)	: A (Societally-Peacebuilding And State-Building) Sphere.
{{(S-PRS) DG's EPO}	: A Socio-Political Reconciliation Sphere's (DG)'s Ending Point.
(MU)	: Mutual Utility.
(NE)	: Nash Equilibrium.
The (A) And (B)	: In The (BPSHM)'s (HG) ₁ Only, The (Political Authority "PA"), And The (Dissident Group(s) "DG"), Respectively, In The (Balance Of Peace State Hypergame Model)'s First Hypergame.
The (R) And (MR)	: Reconciliation And Mutual Reconciliation.
(CA_R)	: The {(C), (A), And (R)} Indicate, In A Sequence, The (Cost), The (PA) Player, And The (HG) ₁ 's (Reconciliation) Between The (PA) And (DG).
(CB_R)	: The {(C), (B), And (R)} Refer To The (Cost), The

	(DG) Player, And The (HG) ₁ 's (Reconciliation), Consecutively.
{{(U_{A-Cf}); (C_{A-Cf}); (U_{B-Cf}); (C_{B-Cf})}}	The (Utility “U” For “A/(PA) Player” By Conflict “Cf”), (Cost “C” For (PA) By Conflict), (Utility For “B/(DG) Player” By Conflict), And (Cost For (DG) By Conflict), Respectively.
{{(U_{MR(A-B)}); (U_{NE(A-B)}); (U_{NE(A)}); {(U_{NE(B)})}}	They Consecutively Are The {(Utility Of The (Mutual Reconciliation) For Both “A And B”); (Utility At The First Hypergame Model/(HG) ₁ 's Nash Equilibrium “NE” Position For “A And B”); (Utility At The NE Position For “A” Only); (Utility At The NE Position For “B” Only)}.
The (CS_{A-R}) And (CS_{B-R})	: The Concession(S) Made By The “A/(PA) Player” At The (Reconciliation) Position Of NE, And The Concession(S) Made By The “B/(DG) Player” At The NE's (Reconciliation) Position.
The (SA) And (SB)	: The (State A) And (State B).
(A-C/W)	: Activation Of Conflict/War.
(N-R/L)	: Territorial/Political/Economic Non-Recognition/Non- Legitimization.
(In-PP)	: Initiation Of A Peace-Process.
The (GR)	: In The (BPSHM)'s (HG) ₂ , A Diplomatic, Political, Economic, And Social Integration, In The (Balance Of Peace-State Hypergame Model)'s Second Hypergame.
(Im-PP)	: Implementation Of A Peace-Process.
(PCS/R-SB)	: Pro-Conflict Settlement/Resolution State-Building.
(D-RC)	: A Peace-Broker Discourse (PBD)'s Reinforcing Cultivation.
(PSBS)	: Peace Spoiling Behaviors Spheres.
(SA-PSS)	: The (SA) Player-Directed-Peace Spoiling Sphere.
(SB-PSS)	: The (SB) Player-Directed-Peace Spoiling Sphere.
The (JA) Zone	: A (Joint-Agreements/Accords/Pacts) Zone.

(I/EOP)	: Internal And/Or External Opposition.
The (C₁) And The (C₂)	: In The (BPSHM) Only, The First Cost Paid By (PA) And (SA), And The Second Cost Paid By (DG) And (SB), Consecutively.
The (SA+SB-PSS₁) And (SA+SB-PSS₂):	The (SA) And (SB)-Directed-Peace-Spoiling Sphere (1), And The (SA) And (SB)-Directed-Peace-Spoiling Sphere (2).
(FS-DT)	: Face-Saving Diplomatic Tactics.
The (IDPSR) Zone	: The (Initial Diplomatic-Political-Social Reconciliation) Zone.
(DRCZ)	: Disciplinary Region Creation Zone.
(PSD)	: The Abbreviation Of Both {(PCS/R-SB) And (D-RC)}, Or The (Pro-Conflict Settlement/Resolution State-Building, And The (Peace-Broker Discourse/PBD)'s Reinforcing Cultivation).
(COD)	: Coercive Diplomacy.
The (N) And (n)	: The (Total Influence) And (Partial Influence) In The (Balance Of Peace-State Hypergame Model).
(PP)	: Peace Process.
(N²)	: Overwhelming/Doubled Total Influence N.
(DCS)	: Diplomatic Convention(s) Signing.
(MS)	: Mediation Success.
(BPS)	: Balance Of Peace-State.
{S (PP)}	: Success Of Peace Process.
{S² (PP)}	: Multiplied Success Of Peace Process.
{LS (PP)}	: Limited Success Of Peace Process.
{RS (PP)}	: Normality Of The Success Of Peace Process.
{(MS)²}	: Multiplied Mediation Success.
{L (MS)}	: Limited Mediation Success.
{R (MS)}	: Normality Of Mediation Success.

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ABSTRACT	
Title of Thesis: Strategizing State Behavior on Domestic and Foreign Affairs: Applying Game Theory to Media Discourse, Politics, and Conflict Management	
Author of Thesis: Mariam Mohamed Elshahawi Ibrahim Elhadidi ARIBA	
Supervisor: Prof. Dr. Ertan EFEGİL	
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This research aimed to apply game theory to media discourse, politics, and conflict management. Using game theory and its extension, hypergame theory, as a theoretical-methodological foundation, paved the way for enhancing the implementation of interactive strategic decision-making in international relations and political communication in an integrative way. Relying on utilizing theories in IR and media discourse, this work moves forward to achieving the stability of national, regional, and international system structures from a lens of interdisciplinary, interrelated, strategic security study. Generally, in this research: 1. We introduce first the theoretical development of what we call the “Conflict or War Impediment Strategic Approach,” including a (Deception Hypergame Model of Interstate Conflict “DHMIC”) and (Deterrence Entanglement Law “DEL”). 2. Second, on the game and hypergame-theoretic-analysis, our (Conflict or War Impediment Strategic Approach)’s applying cases are addressed; restoration of the (DEL) in an actual state of all-out war through a developed (Mutual-Grand Strategy Modeling of the Russia-Ukraine War 2022) takes place; also, a (‘Non-Chance Space’ Reduced War-Hexagon) is built for the war-(hyper)game modeling and counter-modeling, while being applied to the Russian-Ukrainian War case. 3. For accomplishing all study objectives, the discussion of a developed (Multi-Level Conflict Management Strategic Approach) comes third for: a. managing the clash of civilizations by linking media discourse, culture, the other’s representation, state policies, and conflict through our game-theoretic model built, after relying on studying the non-Western representation (Egypt in our case) in the Western media (the BBC). b. Strategically managing intra-and inter-state conflicts by building (Positivity of Peace Hypergame Model “PPHGM”) and (Balance of Peace-State Hypergame Model “BPSHM”), following the focus on Egypt’s intra-state conflict analysis and conventionally theoretical management, to best settle, solve, and transform conflicts within and between nations depending on these hypergame strategic theoretic-models introduced.	
Keywords: (Hyper)Game Theory, Strategy, Deterrence, Media Discourse, Peace and Conflict Management	

ÖZET	
Başlık: Devlet Davranışının İç ve Dış İşlerde Strateji Belirlemesi: Oyun Teorisinin, Medya Söylemi, Politika ve Çatışma Yönetimine Uygulanması	
Yazar: Mariam Mohamed Elshahawi Ibrahim Elhadidi ARIBA	
Danışman: Prof. Dr. Ertan EFEGİL	
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Bu araştırma, oyun teorisini medya söylemine, siyasete ve çatışma yönetimine uygulamayı amaçladı. Oyun teorisini ve uzantısını kullanan hiper oyun teorisi, teorik-metodolojik bir temel olarak, uluslararası ilişkilerde ve siyasi iletişimde bütünleştirici bir şekilde etkileşimli stratejik karar almanın uygulanmasının önünü açmıştır. Uluslararası ilişkiler ve medya söyleminde teorilerin kullanılmasına dayanan bu çalışma, disiplinler arası, birbiriyle ilişkili, stratejik güvenlik incelemesi merceğinden ulusal, bölgesel ve uluslararası sistem yapılarının istikrarını sağlamak için ilerlemektedir. Genellikle, bu araştırmada: 1. İlk olarak, bir (Devletlerarası Çatışmanın Aldatma Hiper Oyun Modeli “DHMIC”) ve (Caydırıcılık Dolanıklığı Yasası “DEL”) dahil olmak üzere “Çatışma veya Savaş Engeli Stratejik Yaklaşım” dediğimiz şeyin teorik gelişimini tanıtıyoruz. 2. İkinci olarak, oyun ve hiper oyun-teorik-analizinde (Çatışma veya Savaş Engeli Stratejik Yaklaşım) uygulama durumlarına değinilmektedir; geliştirdiğimiz (Caydırıcılık Dolanıklığı Yasası) esaslarını gelişmiş bir (Rusya-Ukrayna Savaşı 2022’nin Karşılıklı-Grand Strateji Modellemesi) aracılığıyla _ gerçek bir topyekün savaş durumunda _ restorasyonu gerçekleşir; ayrıca, Rus-Ukraynalı Savaş örneğine uygulanırken, savaş (hiper) oyun modellemesini ve karşı modellemesini ortaya çıkarmak için bir (‘Şans Olmayan Alanda’ Stenograf Savaş-Altıgeni) modeli inşa edilmiştir. 3. Üçüncü olarak, tüm çalışma hedeflerine ulaşmak amacıyla geliştirilmiş bir (Çok Düzeyli Çatışma Yönetimi Stratejik Yaklaşımı) tartışmasını aşağıdakiler için gelir: a. Batı medyasındaki (BBC) Batılı olmayan temsili (bizim durumumuzda Mısır) incelemeye dayandıktan sonra inşa ettiğimiz oyun-teorik modeli aracılığıyla medya söylemini, kültürü, ötekinin temsilini, devlet politikalarını ve çatışmayı birbirine bağlayarak medeniyetler çatışmasını yönetmek. b. Mısır’ın devlet içi çatışma analizine ve konvansiyonel olarak teorik yönetimine odaklanarak, (Pozitif Barış İçin Hiper Oyun Modelini “PPHGM”) ve (Barış-Durumu Dengesi İçin Hiper Oyun Modelini “BPSHM”) oluşturarak devlet içi ve devletler arası çatışmaları stratejik olarak yönetmek ve bu tanıtilen hiper oyun stratejik teorik-modellerine bağlı olarak uluslar içindeki ve arasındaki çatışmaları en iyi şekilde yatıştırmak, çözmek ve dönüştürmek.	
Anahtar Kelimeler: (Hiper)Oyun Teorisi, Strateji, Caydırıcılık, Medya Söylemi, Barış ve Çatışma Yönetimi	

INTRODUCTION

The world's pressing challenges and crises have been altered in scale but developed in nature from one generation to another. From a balance of power *shaken* stability-related crises in the European regional international system during the nineteenth century to the re-balance of power attempts-resulted World War One and Two. And from the latter up to nuclear arms race of a Cold War aroused between the international system's two poles competing for balancing towards one another by military building, and alliance making on the global and regional stages. Throughout those decades, the questioning of a state's national security priorities and self-interest in relation to one another has seized a crucial concern in decision-making circles around the globe.

From here, political, diplomatic, and military facets of inter-state relations have captured political leaders' agendas within the course of action of several international forums. Strategizing state behavior on domestic, regional, and global levels is the mission, apparently assigned to policymakers of each state within that manner. Overcoming (inter)national crises, intra-and-inter-state conflicts, and possible nuclear disasters, therefore, are to be scrutinized through multi-level operations relying on problem-solving mechanisms implemented by nation-state(s)'s leaders, government(s), and/or (inter)national institutions.

As not all social disciplines of knowledge could be precisely separated from one another, the vitality of interdisciplinary studies became a one-way solution for handling a diversity of interrelated world problems. The role played by media discourse during a crisis, for instance, does converge significantly with that practiced by the decision-maker(s) within the foreign policy sphere and another of the society's security organization(s). Given the complexity level of our contemporary world's equations, a collective knowledge-power of the twenty-first century represents today the effective function for providing the answer to all.

Accordingly, this applied research is a work to finalize these works. Since the game theory is the branch of science that relies on using mathematical and economic tools for studying the interactive behavior of (key/sub) players in policymaking, economics, international relations, etc., the exits found by applying this theory to social sciences for

solving various problems, and the equilibria reached when employing it in a specific private or general context of observation, made game theory the field of *coloring* the strategic behavior of (non/sub) state actors the way that had previously been well-predicted through game-theoretic models developed. Thus, before (or for solving) a crisis, the strategic solutions became in *waiting* for the decision-maker(s) to take by, under a diverse manner of integrated specializations. *Based on that perspective, the following parts highlight this research's aspects that will be examined in the next chapters.*

The Research Topic

This study sheds light on how to apply (hyper)game theory to media discourse, politics, and conflict management figuring out solutions for pressing and converged challenges of our contemporary world. Reaching different positions of equilibria concerning both the clash of civilizations and strategically conflict management ensures not putting an end to many related crises only, insofar as it means setting *necessary* strategies for drawing or delimiting a present/future trajectory of each dilemma coped with, for avoiding possible or actual (*destructive*) clash(es), dispute(s), conflict(s), and/or war(s) on national, regional, and global levels. It is thus one of a few studies that work on such an area of specialization from an interdisciplinary lens as well.

The Study Objectives

Many objectives distinguish this research in relation to its areas of investigation, as follows: Main aim 1: Figuring out the possibilities of ceasing the so-called 'clash of civilizations' dilemma into existence. For doing so, this research is based on: Phase 1: Exploring how Egypt (i.e., the Other; the East/Orient) has been represented in the Western media (the BBC) after the July 2013 Egyptian regime change. Phase 2: Revealing the cause and effect of an integration process of the discourse and media representation, Orientalism, and news framing in the Western global media, highlighting the 'us vs. them' binary opposition. Phase 3: Utilizing game theory in finding out the exits/equilibria of the clash of civilizations not only on a global level between the West/Occident (us) vs. the East/Orient (them) but on the regional and national levels, as well, in our contemporary world through a game-theoretic developed model.

Main aim 2: Investigating the possibility of prevailing *positive* peace on national, regional, and international levels. For achieving this aim, we built this studied area on: Phase 1: Analyzing and mapping the Egyptian intra-state conflict that broke out between the military institution and the Muslim Brotherhood movement after the July 2013 military overthrow to generalize, on similar cases, the reached exits by applying converged theoretical perspectives. The last took place through employing peace and conflict theories, besides those of media discourse, to set a general framework for bringing about *positive* peace in the Middle East. Phase 2: Applying (hyper)game theory to the conflict management area, describing the possibilities and probabilities of the strategic behavior of conflicting parties under different situations/contexts, thus reaching the equilibria of each of these cases: a- conflict settlement, b- conflict resolution, and c- conflict transformation.

Main aim 3 (generalized objective): Achieving strategically *diplomatic and security balance* on all levels by strategizing state behavior in domestic and foreign affairs during and after the eruption of a clash, dispute, conflict, and/or war, intra-and/or inter-state, applying media discourse, politics, and conflict management-integrated stratagems and strategies.

The Research Importance

Investigating the media discourse, politics, and conflict management areas for applying (hyper)game theory refers to the existence of these main research problems that we sought to solve, which reveal this research's importance: a. The Other (the East/Orient) representation (i.e., Egypt's case) in the Western media and its relevant dilemma, the one that we call the "balance of culture dilemma." Under this exploration area, we aimed to correlate the media discourse's functioning mechanisms to some other phenomena, such as cultural conflict-generated terrorism, in a violent or non-violent clash of civilizations on a global, regional, and national level through applying game theory. b. The negative impact of prevailing intra-state conflicts instead of peace (even if negative) in many of the Middle East's countries, particularly in the aftermath of the Arab revolutions in the 2010s. In this context, we highlighted the Egyptian intra-state conflict in the post-regime change era begun by the military overthrow of July 3, 2013, as the study's case. So, by tackling the *clash of civilizations* dilemma, the way became paved for dealing with *intra-*

and-inter-state conflicts using game theory and hypergame theory based on media discourse, politics, and diplomatic theoretical approaches for *strategically* managing conflicts within and between nations and bringing about the positivity and balance of peace state, therefore. c. The outbreak of inter-state conflicts and wars due to the deterrence imbalance or failure, the dilemma that we dealt with under a developed strategic approach of impeding conflict/war from the core.

The Research (Major) Method

The Applied Game Theory and Hypergame Theory

This study, applying both deductive and inductive methods, relied in the first place on using game theory and its extension, hypergame theory, as the main theoretical-methodological foundation for the research analysis purpose and the development of relevant theoretic-strategic models. For strategizing state behavior in domestic and foreign affairs, we subjectified (hyper)game theory to media discourse, politics, and conflict management realms to bring about the national, regional, and international security strategically _ that will be explained in its related parts.

In doing so, another two sub-methods have been used: the case study method focusing on i. Egypt (after the July 2013 military overthrow), which is a case of studying the Other's representation in the Western media _ where the BBC was chosen for the analysis purpose. ii. The post-regime change- Egyptian conflict 2013: a case of analyzing the intra-state conflicts in the Middle East, particularly those erupting after the Arab revolutions of the 2010s (e.g., in Libya, Syria, and Yemen)¹.

Moreover, the content analysis method, including the qualitative and quantitative approaches, was employed for conducting a framing analysis of the coverage of the Egyptian issues during the 2013 intra-state conflict in the BBC global (online) English news network. That helped build our Clash of Civilizations Game-Model after scrutinizing how the Other (i.e., non-Western) is represented in the Western media, showing the analysis-based concrete evidence to move forward to manage the dilemma of the so-called clash of civilizations. Besides, analyzing Egypt's intra-state conflict that

¹ The conflicts in Libya, Syria, and Yemen, however, have escalated, transforming from being states of *limited* or *contained* intra-state conflicts into intensively a sphere of waging *proxy* and *internationalized* civil wars (still intra-state) distinguished by the interference of several clashing foreign actors.

broke out in 2013, through applying Efeigil's 2019 conflict mapping model to the concerned case, paved the way to build two hypergame models for managing intra-and inter-state conflicts, as all illustrated in detail later.

The Main Research Questions:

Main questions 1: a. How has Egypt (the Other/Orient) been represented in the BBC global (online) English news network after the July 2013 Egyptian military overthrow? b. How do the Western media's framing process and the Orientalist perceptions (or *misperceptions*) of the Other embedded influence the global public or/and reinforce pre-existing binary oppositions of the West vs. East dilemma? c. How could the predicted/witnessed clash of civilizations on a global, regional, or/and national level in our contemporary world be tackled and managed through a developed game-theoretic model?

Main questions 2: a. How could the Egyptian intra-state conflict between the military institution and Muslim Brotherhood that broke out after the July 2013 military overthrow be resolved and transformed? b. How could (positive) peace prevail intra-and/or inter-state in the Middle East by employing combined theoretical approaches of peace and conflict and media discourse and politics? c. How might developing a (hyper)game-theoretic model of conflict management contribute to settling, resolving, and/or transforming the conflict/war within and between nations?

Main question 3 (generalized): How could possible or actual clash(es), dispute(s), conflict(s), and/or war(s) intra-and/or inter-state be managed and overcome through strategizing state behavior, achieving a *diplomatic and security balance*, relying on media discourse, politics, and conflict management-integrated stratagems and strategies of (hyper)game-theoretic models developed?

The Study Hypotheses:

Hypothesis 1: The initial stability in the system powers' conflict and deterrence relation is achieved through joint equilibria simultaneously occurring and the opponent-directed-capable and credible threat-existing in a mutual deterrence relationship, under certainty and perception, or uncertainty and deception conditions.

Hypothesis 2: With the second war actor having access to the first war actor's war (hyper)game under uncertainty, misperception, and intentional deception conditions created by the second war actor, the last could deliberately camouflage its first-used war stratagems achieving its war objectives and inflicting its enemy, the first war actor, politically, economically, and militarily, if this deceived in the war situation could not reveal the uncertainty and counter deception ultimately, while the war-termination process' spoilers become better off by accelerating a realist war-end tearing war-affected societies into parts.

Hypothesis 3: The war outcome is predictable, and the military chance room almost ceases to exist, coinciding with developing a predictability-reduced war hexagon for the war-(hyper)game modeling and counter-modeling of any party to a given conflict.

Hypothesis 4: A game-theoretic model built on the *normal form representation* of game theory and based on media discourse and politics contributes to settling violent or non-violent (present/future) aspects of the clash of civilizations, coinciding with reaching the equilibrium/solution to this game.

Hypothesis 5: A game-theoretic model built on the *extensive form representation* of game theory and based on media discourse and politics contributes to settling violent or non-violent (present/future) aspects of the clash of civilizations, coinciding with reaching the equilibrium/solution to this game.

Hypothesis 6: The binary formula of (Global Hegemony of Peace Versus Realist Hegemony of War's Inevitability) is the equilibrium or solution point of a positivity of peace developed relevant-hypergame model.

Hypothesis 7: A balance of peace-state within nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties socially, politically, and diplomatically at any phase during and post-intra-state conflicts.

Hypothesis 8: A balance of peace-state between nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties diplomatically, politically, and socially at any phase during and post-inter-state conflicts.

The Research's Applied Theory: Game Theory and Hypergame Theory

Game theory is the branch of science concerned with modeling the strategic interactions between two players or more in real-world circumstances or a predicated situation, in whatever discipline of knowledge, where the aim is to maximize each side's utility with or without considering the other's rationality. So, the equilibrium in game-theoretic models represents the solution point reached when all players pick their moves simultaneously or sequentially in the game. Many equilibria have been defined in the field; the most famous is the non-cooperative games' Nash equilibrium. Under the latter, players can randomize their choices, playing mixed strategies and making the best strategy-response to each other's strategy choice simultaneously while considering the other(s)'s own rationality.

The rationality argument is a standard used in game theory indicating that each player in a game situation seeks the maximization of utility during the strategic interactions of this game's real/predicted life situation, making rational choices (i.e., decisions) that are individually expected to bring the highest and stable payoff to this actor at the end. The extended development of the mentioned game theory is the hypergame theory. If game theory models the strategic interactions in complete or incomplete certainty conditions and perception state, then the succeeded hypergame theory has another say.

Hypergame theory acknowledges the circumstances in which some opponents are in a conflict situation where the incorrect perception, intentional deception, misunderstanding, and misled information made by one opponent against its enemy have a place in modeling this situation. Nash equilibrium is proved to be found in those intentional deception/misperception-based models of the hypergame under a specific context. In a hypergame model, multiple games or hypergames manifest, given that each separate perceived game or hypergame of one player includes some understood equilibria from this player's own perspective and perceptions of the game and the other(s)'s (i.e., the opponent) perceptions and beliefs about the conflict. Still, none of the separately perceived equilibriums can be Nash equilibrium of the entire hypergame model, but only if it is to be a Nash equilibrium in each individual subjective game/hypergame, expressing Nash strategy in all of them under the same model. Thence, the ultimate balance of a hypergame model, strategizing a complex conflict situation, can be reached, and even

permanently. In this part, we explain game theory and hypergame theory in a further detail, beginning by the foundation of game theory, the rational choice theory, as to follow.

The Foundation of Game Theory: Rational-Choice Theory

The rational choice theory or decision theory was the precedent for developing game theory, which is “concerned with goal-directed behavior to reach a desired (maximized) outcome”² through a rationality-based choice made between a set of actions or preferences by a player or decision-maker in real-world situations. So, the decision theory either be *normative*, studying how decisions should be made; *descriptive*, focusing on how decisions are made in reality; or *prescriptive*³, interpreting how imperfect decisions may be improved to be perfect or ideal. Interestingly, “instrumental rationality _ the rationality of rational choice theory _ is applicable to a wide variety of social situations, including situations where various psychological, informational, and structural factors claimed to interfere with rational decision-making are present.”⁴ Despite criticisms of rational choice theory, the “instrumental rationality... (which) is the method of deciding which means are the best to reach a specific goal (or outcome under this goal-directed-behavior decision theory), still retains its philosophical value in investigating and explaining human decisions and acts.”⁵

Given its rationality assumption, the decision theory has been applied to the international relations (IR) field in different ways. One prominent example is a study using rational choice models in the counter-terrorism area of IR, relying on analyzing the formation of terrorists’ preferences and the utility maximization principle. Employing, firstly, a labor supply model in the situation of choice between market and terrorist activities, where the analysis unit is an individual, Anderton and Carter found that “higher market wages might cause an individual to supply more time to market activities and less time to terrorism or

² Nicholas S. Kovach, Alan S. Gibson and Gary B. Lamont, “Hypergame Theory: A Model for Conflict, Misperception, and Deception,” *Game Theory* 2015 (2015): 3.

³ Ibid.

⁴ Stephen L. Quackenbush, “The Rationality of Rational Choice Theory,” *International Interactions* 30, no. 2 (2004): 87.

⁵ Yurdağül Kılınç Adanalı, “Rational Choice Theory: Its Merits and Limits in Explaining and Predicting Cultural Behavior” (Doctoral Dissertation, The Graduate School of Social Sciences of Middle East Technical University, Turkey, 2016), v – 4.

vice versa.”⁶ Simultaneously, applying a consumption choice model to the terrorist labor supply’s decision-making situation – when the analysis unit becomes a terrorist organization, they proved that “if market wages rise, then a terrorist organization would have to pay more to recruit terrorists, which in turn would raise the price of terrorism and reduce the quantity of terrorism via the law of demand.”⁷

What Is Game Theory?⁸

Profound scholars in the field of game theory, such as Avinash Dixit and Barry Nalebuff, define it simply as a branch of social science that studies strategic decision-making.⁹ Game theory is based on utilizing economic and mathematical tools to solve decision-making problems in different disciplines. Depending on an interaction between two, or more decision-makers, a strategic behavior arises out of such an interactive decision-making process. In a game-theoretic model, each player’s strategy can be determined when a set of actions and moves are taken, considering those of the other player(s) and the game’s nature and rules. Therefore, there are three sorts of descriptions in the game theory to model situations: the extensive form, which is well-known as the game-decision tree; the normal form, or payoff matrix; and the characteristic-function form that focuses on cooperative games, which we do not apply to this study.

In this research project, our focus is on the normal form or/and the extensive form representations of game theory in cooperative and noncooperative games. In cooperative games, players can negotiate on a contract or be allowed to cooperate by signing an agreement, and the opposite is right in the noncooperative ones. However, some games start in a future play, allowing the players to move from a zero-sum game played in the past to future equilibriums achieved by cooperation. We consider this mixing between

⁶ Charles H. Anderton and John R. Carter, “On Rational Choice Theory and the Study of Terrorism,” *Defence and Peace Economics* 16, no. 4 (2005): 281.

⁷ Ibid, 281-282.

⁸ This part includes collective information agreed on regarding the basics of game theory. For further readings, please refer to: Graham Romp, *Game Theory: Introduction and Applications* (The USA: Oxford University Press, 1997); Herbert Gintis, *Game Theory Evolving: A Problem-Centered Introduction to Modeling Strategic Interaction*, 2nd ed. (The USA and UK: Princeton University Press, 2009); İlhan Kubilay Geçkil and Patrick L. Anderson, *Applied Game Theory and Strategic Behavior* (The USA: Taylor and Francis Group, 2010); Ken Binmore, *Game Theory: A Very Short Introduction* (The USA: Oxford University Press, 2007); Peter C. Ordeshook, *Game Theory and Political Theory: An Introduction* (The USA: Cambridge University Press, 1986).

⁹ Geçkil and Anderson, *Applied Game Theory and Strategic Behavior*, 9.

both sorts as an expression of “*cooperatively reasoned noncooperative games.*” Within the last, players were not able to negotiate on diplomatic accords or be allowed to cooperate by signing an agreement in the past play of a game while being *rationally* permitted to do so in a future play _ if that to reflect Nash equilibrium or the most optimal position reached by all *opponents*’ strategy choice, made simultaneously, in this game.

At the core of that, *the extensive form representation of game theory* can be explained as a resemblance of a tree’s shape, consisting of a number of branches. At the beginning of each branch, there is a head node, and a tail node exists at the end of the branch. In this form, there are a number of players/actors playing in a sequential move, with a known set of payoffs for each player at the end of the game. On the other hand, the game in *the normal form representation* is being simulated through a matrix of columns and rows, in which each player has just one information set containing his alternatives with the existence of uncertainties about the other player(s) ’s choices or the payoffs expected from the game. Moreover, the players play in a simultaneous move, and they must make only one choice differing from the game in an extensive form where there is a possibility for allowing players to randomize their choices from a number of pure strategies.

Accordingly, there are two sorts of strategies for a player in the game: pure-strategy and mixed-strategy, which vary dramatically from one another. Assuming that each player plays only one specific strategy, then it is a pure strategy-based game. The equilibrium (solution to the game) resulted, in this case, is called a *pure-strategy equilibrium*. Otherwise, if at least one player randomizes some (or all) of his pure strategies, and no one has the incentive to deviate unilaterally from a reached point of stable payoffs received by both, it is described, correspondingly, as a mixed-strategy-based game with an outcome so-called *mixed-strategy equilibrium*. Based on that, the equilibrium in game theory is defined as a stable outcome reached by both players choosing a pair of strategies, simultaneously, from their set of actions, where no one has an impulse to deviate from this position. Many types of equilibria can be defined under this frame. Two of them are a- Nash equilibrium and b- dominant strategy equilibrium.

Nash equilibrium is an *optimal* equilibrium that occurs when all players of the game use their strategies simultaneously, reflecting the *best response* made by each of whom to the other(s) ’s strategy choices, with stable payoffs obtained at the end of this game _ where

no strictly better strategy exists alternatively. Differently, the dominant strategy equilibrium occurs when all players use their dominant strategy in the game. The dominant strategy points out that a player has a strategy by which he becomes better off whenever using it, irrespective of what the other player(s) chooses, and that this strategy is better than any other one he can choose in the game. Accordingly, the players as rational actors are expected to use their dominant strategy, avoiding their *dominated* one, through which, on the contrary, each becomes worse off whenever choosing it. Ultimately, in the dominant strategy equilibrium, each player only moves upon his own rationality. While in the Nash equilibrium, everyone depends on his own rationality and the other players' rationality in the game.

Furthermore, in a game-theoretic model, the so-called *subgame perfect Nash equilibrium* could be reached at one point. The subgame is defined as a smaller part that emerges from any node of the entire game and continues till the end of the game, which might be played in the future. In the same context, if the Nash equilibrium of an extensive form game is reached for every subgame of it, it is called *subgame perfect*. Therefore, the concept subgame perfect Nash equilibrium represents a rational solution to the game _ provided that no player acts upon *incredible* threats or promises.

At last, we assume that the developed game-theoretic model(s) in this applied study is mainly dynamic given that the war/conflict, and therefore competition, is seen as a natural outcome(s) of a flawed *aggressive* human nature, operating in an uncertain and ungoverned and therefore insecure international system, as Classical Realists argue. That is to say, in a dynamic game, some (key/sub) players observe other (key/sub) players' behavior, conditioning their future actions on what the other players did at first. The dynamic game, thus, allows players to enhance their chosen strategies in future moves in cooperative or noncooperative games.

What Is Hypergame Theory?

Hypergame theory, which we use as a theoretical-methodological foundation of our built models, represents comprehensively an advanced development of the precedent game theory applied to a more complicated international arena. Game theory is considered a science of modeling the strategic behavior of decision-makers interacting with one another, which has been used as a methodological tool for analyzing the actors'

interactions in the international relations (IR) discipline for more than 50 years. Applications, extensions, modifications, and illustrations of game-theoretic models began to appear in the security studies literature shortly after publishing John Von Neumann and Oskar Morgenstern's *Theory of Games and Economic Behavior* in 1944 by Princeton University Press.¹⁰ It has been distinguished between four waves of the game theory emerging in IR over the past years before becoming an indispensable theoretical method in modeling interactive decision-making in this discipline. For Zagare and Slantchev, these four waves are¹¹ a. the first generation, which was developed during the Cold War represented in the zero-sum games;¹² b. the second wave was that of reaching the so-called Nash Equilibrium;¹³ while c. the dynamic games described in extensive form,¹⁴ and those of incomplete information¹⁵ were the significant characteristics of the third wave, besides introducing refinements of Nash Equilibrium; and ultimately, d. the game theory emerged as a major theoretical method in IR during the fourth wave.

After over three decades of building the game theory foundation, the *hypergame theory* term appeared in the 1970s, explaining a situation in which players in a game may have different views of the conflict so that perceiving a game model in a differentiated way from one another in accordance with each player's own perceptions, beliefs, and interpretation of reality. This advance suggested that the second (i.e., hypergame) became

¹⁰ Frank. C. Zagare, *Game Theory, Diplomatic History, and Security Studies* (UK and USA: Oxford University Press, 2019): 44, 53.

¹¹ Frank. C. Zagare and Branislav L. Slantchev, "Game Theory and Other Modeling Approaches," *Oxford Research Encyclopedias* (International Studies Association and Oxford University Press), (2021): 1-38. <https://doi.org/10.1093/acrefore/9780190846626.013.401>. "Access Date 06/15/2022."

¹² In zero-sum games, there are either winners or losers in the game. A player wins at the expense of the other where there is no domain of cooperation by signing an agreement or contract between players in such games.

¹³ Nash Equilibrium is the most *optimal* point reached in a non-cooperative game when all players use their strategies simultaneously, achieving the *best response* made by each to the other's strategy choice with the highest (and stable) payoffs obtained by both at the end of this game. Under this position, no one may have the incentive to deviate. Therefore, this equilibrium does not depend on each player(s)'s own rationality only but on that of the other player(s) as well.

¹⁴ The dynamic game is a condition wherein each player observes the other(s)'s moves, conditioning their future actions on what the other(s) chose first. While the extensive form of game theory best resembles a (decision) tree composed of branches and nodes. The game starts from the first branch's node by player A, for example, making the first move. Then, from the player B branch's node, the second move is made sequentially. This game lasts until reaching the tree's last branch's node, ending the play with payoffs gained by all players, or starting a sub-game.

¹⁵ In *incomplete* information games, at least one player does not know, exactly, what the other player(s)'s set of actions, or strategic preferences, is/are, or the future moves of this player(s), and therefore, the expected payoffs at the end of the game. Thus, this is a game played under a (high, mid, or less) level of *uncertainty*.

an extension of the first, game theory. Given that the game-theoretic model is being built upon one situation (in real-life circumstances or a predicted one) through playing only one game, the “hypergame theory decomposes a single situation into multiple games... allowing for an unbalanced game model (to emerge) that contains a different view, representing the differences in each player’s information, beliefs, and understating of the game.”¹⁶

So, the hypergame model does not address a specific set of strategic preferences unchangeably and correctly perceived, completely or incompletely, by other players along with a coherently single-situation game – the case of game-theoretic models. Instead, different views of either perception/misperception or deception held by each player in the hypergame model allow for multiple games to occur, with various strategic preference vectors perceived differently by a player about his opponent(s) in the game, where the in-correction and faulty about estimating the opponent(s)’s preferences could exist. In sum, those multiple games emerge because of existing *unlike* perceptions for every player about reality, which may be true or not, as well as different understandings and interpretations of the game itself. Strikingly, the player in the hypergame does not depend only on his own perceptions of the game – which may be misperceptions or an effect of intentional deception by the opponent, in calculating the outcome but on his belief of how the opponent perceives this game as well, since the hypergame model may contain multiple games according to each player’s perceived (hyper)game. Thence, “the standard rationality arguments from game theory are replaced (in the hypergame models) by knowledge of how the opponent will reason.”¹⁷

Moreover, in theory, a player can raise his utility, relying on having unknown information to the other player(s) due to the misperception or intentional deception he practices against the opponent or both. Here, the “accuracy of the perceived games depends on available information... (nevertheless) the hypergame model more accurately provides solutions for complex theoretic modeling of conflicts than those modeled by game theory and excels where perception or information differences exist between players.”¹⁸ Adding

¹⁶ Kovach, Gibson and Lamont, “Hypergame Theory: A Model for Conflict, Misperception, and Deception,” 4.

¹⁷ Ibid, 5.

¹⁸ Ibid, 1-6.

to that, the nature of knowledge, perception, and information differences varies from one level to another in the hypergame. Primarily, if there are misperceptions in the game, and no player is aware that another player has misperceptions in this game, a condition of incomplete information with misperceptions constitutes a *first-level hypergame* including multiple perceived games by the players about each one's strategic preferences _ that is considered a development of game theory's incomplete information games applicably. At the same time, if at least one player is aware that a hypergame is being played, realizing that another player has misperceptions in the game, it becomes a *second-level hypergame* composed of individual-hypergames perceived by players about the others' played games.

Ultimately, in recent research, stability relationships and Nash equilibria concepts in hypergames have been studied¹⁹ where a *hyper Nash equilibrium* has been located and defined as “a profile of such strategies that each agent plays according to their Nash strategy in their own subjective game.... (That generalizes) Nash's theorem about noncooperative games to hypergames.”²⁰ In other words, the theory proved that as Nash equilibrium manifests in every mixed-strategy noncooperative game (i.e., when both players randomize their choices separately from one another, not being allowed to sign an agreement or contract), a *hyper Nash equilibrium*²¹ exists in every not-infinite

¹⁹ For further discussion, please, refer to the original authors: Y. Sasaki, N. Kobayashi, and K. Kijima, “Mixed Extension of Hypergames and Its Application to Inspection Games,” *Proceedings of the 51st Annual Meeting of the ISSS* (Tokyo, Japan) 777 (2007): 1-9. Also, Y. Sasaki and K. Kijima, “Preservation of Misperceptions— Stability Analysis of Hypergames,” *Proceedings of the 52nd Annual Conference of the International Society for the Systems Sciences (ISSS' 08)*, (July 2008): 1-5.

²⁰ Kovach, Gibson and Lamont, “Hypergame Theory: A Model for Conflict, Misperception, and Deception,” 10.

²¹ This applied-(hyper)game theory research uses Nash equilibrium mainly as a standard of rational choices. It is worth noticing that Nash equilibrium is used as a rational-choice measure in the *complete* information games, while it was named *Perfect Bayesian Equilibrium* in the *incomplete* information *dynamic* (i.e., extensive form) games. Zagare defines Perfect Bayesian Equilibrium as an equilibrium that “specifies an action choice for every type of every player at every decision node... it must also indicate how each player updates its beliefs about other players' types in the light of new information obtained as the game is played out” (Frank. C. Zagare, “After Sarajevo: Explaining the Blank Check,” *International Interactions* 35 (2009b): 116). Within the illustrated manner, we introduce two explanations of the employed Nash equilibrium in our work:

hypergame with mixed strategies. Here, the hyper Nash equilibrium, or what we call simply in this research *Nash equilibrium of the hypergame*, cannot be found for an entire hypergame model if it does not occur as an aggregate of the same Nash equilibrium in every individual/subjective (hyper)game under this model. Comprehensively, hypergames best describe and prescribe complex *conflict* situations between opponents through divergent modeling of multiple (hyper)games, specifying more precisely these situations' equilibria (i.e., solution points), whatever their complexity level is.

Why Choosing the Study Cases Examples for the Analysis Purpose?

For This Study's Developed (Conflict or War Impediment Strategic Approach)'s Applying Cases

Explanation I: This applied-theory study constructs a set of related complete and incomplete information game-theoretic models and incomplete information hypergame-theoretic ones, depending *essentially* on Nash equilibrium (NE) as a game-theoretic instrument to locate rational choices explained under the term, using the same name, (NE). Since the hyper Nash equilibrium characterizes stability relationships in hypergames, this equilibrium is pursued in such theoretic models here under the name of Nash equilibrium of the hypergame. Moreover, in this research, circumstances were not found for the Perfect Bayesian Equilibrium that relies on defining the type of players and the possibility of changing the moves when one player's type becomes known or updated. In sum, under this study's mixed-strategy, noncooperative (even if signing an agreement is a mutual choice or strategic preference for the players as one solution point in addressed conflict situations, not a starting point in a cooperative game), incomplete information (due to misperception or intentional deception), developed hypergame models, such a condition of each player's type (e.g., cooperative or aggressive, strategically soft or hard) and its relevant updated information in relation to changed strategic actions and reactions is *not* provided.

Explanation II: In our application of hypergame theory, we followed two fundamental criteria: i. A perceived equilibrium in one player's own game must be equilibrium to the entire hypergame; otherwise, we dismiss it as a total hypergame's (Nash) equilibrium. ii. Since we build first-level hypergames, wherein each player understands a game of the others' sets of strategic preferences, not a hypergame of these players' played games, and second-level hypergames, in which one player realizes the other's played game and might work on intentionally deceiving the opponent, relying on *perceived* Nash strategies in the players' subjective or individual (hyper)games would be an odd position in reached results. Namely, a stable *hyper Nash equilibrium*, or Nash Equilibrium of the entire hypergame, if achieved in any of our developed hypergame-models, is *considered* whether it is (correctly/not correctly) perceived or not perceived, understood Nash strategy or not understood to be, in each player's individual game _ as long this outcome is the most stable point any can reach when using their strategies, making the best response to each other's strategy choice simultaneously, under the introduced hypergame-theoretic *normative* or *prescriptive* models. In either case, the stability-relationship conditionality in the built models regarding an equilibrium solution, generally, is that only the equilibria within individual (hyper)games that serve as solution points for the entire hypergame are taken into consideration. This conditionality points out that any achieved Nash equilibrium of a whole hypergame would be perceived first, if it is a known outcome, as Nash strategy within the players' subjective (hyper)games; or not (correctly) perceived by some or all, but it is the result of playing Nash strategies in these individual-(hyper)games.

First: on the (Deception Hypergame Model of Inter-state Conflict “DHMIC”) applying cases; the Cuban Missile Crisis and the Russian-Ukrainian War possibility: Why is the Cuban Missile Crisis hypergame-theoretic analysis case? Given the nature of (DHMIC), which focuses on the international system’s powers conflict where deception, misperception, and uncertainty conditions take place, analyzing such a case that represented a turning point in political history regarding the relationship between the system’s two poles (i.e., the US and USSR) and approaching the edge of nuclear war (as it was assumed) is central and essential in reflecting the results on how an opponent in inter-state conflict believes, calculates utility, and understands/misunderstands the other’s actual perceptions. Therefore, the war/conflict among the system’s poles/powers in the present and future can be avoided.

Also, why is the Russian-Ukrainian War possibility hypergame-theoretic analysis case? Once again, the Cuban Missile Crisis can be considered a conflict of a symmetrically repetitive nature in our contemporary world. If Cuba was the protégé that caused the eruption of the conflict between the system’s powers in 1962, then it is Ukraine now that became the most challenging issue among them. Avoiding the war in Ukraine means the stability of the international system and vice versa. In terms of introducing the (DHMIC) under the manner of a (Conflict or War Impediment Strategic Approach) built within this study, the attempt to impede/end the conflict/war between Russia and Ukraine is a priority for achieving the study purpose of applying game theory, and its extension, hypergame theory, to media discourse, politics, and conflict management for bringing about national/international peace and security and the stabilization of the state and inter-state system.

Second: on the (Deterrence Entanglement Law “DEL”) theoretical application’s descriptive-prescriptive inter-state conflict cases: The reasons for choosing the case sample are i. the (DEL) addresses conflicts among the international system’s powers/states using the applied game theory and hyper game theory as a theoretical-methodological foundation; ii. the (DEL) is the second part of our developed (Conflict or War Impediment Strategic Approach) which foremost aims to hinder the possibility of conflict/war eruption, continuity, and/or re-eruption in the future. Here, on a more specific basis, the causes of selecting each case are as follows:

-Why is the Cuban Missile Crisis (hyper)game-theoretic analysis case? The reason is like that one mentioned above; analyzing one of the most influential conflicts among the international system's powers, applying game theory and hypergame theory to show the past reality that was based on uncertainty significantly helps avoid the conflict/war among both powers, and others also, in the future. It is a case meant to apply to similar ones.

-Why is the Russian invasion of Ukraine (hyper)game-theoretic analysis case? That aimed at achieving the stability of the international system and, therefore, each nation-state existing in it. The main objective was impeding the war ensuing possibility at first and its re-outbreak on similar occasions so that preventing the Russia-EU conflict/war possibility as a whole. Meanwhile, the outbreak of the Russian-Ukrainian War in February 2022 represented the necessity to focus on applying game theory and hypergame theory to reach the balance relevant to the (DEL) in an actual state of all-out war to restore the stability of the international system by precluding conflicts/wars (between its states) first, and containing and ending them once they arise second, using the same theoretical-methodological foundation.

-Why are the US-China Taiwan war possibility (hyper)game-theoretic analysis case and the US-Iran war possibility one? Given the abstract nature of the (DEL) that concentrates primarily on preventing the conflict/war possibility among competing/conflicting powers in the international system where a deterrence relationship exists under different origins (since we prove that the balance in the system powers conflict and deterrence relation might be relative, absolute, or incomplete), working on those two cases mirrors remarkable vital priorities to reach the key objective, in this study, of avoiding wars/conflicts achieving the peace and security within and between nations, relying on game theory and hypergame theory as a theoretical-methodological foundation. So, both analyses not only provide the tools to impede the possibility of shifting a regional war into a global one but also prevent such a war from its roots.

-Why is the Israeli-Palestinian Conflict (hyper)game-theoretic analysis case? Based on the above-mentioned reasons, it is critical to focus on avoiding the global system's conflicts/wars aiming at achieving multi-level peace and security without approaching one of the most long-lasting conflicts in political history, the Israeli-Palestinian one. No balance can be obtained in the international system if the regional war possibility in the

Middle East is still highly probable. The key reason for choosing this case example is to help bring peace in the Middle East region by moving the most crucial, dominating, changing, and challenging piece of the game out to a safe position. Hence, the study goal of using the applied game theory and hypergame theory to impede conflicts/wars becomes fulfilled. Given that the (DEL) as the second part of our (Conflict or War Impediment Strategic Approach) deals with inter-state conflict cases, there was a pivotal necessity to address an intra-state conflict case, which is going to be Egypt's one, to focus on managing conflicts rather than impeding them in another developed strategic approach as to come below.

For This Study's Developed (Multi-Level Conflict Management Strategic Approach)

In the first part of the (Multi-Level Conflict Management Strategic Approach) of managing the clash of civilizations: Why do we study Egypt's representation in the Western Media and choose BBC English?

-Since the mentioned strategic approach addresses first the so-called clash of civilizations, concentrating on the relationship between a balance of culture and the representation of the other, which is the non-Western primarily, from the orientalism theory perspective, exploring how one sample of this other is being framed and represented in the Western media discourse paves the way for building a game-theoretic model based on concrete evidence for tackling the clash of civilizations between the West and the East in the first place.

-Selecting the Egypt case is intentional, given the geopolitical importance of Egypt as the other and an essential country for representing the East or the non-Western. Namely, we needed a case to generalize on the representation of the non-Western in the Western media, proving the validity of the orientalism thesis first and moving to solve violent/non-violent aspects of the clash of civilizations second, and on multiple levels as well.

-Choosing the timing of the framing analysis is also intended. In terms of concentrating on conflict management (where we move forward in the second part of our introduced approach to analyzing the Egyptian conflict and managing it theoretically and conventionally before discussing two hypergames for conflict management strategically),

we focused on revealing how Egypt was represented in the Western media during a transformation stage of the Egyptian political history. More specifically, the analysis period comes after a. the June mass protests and the sequential July military overthrow of the existing political regime in 2013 and b. the former Defense Minister Sisi seized power in May 2014. In doing so, we keep the coherency in our research parts between the conflict country's media representation and this conflict analysis and management next.

-Studying the other's representation in the Western media is a task that crystalizes the importance of which Western media platform is a. addressing global audiences, b. specialized in the Middle East issues, c. representing multiple languages-international news networks, d. demonstrating solid colonialization history, heritage, and connections, and, therefore, superiority towards the East, to be able to correctly reveal results based on an accurate and valid assumption that the non-Western or the East is the other or them for this Western platform or us. The BBC (British Broadcasting Corporation) English here is the best media sample, which was founded in 1927 and is the largest broadcaster in the world. In that case, all the mass media sample criteria necessitated for acquiring evidence-based analysis to explain the other's framing in the Western discourse for managing the clash of civilizations in a subsequent game-theoretic model built are found.

In the second part of the (Multi-Level Conflict Management Strategic Approach), managing intra-and inter-state conflicts: Why Egypt's 2013 intra-state conflict is chosen as the analysis and conventionally theoretical management case?

Given the so-called Arab Spring revolutions erupting during the 2010s that caused chaos and civil wars in the Middle East, sufficiently to call this region the most inflamed one by conflicts in the entire world, we needed to select a valid case out of the whole sample to analyze and manage to stand at the reasons, and structural roots of conflicts in the Middle East, why conflicts escalate, and why managing them theoretically in a conventional way fails. Thus, we could locate the shortcoming sides to advance in developing hypergame-strategic theoretic models for conflict settlement, resolution, and transformation in the most optimal way. Consequently, all deviation possibilities on the path of conflict management can be considered while widening the strategic vision based on applying IR and media discourse theories to manage those conflicts ensuing between nation-states, not only within them.

Why Is This Study So Much Important? How It Makes Contributions to the Theoretical Literature?

This study is one of a few ones that apply game theory and further its extension, hypergame theory, to media discourse, politics, and conflict management areas of specialization, and in an integrative way, to achieve national, regional, and global peace and security and the stability of the state and inter-state system's structure. Within this study, we develop all the following:

First: A (Conflict or War Impediment Strategic Approach). That is composed of two parts: the first is a (Deception Hypergame Model of Inter-state Conflict/DHMIC), which we apply to two inter-state conflict cases. Comparingly, the second part is what we call the (Deterrence Entanglement Law), considering its theoretical application to five pressing descriptive-prescriptive conflict cases for the purpose of bringing peace and security theoretically-strategically among the international system's powers/states and, therefore, stabilizing the structures of the global system and regional ones, coinciding with reaching a *state of balance domination* in the powers' conflict and deterrence relation.

Second: Modeling the Israeli-Palestinian Conflict's conflict/war impediment states from the Deterrence Entanglement Law's perspective.

Third: A Restoration of the developed-Deterrence Entanglement Law (DEL) rules within an actual state of all-out war through advancing in building what we call a (Mutual-Grand Strategy Modeling of the Russia-Ukraine War 2022).

Fourth: Revealing uncertainty of the 2022 Russia-Ukraine War dynamics from the game theory and hypergame theory perspective. In this context, we develop a ('Non-Chance Space' Reduced War-Hexagon) for the war-(hyper)game modeling and counter-modeling.

Fifth: Within the confines of this study, we also introduce a (Multi-Level Conflict Management Strategic Approach). Under this approach, we first apply game theory to media discourse and politics, developing a (Clash of Civilizations Game) as a game-theoretic model working on managing the violent and non-violent aspects of this clash through revealing the relationship between the representation of the other and a balance

of culture on global, regional, and national levels, tackling the clash of civilizations and sub-civilizations alike.

Sixth: Under the manner of the built (Clash of Civilizations Game), we introduce three significant theoretical contributions: a. Theoretical development of (The Cause and Effect of an Integration Process of Discourse and Media Representation, Orientalism, and News Framing in the Western Global Media). b. Theoretical development addressing a (Mutual Influence of the Surface and the Core in an Interrelation of the Cause and Effect) for *countering cultural conflict-generated terrorism*. c. A completely developed approach, which we call the (Media-Liberalized Discursive Realism). Under the latter, we suggest a (Balance of Culture) model, explaining how cultural containment copes with the binary oppositions-dilemma as a culture balance-oriented strategy for stabilizing the global, regional, and nation-state system's structures.

Seventh: We suggest a theoretical framework on how to achieve positive peace in the Middle East. As a first step, this framework deals with managing conflicts relying on a conventionally combined theoretical perspective without focusing on a (hyper)game theory-based strategic theoretic modeling.

Eighth: Advancingly, one of our most critical theoretical contributions is the intra-and-inter-state conflict management strategically under the (Multi-Level Conflict Management Strategic Approach). In this approach's second part, we discuss: First: a (Positivity of Peace Hypergame Model "PPHGM"). Second: a (Balance of Peace-State Hypergame Model "BPSHM"). Accordingly, both hypergame models operate on theoretically-strategically managing conflicts within and between nations to settle, solve, and transform them based on the equilibria reached and equations provided.

The Study Divisions

This dissertation is divided into four chapters. The first addresses the conflict management theoretical debates, while the second focuses on the applied theory used (i.e., game theory and hypergame theory) and the theoretical development of what we call the "Conflict or War Impediment Strategic Approach." The latter includes the first part of a (Deception Hypergame Model of Interstate Conflict "DHMIC") and the second of a developed (Deterrence Entanglement Law "DEL"). In the third chapter, the game and

hypergame-theoretic analysis takes place, where we discuss a. applying cases of our (Conflict or War Impediment Strategic Approach) in its two branches; b. a restoration of the (DEL) in an actual state of all-out war through a developed (Mutual-Grand Strategy Modeling of the Russia-Ukraine War 2022); c. a built ('Non-Chance Space' Reduced War-Hexagon) modeling for the war-(hyper)game modeling and counter-modeling, and its application to the Russian-Ukrainian War case.

In the fourth chapter, we introduce what we call a "Multi-Level Conflict Management Strategic Approach" for: a. managing the clash of civilizations through a developed game-theoretic model, after relying on studying the non-Western (Egypt in our case) representation in the Western media (the BBC). b. managing intra-and inter-state conflicts by building a (Positivity of Peace Hypergame Model "PPHGM") and (Balance of Peace-State Hypergame Model "BPSHM"); following considering Egypt's intra-state conflict analysis and conventionally theoretical management as a case to other symmetrical ones, for the realization of the weakness positions to best settle, solve, and transform conflicts through theoretic-strategic modeling. Accordingly, the general conclusions show how this dissertation achieved its objectives and proved the study hypotheses.

CHAPTER ONE: CONFLICT MANAGEMENT AND INTERNAL AND EXTERNAL STATE BEHAVIOR; THEORETICAL DEBATES

After World War II, as many colonized territories were following suit in a struggle against colonialism and gaining their independence, a pacific transition of (fragile) state systems had not fundamentally been the case, and therefore, many ethnic groups of shared identity and culture fought for their own cause _ such as the Kashmiri people in South Asia after dividing British India in 1947 into India, East Pakistan, and West Pakistan. In the same context, with the collapse of the Soviet Union and the breakup of Yugoslavia in the early 1990s, several intra-state conflicts erupted within the realms of these two Communist blocs. It was apparent that the end of the Cold War²² in 1991, coinciding with the disintegration of the Warsaw Pact's²³ Central and Eastern European²⁴ member-states and the dissolving of the Union of Soviet Socialist Republics (USSR),²⁵ did not have a significant impact on an *early* stabilizing of the political structure of the newly emerging international system of unipolarity under the United States leadership. It marked, however, an alternative trajectory for dealing with an increasing number of internal conflicts in the remnants of a global Communist bloc, from one hand; whereas, several

²² The Cold War (1948-1991) was a conflict of geopolitical tensions and proxy wars (i.e., wars or armed conflicts fought by agent-states or agent/recruited-armed groups with physical or/and logistical support from external/foreign actor or power) between the United States of America mainly and the Western bloc, from one hand, and the Union of Soviet Socialist Republics primarily, and the Eastern bloc, on the other hand, after World War II. The most prominent examples of these indirect confrontations were the Cuban Missile Crisis (1962), which is a geopolitical unarmed (limited) conflict instance, and the Korean War (1950-1953). In the latter case, US troops fought on the side of South Korea against the Communist army of North Korea that was supported by Soviet and Chinese forces. The Cold War traces its roots to US President Harry S. Truman's foreign policy doctrine, announced to Congress in 1947, which was developed in 1948 and aimed at Soviet Expansionism's containment. The doctrine considered that the US is pledged to support free people in their struggle against Soviet communism threats, from inside or outside their national borders, occurring by armed minorities or external pressures. Accordingly, the Congress appropriated financial aid to support the Greek and Turkish militaries and economies as a vital factor in containing the communist uprisings in both countries and, therefore, the Soviet expansion within this strategic zone. The doctrine had led to establishing the North Atlantic Treaty Organization (NATO) in 1949, which became a developed base of the Western bloc's military and security alliance of anti-communist states.

²³ The Warsaw Treaty Organization (May 1955- July 1991) member states were: the Soviet Union, Albania, Poland, Czechoslovakia, Hungary, Bulgaria, Romania, and the German Democratic Republic (East Germany).

²⁴ Central and Eastern European Countries (CEECs) comprises of these states: Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia, and the three Baltic States: Estonia, Latvia, and Lithuania.

²⁵ The USSR (December 1922- December 1991) member states were: Russia, Ukraine, Georgia, Belorussia, Uzbekistan, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova, Turkmenistan, Tajikistan, Latvia, Lithuania, and Estonia.

of the former Communist-Central and Eastern European states joined the European Union (EU)²⁶ and the Western Bloc, on the other. Based on that politico-historical perspective of our contemporary world, in this chapter, we focus theoretically on illustrating the difference between intra-state conflicts and those that erupted inter-state, conflict management theorization, old wars and new wars, deterrence as a theory and strategy for the system stability, conflict causation and elimination debates, and conflict management relation to media discourse and politics.

1.1. Conflict Definition, Nature, and Its Management: Theoretical Perspective

From a law perspective, the conflict concept differs apparently from that of dispute, although we, and many other scholars, use both terms to refer to almost the same sort of clash existing among opponents. Fundamentally, “conflict is seen to exist when there is an incompatibility of interest. When all available methods and techniques for managing this conflict are exhausted and conflict becomes irreconcilable, techniques for dispute resolution are required²⁷.” That is why there is a differentiation between notions of conflict management and dispute resolution, since “conflict can be managed, and perhaps avoided. A dispute may or may not flow from conflict and is associated with distinct justiciable issues. Disputes require resolution but (can) be managed rather than the process may lend itself to third party intervention²⁸.” Comprehensively, in this section, we shed

²⁶ The EU is a political and economic union established in 1993 by the Maastricht Treaty, including 27 member states, mainly in Europe, and taking the shape of supranational confederation or inter-nation confederal government. It was founded by signing the Treaty of Paris in 1951, and the Treaty of Rome and the Euratom Treaty in 1957 by “Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany.” The three treaties created the European Communities; the European Coal and Steel Community (ECSC)” for regulating the coal and steel industries, by the first treaty, and the “European Economic Community (EEC)” as an economic integration among the founding states, by the second treaty, and the “European Atomic Energy Community” by the third. The three communities were replaced by the European Union in 1993. Through extending the EU accession process to many other countries, the EU member states now are “Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.” The United Kingdom joined the European Communities in 1973 and was the only member state to leave the EU in 2020.

²⁷ Mohammed Dulaimi, “Iraq,” in *Dispute Resolution and Conflict Management in Construction: An International Review*, ed. Peter Fenn, Michael O’Shea and Edward Davies (London and New York: E & FN Spon, An Imprint of Routledge, 1998), 120.

²⁸ Peter Fenn, Michael O’Shea and Edward Davies, “Introduction and Commentary,” in *Dispute Resolution and Conflict Management in Construction: An International Review*, ed. Peter Fenn, Michael O’Shea and Edward Davies (London and New York: E & FN Spon, An Imprint of Routledge, 1998), xvii.

light on conflict definition and nature in relation to conflict management from a theoretical lens.

1.1.1. Intra-state Conflict

The intra-state conflict is a concept of the conflict that breaks out within the borders of a nation-state distinguished by complete or incomplete sovereignty, which occurs mainly for ethnic and cultural, religious and sectarian, political, economic, or ideological causes, with the interference of foreign actors and internationalizing the conflict or the non-intervention of any external powers and keeping it nationalized. In this context, the following explanation differentiates between features of a. the ethnic conflict, b. the terrorism-generating conflict, where the terrorism meant is religious/political ideology-based and associates with the (internal) conflict occurrence, and c. the political/ideological basics-derived conflict or *civil war*. Principally, the focus of this research study is on tackling those three variants of the intra-state conflict, considering that terrorism is a national phenomenon first that might be international second, which ensues within states relying on chaotic conditions existentialism but is coped with further as a significant conflict-effect spreading across nation-states.

Firstly: the ethnic conflict. It is a conflict arising based on ethnicity issues-related differences, where not all dislike ethnic groups tend to dispute over self-determination rights, but a prominent number of conflicts that ensued after World War II and beyond were motivated by ethnic dissimilarities. Some intra-state conflicts develop over time, converting to be inter-state conflict cases when two ethnicities (i.e., different ethnic groups of people) or more decide or move to employ self-determination right for each ethnic group on shared territories. One of the most famous instances is the division of British India in 1947 based on religious differences into India with a Hindu majority and East and West Pakistan with a Muslim majority. After the division, India and Pakistan fought three major wars over the Kashmir region that borders both nations in 1947 and 1965, and a limited war in 1999. The *internal* conflict transformed into an *inter-state* one in that case. Another like-issue of conflict is represented in the United Nations Resolution 181 that passed by the United Nations (UN) General Assembly in 1947, which called for the partition of Palestine into Arab and Jewish states, where the city of Jerusalem was to be a separate entity governed by a special international regime. Similarly, after the

partition, the interior civil conflict between the Arab and Jewish communities within previously British mandate-subjugated Palestine took another course of inter-nation wars fought between Arab states and Israel (the newly declared Jewish state by 1948) in 1948, 1956, 1967, and 1973.

Ethnicity, therefore, is one leading feature of the occurrence of (*intense*) intra-or inter-nation disputes. It is the causation of possibly separating groups of people based on differences in language, religion, traditions, historical backgrounds, ideological beliefs, and norms and practices if these factors existed thoroughly among distinguished communities *homogeneously* coexisting on a specified and delimited part of a (historical) territory. If religion-dissimilarity is the only root of a conflict, this may be seen as a *sub-ethnicity-based conflict* because of the resemblance existing in many other societal factors. In general, ethnicity becomes the collective identity, as well as the common and shared culture of a group(s) of people, which might be the stimulus, or reflect a “*holy duty*,” along with generations to initiate a conflict and fight a war for the sake of unity to those shared values and beliefs under one flag. Interestingly, Hutchinson²⁹ argues that ethnicity is compatible with pluralism, but it is a *constrained* pluralism, so the internal diversity of ethnic groups does not motivate the development of alternatives unless being driven by some commitment because what keeps its relevant contestation that can produce polarization of options in check is a sense of common values, a consciousness of which may arise out of the cultural debates themselves.

Secondly: What if ethnic or political roots of conflict lead to illegally violent deviation by some antagonistic groups or provoke committing terror behaviors against civilians for achieving political gains? Under that situation, the phenomenon of political motivation-derived terrorism is located. Among several kinds of terrorism, one basic type is fed by conflict and ethnic disputes, which is best described as conflict-generated terrorism. The conflict that provokes the emergence of terrorism is generally seen to be initiated intra-state _ while the state-fragility factor may or may not exist, contributing to organizing terrorist groups’ fronts in the first place. Also, the resulting terrorism outcome is more likely to be religious or/and political ideology-oriented. In some cases, terrorist activities

²⁹ John Hutchinson, *Nations as Zones of Conflict* (The UK, London; the USA, California & India, New Delhi: SAGE Publications Ltd, SAGE Publications Inc & SAGE Publications India Pvt Ltd, 2005), 112-113.

manifest vigorously and spread not only on a national stage _ from which it had begun _ but also on regional and international ones sequentially, coinciding with the terrorist ideology exportation and distribution among other public groups of people. Now, it is a political game of actors (i.e., terrorists) who unlawfully act outside the sphere of state sovereignty, even from inside an utterly sovereign nation to whose jurisdiction they are supposed to be subject.

Theoretically and practically, terrorists/terrorist groups are non-state actors recognized by committing illegitimate aggression in one or more aspects of human life. Under a *broader concept* of terrorism, the last reflects aggressive or lawless actions that an outlawed group(s) of people direct for political purposes or economic interests (e.g., illegal drugs or weapons trade, or smuggling activities by a banned organization), among others, against innocents. In that case, nation-state authority practiced upon such groups is diminished or eliminated, either in an actual world or cyberspace. In IR theory, studies on conflict management generally began to highlight an international terrorism phenomenon considering it a derivative effect of conflict or cause of extended conflict _ where the political incentive lies at the core of terrorist acts _ since the 11 September terrorist attacks against US premises and thousands of civilians had taken place in 2001 allegedly by Al Qaeda terrorist international network. Therefore, a limited or politics-focused concept of terrorism became more remarkable than before, which is conflict-related.

Under a *limited or politics-focused concept*, terrorism term means the use or threat of use of violence against civilians by a weaker armed group sharing the same violence-directed-political/religious ideology, under a comprehensive manner of asymmetrical confrontations against a stronger party/entity such as a nation-state or coalition of states. Terrorism, in this context, is the tactics used to justify committing illegal aggressive actions motivated by political or/and religious ends and employed by combatants and their leaders for amending political, economic, or/and territorial settings unaccepted by that armed group. Moreover, conflicting-terrorist groups became representatives further to multiple layers of organized networks, expressing the “*organization of terrorism*” itself on many possible levels (say, high, moderate, or low), which is a sub-phenomenon of the primary conflict-related (international) terrorism one. The question is, why would terrorist groups in a conflict society be allowed to develop and extend the range of their

violent actions from the beginning? In fact, that dates the existence of counter-value to that adopted by civil society organizations within and between nations to achieve peace and justice, which brings chaos, conflict, and war instead.

Many examples manifest regarding how primitive terrorist groups could organize themselves over time as a coherent political entity, facilitating terrorist practices in this manner. The most salient was the Al-Qaeda terrorist organization³⁰ that was founded in 1988 during the Soviet-Afghan War. Terrorism from the mentioned perspective is a method of organizing aggressive behaviors to be committed against combatants as well as non-combatants, whose modes and tactics necessitate national, regional, and international counter-efforts in virtual and actual combat alike for restoring peace and security either in intra-and inter-state battle zones caused by organized terrorist groups or in any other region affected by such aggression. Strikingly, counter-terrorism endeavors concentrate on a struggle against non-state terrorist actors within or across nation-states and the *misleading ideology* that created terrorism's core at first.

Thirdly: Civil conflict or war. This sort of internal conflict is distinguished by its political, ideological, or/and sectarian and ethnical nature, and it coincides with motives of changing an existing structure of the state-system and positing a new setting alternatively, which might include uprising, revolution, insurgency, rebellion, or insurrection to occur societally. Civil wars were a gloomy feature associated with the rise and fall of nations throughout medieval, modern, and contemporary history. In modern history, the English Civil War (1642-1651), a series of civil wars fought between Parliamentarians and Royalists over the governance of England and religious freedom issues, had left a long-lasting impact on the political orientation of the English nation. In our contemporary world, the so-called Arab Spring Revolutions that occurred in the 2010s left extreme influences on how civil wars breaking out in Libya, Syria, and Yemen _ which were popular paths, first, followed for a political change's pursuit by revolutionary groups of people of one nation _ and being internationalized by foreign powers intervention, shifted these nation-states into fragile entities. In such fragile states, "*sovereignty*" over a defined territory and a specific amount of population with legitimacy by the whole international

³⁰ It is a militant multinational terrorist network claimed to follow the Salafist Islamist ideology that traces its roots to the early ages of Islam, under new labeling of Salafist Jihadism concerning extremism demonstrated outside a broader pacific Islamic ideology.

society on one admitted national leader of agreed-on homeland borders became *under question*.

1.1.2. Inter-state Conflict

The inter-state conflict is an external conflict that erupts between two or more discrete nations where the disputing side might be a sovereign nation-state or a socio-political entity such as principality, self-determination regime, and colonized territory. That inter-nation conflict might be: a. *limited conflict* when a dispute among states ensues, developing to possibly including military action, and then is being de-escalated, b. *all-out conflict* if one or both states escalate the dispute, involving in military confrontations and refraining from moving to comprehensive war, c. *limited war* if military skirmishes or/and armed attacks between conflicting states take place shortly and then are being de-escalated, which generally expresses one circle in a chain of continuous war, d. *all-out war* when one or both conflicting states intentionally or premeditatedly escalate the military actions against the other(s) in severe and relentlessly ongoing battles, e. *major or great war* if super/great powers engage in continual military battles versus one another in an all-out war. Assuming that there is a grade out of five to each level mentioned, where *one* indicates the less intensity of inter-state conflicts and *five* is the highest, thence: the *limited conflict* is (Level I), the *all-out conflict* is (Level II), the *limited war* is (Level III), the *all-out war* is (Level IV), and the *major or great war* is (Level V).

In IR theory, the key focus was on interpreting the cause of war or conflict to avoid it. From Classical Realist thought, the war or conflict traces its roots to an aggressive human nature that is best seen under anarchy conditions when the war be the case where no absolute ruler or government exists to restore security and end the state of war. On a systemic level, anarchy is ascertained with existing *no* central authority to rule the world, leading states to seek security by accumulating power at one another's expense and achieving self-interests through relative gains within a suspicion-based international environment. At the core, anarchy causes a security dilemma in the international system, which is the structural causation of war among nations from a Structural Realist perspective. The *security dilemma* means that rational actions made for self-arming by the system's states might cause war. More specifically, actors (i.e., states) of an international system defined by its anarchic structure should acquire political and military

power by alliance building and arming strategies in a self-help system. Although such actions are rational and picked for purely defensive reasons, they stimulate other nations to act likewise, while the suspicion factor distinguishes inter-actor relations. The accumulated outcome, in that case, becomes war after directing a state's military and alliance against another thoroughly, even if unintentionally.

Liberalism thought contests that of Realism. For Liberalists, an international regime defined by cooperation and interdependence affords absolute gains in mainly political and economic realms for all actors within cooperative international institutions. Under a Liberalist perspective, the war outcome is minimized as long it might affect economic interests sought in the first place between international actors so that the war is avoided. From the Social Constructivism view, states' perception of surrounding reality determines their interactive relations. Anarchy and cooperation are not facts but perceived sides of reality _ for Social Constructivists. Namely, Realists choose to construct perceptions on other actors as being conflicting or competitors and self-helpers, while Liberalists decide to perceive the system's actors as cooperators and regime-builders. Briefly, we can conclude that the ***war is what states make of it***, following in the footsteps of Alexander Wendt,³¹ who first introduced the Social Constructivist approach in interpreting IR theory through his 1992 article: "Anarchy Is What States Make of It: The Social Construction of Power Politics," which was published in the *International Organization Journal*.

The previous theoretical explanations of war causes rely on system-level analysis, considering Realism and the anarchic nature of the international system structure, and also, Liberalism and the interdependence relations among economic benefits-oriented-national governments in a global liberal regime. The system structure-based analysis provokes inquiry on many other factors, such as the type of polarity of the international system and whether it affects the escalation or de-escalation of wars among states. Polarity describes the distribution of power among the international system's states, in general, and great powers in particular. The system might be unipolar if one power or pole dominates it, bipolar if there are two, and multipolar if there are three or more poles. What may concern here is that the international system underwent *relative stability* from

³¹Alexander Wendt, "Anarchy Is What States Make of It: The Social Construction of Power Politics," *International Organization* 46, no. 2 (Spring, 1992): 391- 425.

1815 till 1914, which is well-known as the long-peace century when multipolarity was the case of the day with Britain playing the role of *balancer of the system*. The European continent was defined, at that time, by a classic balance of power system, where no power or group of states could overwhelm the others. However, the Great War erupted by 1914 in the European regional international system. It was evident that when the multipolarity had taken the shape of escalatory bipolarity by establishing the Triple Alliance of German Empire, Austria-Hungary Empire, and Italy in 1882 versus the Triple Entente³² of France, Russian Empire, and later the United Kingdom, the prevailing alliance system turned to be a *war-escalator* instead of a *system-stabilizer*. The last was the strategic objective meant first from founding the alliance system when the German Chancellor Otto Von Bismarck sought to ally with Austria-Hungary through the Dual Alliance in 1879, maintaining peace by making waging successful war by the Russian empire against both empires less possible.

The international system witnessed another level of relative stability after World War II (1939-1944) ended and the Cold War began (1948-1991). That relative stability was associated with the *bipolarity* of the system where no great or major war had occurred when the US and Soviet Union represented the system's two poles. After the collapse of the Soviet Union in 1991, a unipolar international system emerged under the US leadership before China, specifically, and Russia, the European Union, and India generally, could catch up with the US position as rising powers of a multipolar system in the early 21st century, with the US (still) at the helm.

A hegemonic stability theory sees that an international system defined by *unipolarity* might be more stable considering that a sole hegemonic-state or pole of the system would have the necessary (military, economic, political, and diplomatic) power to deter aggression, restore security, and enforce rules to prevent wars and conflicts. Nevertheless, the interrogation arose from the power transition theory that argues that (major) war/conflict is *likely* to arise when relations of power undergo a change within the international system where rising powers challenge weakening hegemons. Conclusively, if a rising power attempts to change a weakening hegemon's equations of running the

³² Triple Entente was one of the leading causes to World War I, which was built upon the Franco-Russian Alliance of 1894, the Entente Cordiale of 1904 between France and Britain, and the Anglo-Russian Entente of 1907.

international system and deviating sharply by clashing or conflicting with its interests, a major war is the most likely outcome. Otherwise, if the rising power seizes a weakening hegemon's position, maintaining the latter's governing rules, practices, and interests (i.e., politically, economically, militarily, diplomatically, socially, and culturally), the major war does *not* appear to be a probable outcome.

Another vital level of analysis reflects a high possibility of avoiding war. It is the democratic dyads-level analysis, which focuses on the nature of relations between pairs of states regarding being democracies or not. A liberal democratic peace theory establishes a solid ground in IR theory based on that approach. Democratic peace theorists argue that liberal democratic states do not go to war against each other, but they might go to war against illiberal, dictatorship, or non-democratic states. From that perspective, a global view of a wholly democratic world of liberal states provides the conditions based upon historical empirical evidence that such a democracies-composed-imagined international system will *not* witness wars or all-out conflicts among its like-states with symmetrically democratic domestic structures.

In sum, if it exists, a global democratic-political culture, shaping an international society of all states living in perpetual peace, with an “*absolute*” peaceful orientation in managing possible conflicts, marks the causation for avoiding probable wars. That imaginary exit of wars seems to ascertain under a *global citizenship's* identity of *cosmopolitan-citizens*, or *moral communities'* principle, for whose existence critical theorists stand firmly, where borders of so-called nation-states fade away. According to a critical theory perspective of emancipatory post-sovereign peace _ exceeding the Realist and Liberalist notion of territorial sovereignty, inherently structural violence in conflict zones ceases to exist when a. universal human-emancipation freeing peoples from physical and human constraints that restricted their free-choice once, b. emancipatory discourse ethic-constructed-global peace, c. open communication and free dialogues between individuals of different backgrounds representing inclusion and diversity, and d. systemic self-sustaining justice prevail *equally* in political, economic, social, and cultural structures of a developed world system, preserving the values and norms that all human species agreed on and shared together for millennia.

Finally, a *Clash of civilizations* is considered a cultural lens of conflicts interstate or even intra-state. It is defined by witnessing groups of people who share a different identity of distinct ethnic or religious backgrounds coexist *heterogeneously* with another dominant identity people within or between nations, that imposes a diversification of language, traditions, religion/religious sect, historical context, or/and ancestors' dynasty to manifest. In that case, a homogeneous texture of the social body ceases to exist internally or toward other dissimilar nations, where the clash between unlike cultures occurs as a rationality-disguised-irrational preference for such incompatible groups of people. Further, the clash of civilizations was to be associated with religious revivalism crystalized prominently in our contemporary history by the Iranian Islamic Revolution in 1979, since this religious resurgence targeted Western secularism as an enemy of indigenous religious heritage. However, "the current religious revival does not offer a significant threat to the system of national states. In many cases, religious movements have become ethnicised and another variety of nationalism."³³ In short, the clash of civilizations is best described as being *ideological combat* in which opposing civilizations or sub-civilizations might engage non-violently _ when expressing antagonistic ethnic or religious heritages non-aggressively _ or violently once such opposition turns to reflect animosity between these civilizations in battle zones, either nationally, regionally, or globally in both cases.

1.1.3. Conflict Management: Theoretical Debates

In IR theory, a negative peace generally addresses the state-level causes of conflict, which was associated with a victor's peace argument in Realist thought, the kind of peace that describes a state when one actor (i.e., a nation-state) in a conflict wins at the expense of the other. In contrast, positive peace focuses on dealing with the conflict roots in society and at cross-individual and groups level, which emerged through the win-win peace formula. Considering the conflict as the salient effect of structural problems economically, politically, and socially within a conflict society, the positive peace established the initiative to overcome the structural violence for guaranteeing not witnessing the conflict or a renewed episode of a given conflict in the future.

³³ Hutchinson, *Nations as Zones of Conflict*, 189.

Integrating some Realist and Liberalist arguments, an approach to constructing liberal peace in conflict societies emerged by the end of the Cold War, where force and power became the tools for enforcing peace and preventing wars. In the beginning, liberal peace was represented through broadening the implications of peacekeeping operations and required the targeted sovereign state's consent, and later, such consent was no longer necessitated for the provision of liberal peacebuilding to the dispute societies. Liberal peace constitutes the core of political, societal, and economic governance reform, domestically and internationally, oriented by liberalist ideology. It focuses on the democratization of local and global governance institutions as well as human rights, self-determination rights, and freedom within the civil society, placing and disseminating the free trade and open markets values and norms as features of state-economy recovery and governing in conflict or zero-conflict zones.

Conflict management was the diplomatic tool in the Realist thought-based-first generation of victor's peace to help both conflicting parties agree on a peaceful exit of armed disputes, putting an end to an ongoing conflict through mediation or limited peacekeeping mission deployment under the permission of the host state. Moreover, states were the concerned actors in managing conflict, and their self-interests were the aim of such efforts, whereas non-state actors had not been considered within a third-party intervention, and the latter's interests in mediating a conflict seized a vital position. In a second generation, the focus moved to conflict management by tackling *structural violence* by introducing the win-win peace formula of positive peace that deals with rooted causes of dispute on the individual, group, and society levels.

Structural violence is a concept pointing out that oppression and human deprivation within a given society's political, economic, and social structures represent and reflect the roots of aggression and violence. Such inherent causes and motives of violence and conflict were to be coped with through a positive peace brought about by *societal progressivism* on the level of state structures, placing *human needs'* fulfillment and satisfaction objectives as a key of conflict management. By the Cold War's end, the third generation came out, under which a state-building notion precisely mirrored a *liberal peacebuilding* project in conflict zones employing liberal-peace arguments and aims, relying on the deployment of wider or multidimensional peacekeeping operations to the dispute's society for peace-enforcement pursuit. Thus, liberal-peacebuilding implications

became at the helm of conflict resolution and transformation by influentially keeping and imposing peace within failing or weakening states and contributing to the establishment of a new world order, which is liberal ideology-oriented, replacing the former bipolarity of communist-liberalist hybrid doctrine.

In the fourth generation of conflict management, the critique of the liberal peace project was the case, which considered the liberal peace's governance reform as a way of redistributing the power and rules in the world system by a hegemonic actor through external intervention in conflict zones. From this perspective, the reform of governance based on the liberal peace argument reconciles hegemony, the balance of power, national interests, and liberal institutionalism objectives altogether. Strikingly, the fourth generation's critical strand called for human emancipation to prevail in conflict societies. It "implies an emancipatory form of peace that reflects the interests, identities, and needs of all actors, state and non-state, and aims at the creation of a discursive framework of mutual accommodation and social justice which recognises difference... (where) post-Westphalian (or post-sovereign) peace is its aim."³⁴ The Post-Westphalia principle is associated with those *new wars* emerging in the post-Cold War era, under which state sovereignty became in decline, and military intervention by intergovernmental institutions is legitimized in intra-state conflicts as well as inter-state ones without having the permission or consent from the host state's government. In a post-structuralism variant of the fourth generation, *emancipatory peace* is also identified. However, peace is seen as a product of sovereign governments through top-down mechanisms _ not only bottom-up ones as those predicted by the critical theory that seeks the achievement of self-emancipation aim (that is, on civil society levels), embodied in the elites' or ruling classes' discourse, conveying universal objectivity (or inter-actors subjectivity) of *structural peace* versus *structural violence*.

Based on that theoretical introduction, what is, more specifically, **conflict management**? Conflict management is any effort exerted by a third-party intervention for the prevention, limitation, containment, or de-escalation of the tensivity, intensity, and extensity of an ongoing (armed) conflict or war intra-or-inter-state. Conflict management might take the form of mediation, peacekeeping, state-building, and peace-enforcement, among other

³⁴ Oliver P. Richmond, *Peace in International Relations* (United Kingdom: Routledge, 2008), 109.

sub-forms such as coercive diplomacy, adding to that the international adjudication for settling or resolving conflicts among nations. Managing a conflict through mediation means that a third party might intervene between disputants to bring them to sit together on the negotiation table, assisting both in moving to peaceful solutions or acceptable exits for ending a state of conflict or war.

The theory suggests that mediation efforts are best made during the ripeness moment of conflict when both parties may agree to participate in negotiation based on given facts of failure or temporal non-success in the battle zones. Also, the third-party interests in initiating mediation are to be considered. So, mediation is a mode of negotiation art that is practiced by neutral third parties such as nation-states, intergovernmental or non-governmental organizations, individuals, political leaders, etc., which serves the private interests of the intermediaries themselves. Using sub-forms of conflict management like coercive diplomacy lies further in the realm of mediation. Coercive diplomacy is the use or threat of use of deterring force, still not military, to compel one disputing side or both to accept the negotiation trajectory instead of continuous conflict or war. It implies imposing sanctions, embargoes, threats, trade tariffs, etc., as a means of enforcing rules for containing conflict or war. Nevertheless, coercive diplomacy tools can be used during a state of *relative peace* when the international system's hegemon(s) seek(s) to employ some ways for deterrence against aggressors in the system in order to make the conflict/war outcome less likely.

In the IR discipline, the peacekeeping approach has been one of the main methods traced for conflict management. It first appeared through traditional peacekeeping operations in the early 1950s, developing into peace-enforcement and state-building projects by the 1990s that further sought conflict resolution goals. **Peacekeeping** is a concept meaning the deployment of military personnel as well as civilians to the conflict zones under an international flag of a multinational coalition of states that agreed to contribute to containing an ongoing conflict for conflict management purposes. One of the first missions of peacekeeping in the United Nations history was the UN force deployed in Sinai, Egypt, in 1956 to help de-escalate the war between Egypt and Israel after the Suez crisis – that occurred in the same year when Israel, Britain, and France attacked some infrastructure positions as a part of a broadening circle of Arab-Israeli wars.

It can be said that along with the Cold War era, and up to the early 1990s, peacekeeping capabilities to manage conflicts were restricted by the same constraints of the surrounding bipolarity system, and such operations were to be issued within the manner of the United Nations Security Council and General Assembly decisions. In that case, peacekeeping missions had been pledging to an *impartiality* principle and could rarely have had the choice of resorting to force or coercion during their presence in conflict zones where the host country's *consent* on the international/UN forces deployment was necessitated.

By the end of the Cold War, peacekeeping efforts developed into being more active and extremely effective, particularly in failed and fragile states, introducing a new era of the construction of liberal peace under the so-called ***liberal peacebuilding*** reflecting *wider* and *multidimensional* peacekeeping operations. Two variants of the liberal peacebuilding project manifested strongly: peace-enforcement and state-building. Some salient examples are there to prove to what degree and extent the nature of the pre-Cold War *traditional* peacemaking shifted by the transformation of the international system itself when unipolarity was taking shape, formulating a new liberal world order. The first instance is the Gulf War (1990-91), when a US-led operation, the so-called Desert Storm or Desert Shield, was initiated with a coalition of willing states. Under such circumstances, the system's emerging sole pole (i.e., the US) utilized its position to deter the aggressor, the then-President Saddam Hussain of Iraq, from invading the neighboring state, Kuwait, using lethal force and in cooperation with the leading system's states to cultivate the seeds of "*world-governance reform*" based on the liberal orientation. In 2002, another US-led operation was taking place, the so-called International Security Assistance Force, which was deployed in Afghanistan, under two essential objectives: firstly, the war on terrorism _ that implied an active war engagement; and secondly, building peace within the Afghani state itself politically, economically, and socially. The last aimed at creating the core of self-sustaining liberal peace for the state-stabilization purpose.

Accordingly, *peace enforcement* is an effort exerted for the aim of conflict resolution by a third-party intervention, entailing the military nature as well as coercion, for enforcing peace in states-affected or damaged by war/conflict, which does not necessitate the consent or permission of the host government on would-be international military forces interference, and requires the multilateralism. Otherwise, it would be an invasion in all

but only name. Peace enforcement is a legal instrument that can be authorized by; the United Nations, other inter-governmental organizations such as NATO, global or regional hegemons, or a coalition of willing states _ provided that such a mission serves the national interests of the participating states. Apparently, it aims to deter the system's aggression or aggressors using coercive military force, implying a collective security nature and state sovereignty- decline phenomenon. With the provision of peace enforcement in conflict zones under wider-peacekeeping or liberal-peacebuilding operations, another task is assumed to be accompanying it, that is, a *state-building* mission.

The state-building proposal became a vital objective under multidimensional peacekeeping operations seeking liberal peacebuilding coinciding with the emergence of the state-fragility factor, more broadly, particularly by the early 1990s. State-building means the deployment of wider peacekeeping or peace-enforcement operations to conflict societies, which necessarily include the mission of the democratization of society, administering an interim government, monitoring would-be-held elections, watching human rights, supervising an economic transformation into a free and open economy type, among others. Briefly, state-building is the efforts exerted by multinational interveners in the dispute society of failed or fragile states to secure and guarantee a liberal reform of state governance. That means constituting the liberal-peace values and norms within the state's institutions, political system, economy, and civil society, which is to be directed through an illiberal period of international intervention first and then assumed to construct a *self-sustaining* liberal peace over time.

In another context, *international adjudication* seizes the role of managing conflicts; however, inter-state only. Mediation and peacekeeping are forms of conflict management that might be formulated to prevent, contain, and de-escalate conflicts within nations and among them. In comparison, peace-enforcement and state-building concern conflicts or wars within failing, weakening, or fragile states. At the same time, international adjudication is a different form of conflict management that addresses disputes between sovereign nations. The international adjudication points out to the agreement between two disputing-sovereign states to refer their conflict case to international dependent arbitrators and courts, or independent judges and tribunals, where both parties acknowledge, previously, that they accept the resulting decision, which is binding to all, whatever it is,

in favor or against any. If mediation and peacekeeping may or may not occur under sovereignty conditions, while peace-enforcement and state-building are provided where state sovereignty becomes in decline, it is fair to say that international adjudication is distinguished by requiring *state sovereignty* as a provision to be issued and then implemented.

1.2. Clausewitzian War and Deterrence in Global Politics:

1.2.1. Clausewitz's Paradoxical Trinity of War

Carl von Clausewitz is the founding father of the well-known paradoxical trinity of war. He considers the war as a total phenomenon, identifying its nature through an interaction of three elements: people, the commander and his army, and the government. In Clausewitz's own words, the dominant tendencies of war make it a paradoxical trinity "composed of primordial violence, hatred, and enmity... (which reflect) a blind natural force; of the play of chance and probability (where creativity manifests); and of its element of subordination, as an instrument of policy, which makes it subject to reason alone."³⁵ For him, war recognizes and absorbs initial conditions and surrounding contexts and circumstances when it "adapts its characteristics to the given case."³⁶ The nature of war, according to Clausewitz, is seen, therefore, as an adaptive system, which is complex by the same complexity associated with the interaction of its integrated parts of people, army, and government, or tendencies of passions, probability and chance, and politics, rationality and reason. To some extent, we should consider, as Clausewitz did, that the complexity of the trinity's relations or variables as a structure of a complex social system affects political and military leaders regarding their war decisions, allows for *unpredictable* behaviors to emerge, where military objectives serve political aims and are fed by population's primordial violence towards the enemy.

Admitting that "a theory that... seeks to fix an arbitrary relationship between them (the trinity's tendencies) would conflict with reality to such an extent that for this reason alone it would be totally useless."³⁷ might leave us in conflict with the changed reality itself.

³⁵ Carl Von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (The United States: Princeton University Press, 1989), 89.

³⁶ Ibid.

³⁷ Ibid.

Namely, Clausewitz's theory of war predicting that the interaction between the trinity of war's components creates uncertainty and unpredictable behaviors of the war phenomenon is a prediction, in itself, which allows the unpredictable to be predictable if unpredictability was predictability at the beginning. More clearly, if an object lying between three magnets of the trinity parts is the war, then directing the object and re-directing it defines the course to which this object will move, conditioning that the creativity variable expresses only probabilities where there is no room for chance when this chance becomes a rationally predicated possibility under given probability.

Differentiating between *moderated trinity*, where a moderating tendency exists to stabilize the system hindering the occurrence of tipping point within, and an opposite, *unmoderated trinity*, Cole argues that "in war, an unmoderated trinity could manifest in irrational acts of large-scale violence. The violence may continue until it expands into new boundaries where there are moderating (stabilizing) forces that will dampen and end the violence."³⁸ Strikingly, many use Clausewitz's trinity to refer to an *old-wars* phenomenon. In theory, the old wars are those fought between regular and standing armies among nations where the political and military objectives lie at the helm of initiating them, and the war's targets are the enemy's combatants and military positions in nature. The old wars were named *Westphalian wars* since the nation-state sovereignty represented the pillars upon which these wars were/are to ensue. Comparingly, a *new-wars* phenomenon emerged by the Cold War's end in the early 1990s, called *post-Westphalian wars*. The new wars are being fought within nations where no specific military or political aims can put an end to these wars, which might be initiated for economic causes; further, the violence is an end in itself insofar as it is a means for achieving political and economic gains. In the new wars, weakening a nation-state's sovereignty is considered a goal in coincidence with the significantly rising roles of non-state actors such as terrorists and irregular armies. Also, in such wars, the conventional separate lines between what is civilian and what is military or governmental *thoroughly* diminished, if not disappeared, so that civilians are primary targets for the new wars' lords.

³⁸ Brian Cole, "Clausewitz's Wondrous Yet Paradoxical Trinity: The Nature of War as a Complex Adaptive System," *Joint Force Quarterly (JFQ)* 96, (1st Quarter), (2020): 47.

One may wonder, what if the new wars were the fledgling product or phenomenon of *extremely unmoderated trinity* if this trinity means: the clash between what is objective; passion, chance and probability, and reason, and what is subjective; people/population, state's standing army, and government. In other words, when a nation-state's government loses its all population's passions for legitimizing a war not for its people (i.e., external national war) but against some (fighting, revolutionary, or dislike) groups of it, where the commander and his army have not to protect the whole population but to combat its noticeable part. Thence, politics of irrationality manifesting by extending a large scale of violence into (widening) classes of people within the same state must create the gap by dividing the standing army into many separate *self-organized* regular and irregular armies serving diverse local agendas of not only government, this time, but also a population who de-legitimized the government.

At such a moment, the creativity of divided fighting armies on the same land provides sufficient space for foreign actors to intervene, where a vacuum made up by the distance between what was supposed to be rational (relating to the governing regime) and what is irrational (relating to people) exists. Here, the policy instrument (i.e., the state's army) becomes, in part, a misused or change's tool by an irrational element with its relevant passions-tendency (i.e., population). While the proximity among the trinity's components is lessening, some divisions of newly composed opposing or clashing fighting armies may replace the would-be rationality of government with another of foreign powers, and some may place the population as an object to protect against other branches of armies that target them. Eventually, a state of continuous violence *rationality* extends and expands beyond government-associated rational tendencies, infinitely, until moderating forces emerge out of chaos and give rise to stabilization factors. Under that explanation, the trinity of war can interpret the new wars phenomenon as well as the civil wars one, considering that both emerge intra-state, and therefore, Clausewitz's trinity is inclusive enough to address these divergent realms of wars.

In the conventional civil wars' case, the stabilizing, moderating forces of the trinity of war tend to be the most potent fighting party within a broader game of power played out internally, namely, the side that wins to lead and govern. However, that does not apply typically to the case of the new wars that differ in nature from the pre-Cold War end's civil wars, even if they take the latter's shape sometimes, in that nation-state sovereignty

can never be compromised during a state of “old” civil war or fairer to say: *Westphalian civil wars*. Accordingly, in the new wars’ case, a moderating force that can end the state of the war of all against all, and stabilize the trinity’s extremely-unmoderated complex system, is assumed to be a global or regional *capable* government or a globalized *hegemonic* ruler or actor _ which/who owns absolute political, economic, and social powers to enforce security and end the violence, restoring peace in damaged territories by the war. In short, that is a perceived Hobbesian ruler or government, demonstrated in the Classical Realist thought as to come later, who/which might be national, regional, or global in our case, given the state sovereignty-decline factor besides the rise of non-state actors one in the new wars or what we may call “*post-Westphalian or post-sovereign civil wars*.” At last, in a distinction between a trinitarian and non-trinitarian model of warfare, Maynard considers that³⁹ the trinitarian one prevailed in political history up to the mid-twentieth century while the non-trinitarian mode of violence emerged when populations became part of the battle zone, not an exclusion within; namely, in insurgency-movements coinciding with the demise of the colonial era after World War II, and in identity conflicts that significantly took shape by the Cold War’s end (such as those witnessed during the breakup of Yugoslavia in the 1990s).

1.2.2. Deterrence Theory and Conflict Management

Deterrence theory is rooted in IR debates through its initial theorization in the Realism thought and particularly the Structural Realism that moves from an anarchy nature of the international system’s structure. In Realism, anarchy describes a condition in which no central authority or world ruler/government exists to end a state of war or conflict between its nations or similar states in form and function. Therefore, states seek survival securing their self-interests by power accumulation in an insecure global environment under mutual-suspicion circumstances; simultaneously, this environment bolsters the anarchy that created it. Within an anarchical structure of a self-help system, a security dilemma manifests when an arming action made for defensive reasons by one actor (i.e., state) stimulates a chain of *symmetrically* taken behaviors by other actors, prompting states to wage wars against one another.

³⁹ Kimberly A. Maynard, *Healing Communities in Conflict: International Assistance in Complex Emergencies* (The USA: Columbia University Press, 1999).

Contextually, from a Realist perspective in general, deterrence is a product of a stable and stabilizing bipolarity system and a balance of power mechanism linked with parity and symmetrical arming-relationship among great powers that make war the worst and most exorbitant outcome for all. So, the war between the system powers is the unthinkable output and is irrational or accidental if arose, as we explain more broadly in the next chapter. In comparison, another theory was an applicably advanced version of this Structural Deterrence one, under a broader *Classical Deterrence Theory*, which also moved from the same axiom, arguing about the irrationality of war in the nuclear age but using the strategic intuition and calculations as an alternative to proving such a like conclusion of its precedent theory. This more influential contribution to deterrence theorization in IR is what we may call a *strategic rationale-deterrence theory*.

Thomas C. Schelling is considered the founding father of that *strategic rationale-deterrence theory* in IR through his 1960 book *The Strategy of Conflict* and his 1966 book *Arms and Influence*. He introduced a theory that describes risk manipulation strategies, commitment credibility of a state's (i.e., deterrer's/threatener's) resolve, and costly signals. Accordingly, a state may resort to deter undesirable behaviors made by another, securing either the deterring state's homeland or its allies', when using manipulative strategies and running risks considering its own calculations for rational actions as well as how the adversary might *expectedly* calculate. In this mutual rationality relationship, cooperation and bargaining are achieved *not* through (direct) communication *insofar* as they are being brought about by showing the credibility of a state's commitments (and therefore deterrence) to protect or defend other parts of the world that are worth war. Danilovic calls Schelling's theory a *theory of commitments*, addressing first-wave thinkers;⁴⁰ at the same time, the whole theoretical school, including both Schelling's work and his first wave's pioneers, and the developers who followed to refine the theory in sequential waves, is named by Zagare a *decision-theoretic deterrence theory*.⁴¹ In short, it can be said that Schelling's theoretical contributions demonstrate "a theory of

⁴⁰ Vesna Danilovic, *When the Stakes Are High: Deterrence and Conflict Among Major Powers*, 4th ed. (The USA: The University of Michigan Press, (2002, 2005)).

⁴¹ Frank. C. Zagare, "Classical Deterrence Theory: A Critical Assessment," *International Interactions* 21, no. 4 (1996): 365-387.

commitments concerned with the manipulation of an adversary's perceptions of the deterrer's resolve and commitment to act."⁴²

Schelling, discussing the threat that leaves something to chance, considers *deterrence* as a contingent-behavior mechanism of a threat through which a state *may* act massively, not that it certainly will, which entails an implicit risk (such as the inadvertent war among great powers) that deters an adversary from committing behaviors that generate the original threat.⁴³ From Schelling's perspective, under a deterrence situation, the credibility of threat stems from the possibility of precipitating major war or accumulative retaliatory threats for both sides (i.e., the deterrer/threatener and adversary/opponent), while a *chance* of estimating how successfully both can avoid precipitating war under the circumstances does manifest⁴⁴ given that the chance itself is a possibility of choosing to respond or escalate or not. Further, Schelling differentiated between the threat that compels and the threat that deters: "There is typically a difference between a threat intended to make an adversary *do* something (or cease doing something) and a threat intended to keep him from starting something."⁴⁵ Accordingly, to deter by threat an enemy's advance, it may be enough to burn the bridges manipulating the opponent as to believe that there are no choices left, whereas to compel by threat an enemy's retreat, the threatener has to be committed to moving forward, and this requires setting fire, coercing the adversary to do what this threatener seeks.⁴⁶

Describing strategies on the *risk manipulation and commitments* and theorizing deterrence among great powers in the nuclear age as a method for avoiding great war, in Schelling's words: "Irreversibly initiating (mutually) certain disaster... is no good. Irreversibly initiating a moderate *risk* of mutual disaster, however, if the other's compliance is feasible (instead of certain disaster)... may be a means of scaling down the threat to where one is willing to set it going."⁴⁷ This precisely conveys the rationale of the mutually assured destruction (MAD) strategy that indicates running risk relying on the capability of retaliation or retaliatory threats rather than the certainty of nuclear war.

⁴² Danilovic, *When the Stakes Are High: Deterrence and Conflict Among Major Powers*, 12.

⁴³ Thomas C. Schelling, *The Strategy of Conflict* (England: Harvard University Press, (1960, 1980)), 189.

⁴⁴ Ibid.

⁴⁵ Ibid, 195.

⁴⁶ Ibid.

⁴⁷ Ibid, 196.

In this context, Schelling considers threatening limited war rather than all-out war to deter an attack, because “to threaten limited war is to threaten a risk of general war, not the certainty of it... (which is) a lesser threat than the massively retaliatory threat.”⁴⁸ According to his theory, this risk or lesser threat must *not* be discredited as to enable deterring an opponent from re-initiating his threatening actions in the future if the risk proves to be extremely costly; or from continuing these actions in the present, which may occur should the adversary stand firm for bringing the initiator or deterrer into backing down if the deterrent threat cannot be irreversible. Therefore, the threatener can engage in a limited war without making (*certain*) general war the price both opponents pay, but only, each “pay instead the lesser price of a risk of general war, a risk that the enemy can reduce by withdrawal or settlement.”⁴⁹

Basically, in Schelling’s theory of strategic rationale-deterrence, concepts such as costly signaling and commitment are connected to a state’s reputation concerning a strong resolve under an interdependence relationship. For Schelling in his 1966 book,⁵⁰ “one of the major rationales for maintaining a reputation for strong resolve comes from the understanding that commitments and events are seen as interdependent.”⁵¹ Put it simply, a state’s commitment to deter an attack or react to a challenge set against an ally in one area or region in the world affects its international reputation and other states’ perceptions towards it, regarding standing firm as a strong defender for protecting a protégé or repelling defiance. That means a commitment to confront like-challengers in similar events in other parts/regions of the globe, which is a horizontal interdependence relationship between commitments and separate events, from Schelling’s theory perspective. Simultaneously, the credibility of a state’s commitments influences its reputation of committing potent resolve, over time, in matching events, which is considered a vertical interdependence relationship between commitments and events.

Under that perspective, Schelling’s theory concerns more with commitment credibility’s goals that maintain a state’s perceptions globally of honoring its commitments in defending other parts in the world that are worth a war, running risks by doing so, than intrinsic objectives related to vital national interests. Nevertheless, taking action(s)

⁴⁸ Ibid, 191.

⁴⁹ Ibid.

⁵⁰ Thomas C. Schelling, *Arms and Influence* (The USA, New Haven: Yale University Press, 1966).

⁵¹ Danilovic, *When the Stakes Are High: Deterrence and Conflict Among Major Powers*, 14.

against an aggressor or challenger may be seen as a reinforcement or a product of a state's intrinsic interests genuinely, considering that reacting to events not worth war from a national standpoint and protecting relevant protégés contribute to constituting a hegemonic position to a given defender in the system boosted by a chain of credible commitments that this defender stands for. Still, other deterrence theorists argue against running risks of general war for pure commitment reasons; "in the 1960s and 1970s, several third-wave deterrence theorists raised doubts about the validity of the theory of costly signaling and commitments... (who introduced) *a Theory of Inherent Credibility*."⁵²

Differently, under the third wave, inquiries had been raised on the inevitability of running risks for honoring a state's commitments, including taking the *risk* of general war that may extend to be a *certainty* of nuclear war itself. Thence, issues related to a state's intrinsic or inherent interests seized priorities instead, where an actor should calculate an event as worth a risk or war or not based on being worth stakes for the state or not, rather than being worth commitment or not. Accordingly, credibility shifts from accompanying commitments outside to pertaining commitments inside on the national level; and on the global level if, and only if, this serves inherent national stakes, *not* the state's perceptions and reputation on the international stage.

In conclusion, *deterrence* is any threatening act(s) committed politically, diplomatically, economically, or/and militarily by a threatener to prevent an opponent from doing something not done yet, employing a threat that must be capable and credible; a. to hinder the occurrence of wars via this deterrent used, a deterrence-general aim, or b. paying a lesser price than precipitating major war by possibly waging a restricted, limited war, a deterrence-specific goal. During a deterrence situation, bargaining skills can be used, defining *bargaining* as formal and informal communication modes conducted between actors that can bring an end to a crisis or conflict through mutual understanding and both sides' preparedness to engage in cooperation efforts. Relevant to deterrence is compelling. *Compellence* entails using threats to coerce an adversary to do a threatener's desired behavior or not do an undesired action. Comprehensively, "both deterrence and compellence involve demonstrating capabilities, signaling the credibility of a threat, and

⁵² Ibid, 17.

communicating to other actors the will and terms of the use of this threat... (whereas) credibility and communication are (connectedly) achieved through successful bargaining and negotiation.”⁵³ Simultaneously, deterrence is distinguished by being a method of achieving linearly or non-linearly cooperation and possible bargaining and negotiation between a deterrer and an opponent in initially non-cooperative situations.

Ultimately, it can be said that deterrence, in theory, diversifies into many types. Deterrence might be verbal, delivered to an enemy through official statements, or non-verbal conveyed through unspoken actions such as troops mobilization near an area of conflict or setting military forces on a high alert. Most importantly, deterrence might be direct, extended, immediate, or general. In a *direct deterrence*, a state applies its capabilities for deterring an attack from its own territories, whereas, in an *extended deterrence*, a state becomes concerned with defending or protecting an ally or protégé, running risks as a limited war, for accomplishing this purpose. *Immediate deterrence* refers to using threats to prevent probable attacks during a state of possible conflict where the war might ensue at any time, employing deterrents for hindering the occurrence of this possibility of war or conflict. Comparingly, *general deterrence* is seen among states that are conflicting or continually rivals when both maintain their military forces at alert, although no state of war or conflict takes place.

1.3. Conflict Management: Theory and Practice

1.3.1. Conflict of Interest and Security Community

Bercovitch and Fretter, studying the international conflict and management from 1945 to 2003, demonstrated that the incidence of conflict by geopolitical region indicators show that conflict frequency seizes the first place in Africa (28.3%), then, Middle East (19.5%), East Asia and Pacific (19%), Americas (13.1%), Southwest Asia (11.4%), and Europe (8.7%), where interstate conflicts occurred in (66.5%), and civil (intra-state) conflicts took place in (33.5%).⁵⁴ Further, “both types of conflicts (interstate and intrastate) have damaging effects on economic growth; however, the damaging effects of internal

⁵³ Juliet Kaarbo and James Lee Ray, *Global Politics*, 10th ed., (The USA and Canada: Wadsworth, Cengage Learning, 2011), 294.

⁵⁴ Jacob Bercovitch and Judith Fretter, *Regional Guide to International Conflict and Management from 1945 to 2003* (The USA, Washington, D.C.: CQ Press, A Division of Congressional Quarterly Inc., 2004).

(intrastate) conflicts have far more damaging effects on economic growth than interstate (external) conflicts.”⁵⁵ Contextually, it was proved that the core conflict issue in the 1945 to 2003 conflicts lies in: ⁵⁶ security (27.7%), territory (22.7%), ethnicity (21.9%), ideology (18.4%), independence (7%), and resources (2.3%).⁵⁷

In comparison, an evolutionary theory considers that those core issues of conflicts are not the ends genuinely but means to an ultimate good of the human species, focusing on the importance of genes that are transmitted from one generation to another among an offspring and its relatedness to homogenous identity of an ethnic group. This theory suggests that “there are conflicts of interest among all humans... because the ultimate interest of any organism is its genetic fitness.”⁵⁸ So, from evolutionary theory’s perspective, “the observable objects of humans conflicts - territory, property, resources, power, privilege, wealth, security, status - are not ends in themselves... (but) the variable and proximate means by which individuals pursue their ultimate interest - maximizing the reproductive rate of (their) genes.”⁵⁹ It is quite interesting that this theory, when discussing the root causes of human conflicts, requires us to admit that people choose to increase the carried genes’ reproductive rate by eliminating these genes in conflicts and wars, *not* by peacefully coexistence with other humankind to preserve such an ultimate interest if it was *credibly* the ultimate one (!).

From a more realistic view, conflicts of interest vary dramatically in both their initiation, continuation and resolution trajectories. However, there is almost an agreement in previous theoretical debates that “reaching a political formula for resolving the conflict of interest is necessary but insufficient for surmounting the political and psychological

⁵⁵ Riad A. Attar, *Contributions to Conflict Management, Peace Economics and Development Volume 13: Arms and Conflict in the Middle East*, ed. Manas Chatterji (The United Kingdom: Emerald Group Publishing Limited, 2009), 169.

⁵⁶ Moreover, at the same studied period, in interstate conflicts (66.5%), the outcome is: abated (22.4%), full settlement (16%), lapse (11.1%), partially settled (8.5%), victory (6.4%), and ongoing (2%); whereas in civil (intra-state) conflicts (33.5%), the outcome is: ongoing (10.2%), victory (7.6%), full settlement (5%), abated (4.7%), lapse (3.8%), and partially settled (2.3%); see in (Bercovitch and Fretter, *Regional Guide to International Conflict and Management from 1945 to 2003*, 11).

⁵⁷ Bercovitch and Fretter, *Regional Guide to International Conflict and Management from 1945 to 2003*.

⁵⁸ Gary R. Johnson, “The Roots of Ethnic Conflict: An Evolutionary Perspective,” in *Fundamental Theories of Ethnic Conflict: Explaining the Root Causes of Ethnic and Racial Hate*, ed. Muli Wa Kyendo (Kenya: The Syokimau Cultural Centre, 2019), 3.

⁵⁹ Ibid.

barriers that may foil the normalization and stabilization of peace relations.”⁶⁰ Basically, the success of conflict management is related theoretically to a *pluralistic security community* concept, which refers to a group of states that shares fundamental values and conforms their behaviors to certain principles where war between them is largely unthinkable.⁶¹ Accordingly, “across regions, (a) strong commitment to collective goods and the political will to action are associated with conflict management success”⁶² and regional security communities, considering this commitment and will are formulated through some other dimensions.⁶³

Close to the pluralistic security community notion is a *moral pluralism* one⁶⁴ manifesting in a given (democratic) society. In this regard, Robert Talisse addresses an alternative to a Hobbesian war of all against all under conditions of moral pluralism in relation to democratic justification and politics, suggesting that “dialogical democracy must countenance a state that actively promotes a politics of engagement by cultivating certain *epistemic* habits (and capabilities) among citizens and creating and maintaining civic and political institutions within which proper deliberation can commence.”⁶⁵ In short, epistemically citizenry inclusiveness societally and collective commitment and will inter-nation in one region constitute both pluralistic security society nationally as well as pluralistic security society regionally.

On the contrary, large-scale conflicts and wars are the opposite outcomes of such security domains. It is seen that there are contemporary situations present challenges of protecting

⁶⁰ Yaacov Bar-Siman-Tov, “Dialectics Between Stable Peace and Reconciliation,” in *From Conflict Resolution to Reconciliation*, ed. Yaacov Bar-Siman-Tov (The USA, New York: Oxford University Press, 2004), 61.

⁶¹ Paul F. Diehl, “Conclusion: Patterns and Discontinuities in Regional Conflict Management,” in *Regional Conflict Management*, ed. Paul F. Diehl and Joseph Lepgold (The USA: Rowman & Littlefield Publishers, Inc., 2003), 279.

⁶² Ibid.

⁶³ These dimensions can be summarized as follows: a. a shared sense of norms among the states in the region such as democratic governance and diplomatic initiatives, b. normative consensus on developed institutional mechanisms for coordinating regional behavior, facilitating and providing resources to conflict management efforts, c. the support of key regional or extra-regional states for the creation of security communities (or fairer to say, the regional hegemons as intra-and inter-state conflict management actors), d. the impact of economic interdependence, among other dimensions; and the essential contextual elements defined by regions, such as the variation in threats, responses, and success (see in, Diehl, “Conclusion: Patterns and Discontinuities in Regional Conflict Management,” 279-280).

⁶⁴ Moral pluralism can be seen in a society where individuals “enjoy freedoms of thought, expression, assembly, petition, and religion, all within the constraint that each is entitled to as extensive a share of such liberties as is consistent with there being an equal share for all.” (Robert B. Talisse, *Democracy and Moral Conflict* (The USA, New York: Cambridge University Press, 2009), 11).

⁶⁵ Talisse, *Democracy and Moral Conflict*, 191.

human rights while addressing a resolution of conflict, ranging from largely internal armed conflicts with regional or international dimensions (as in the internationalized civil war cases) to diffuse and globalized confrontations such as the “global war on terror.”⁶⁶ The last represented the United States and its allies’ unlimited war against terrorism following the 11 September terrorist attacks on the US official premises in 2001, initiated through the War on Afghanistan 2001, the War on Iraq 2003, and the War on the Islamic State of Iraq and Syria (ISIS) terrorist network organization during the 2010s.

1.3.2. Terrorism As a Symptom or Cause to Intra-or Inter-state Conflict

According to William Thompson’s⁶⁷ classification of *Primary System-Contextual Factors Undergirding Terrorism Evolution*, the first terrorism wave (1800s-20s), the second (1830s-60s), the third (1870s-1910s), the fourth (1920s-60s), the fifth (1960s-90s), and the sixth (1970s-2020s), were/are respectively *encouraged* by: “(Napoleonic wars); (industrialization diffusion); (dynamite, globalization, communication and transportation networks); (post-WWI Versailles Treaty (self-determination and decolonization norms)); (Cold War ideological struggle); (information technology, globalization, US systemic leadership and patron-client ties, and government suppression).”⁶⁸ At the same time, these same waves were/are consecutively *discouraged* by: “(great power suppression); (government suppression); (labor diversion, government suppression, and World War I); (post-WWII decolonization due in part to war exhaustion); (end of Cold War and government suppression); (government suppression).”⁶⁹

⁶⁶ Chandra Lekha Sriram, Olga Martin-Ortega and Johanna Herman, *War, Conflict and Human Rights: Theory and Practice* (The USA and Canada: Routledge, 2010), 232.

⁶⁷ Thompson coded each terrorist event from 1946 till 2000, based on testing whether the group involved could be described as primarily interested in nationalistic (political independence), ideological (promoting political preferences), or religious (espousing a specific sect, or fundamental interpretation of religious belief) concerns (William R. Thompson, “Emergent Violence, Global Wars, and Terrorism,” in *Kondratieff Waves, Warfare and World Security* (NATO Security through Science Series, Sub-Series E: Human and Societal Dynamics – Vol. 5), ed. Tessaleno C. Devezas (Amsterdam, Berlin, Oxford, Tokyo, and Washington, DC: IOS Press (published in cooperation with NATO Public Diplomacy Division), 2006), 191-192).

⁶⁸ Thompson, “Emergent Violence, Global Wars, and Terrorism,” 193.

⁶⁹ Ibid.

Fundamentally, Max Weber, in his 1947 book,⁷⁰ founded a classic organization theory that became widely employed in IR's terrorism field. Weber's theory concerns constructing forms and models of organizational behavior in economics,⁷¹ specifying methods of market organizations based on rational or rationalized behavior of individuals in society; that was developed by focusing on a shift from structural hierarchies to networks. This theory's implementation for defining terrorism forms and symmetrically a shift to constructed organizational networks reflected a remarkable contribution in IR for dealing with this subject matter. When applying the organization theory to the terrorism phenomenon, it can be argued that the "general shift towards networked forms of organization... (implied) a sharp contrast between the 'old' and the 'new' terrorisms... Old, pre-11 September 2001 terrorism of ethno-political, leftist and other traditional types is associated with *hierarchical* models, while the new transnational superterrorism is a synonym for *network* terrorism."⁷² Changing the nature of terrorism was accompanied by altering how conflict and religion have been overlapping in political and media discourse. Clearly, in the aftermath of 9/11 events, an interlinked and interdependent relationship between media, religion, and conflict manifested more significantly, when a "discourse of 'otherness' has been polarised around religion as a source of conflict, which in turn has been used by political elites to legitimate political strategies, both within and between states."^{73/74}

⁷⁰ Max Weber, *The Theory of Social and Economic Organization*, trans. A. M. Henderson and Talcott Parsons, and edited with an introduction by Talcott Parsons (The USA, New York: Oxford University Press, 1947).

⁷¹ Through Weber's *Theory of Social and Economic Organization* (1947): a. economics has been able to operate with the pure-type (or ideal-type) of rationality accompanying individual behaviors, such as maximizing gains and minimizing losses; also b. studying bureaucracy and classifying its types and their administrative bases, Weber theorized that the most significant issue appeared to be the effect of this phenomenon of mass society upon human personality (see in, George Simpson, "Reviewed Work(s): *The Theory of Social and Economic Organization* by Max Weber, A. M. Henderson, and Talcott Parsons," *The Philosophical Review* 57, no. 5 (Sep. 1948), 526-527).

⁷² Ekaterina Stepanova, *Terrorism in Asymmetrical Conflict: Ideological and Structural Aspects* (SIPRI Research Report No. 23), (Sweden and USA: SIPRI (Stockholm International Peace Research Institute) and Oxford University Press, 2008), 100.

⁷³ Lee Marsden and Heather Savigny, "Towards a Theorisation of the Link Between Media, Religion and Conflict," in *Media, Religion and Conflict*, ed. Lee Marsden and Heather Savigny (England and the USA: Ashgate Publishing Limited & Ashgate Publishing Company, 2009), 159.

⁷⁴ Marsden and Savigny also suggested that "the media have the capacity to operate as both structures and agents in the representation of the contemporary political context media and conflict... play(ing) (role) in setting the context through which religion and conflict are represented and interlinked in public discourse" (ibid, 158-159).

1.3.3. What May Cause or Affect Conflict Outcome?

“Every conflict involves political, ethical, and psychological dimensions. Identity and power differentials underlie the social, organizational dynamics of conflict,”⁷⁵ where tactical strategies, fighting capabilities, and operational skills can determine, besides the relativity of coercive power, the end of an ongoing conflict. In a significant part, these factors interpret why armed insurgents might be able to overwhelm regular armies in battle zones if we add the moral state and changeable political objectives as other variables for affecting conflict outcomes and termination, not only power balance or imbalance. Moreover, a combination of the mentioned factors defines the causation behind ending one conflict through a *negotiated settlement/compromise* (when power-parity relationship manifests), and another by (diplomatic-strategic or territorial) *victory* (in *firmly* power-imbalance relationships), or a third by being *ongoing* (between antagonistic powers, or in asymmetrical confrontations such as the case of guerilla warfare, insurgency and combating terrorism).

Interestingly, Bartos and Wehr suggest a causal proposition that illustrates an interrelationship between solidarity and actions in conflicts; accordingly, “if the level of conflict solidarity within a group increases, the chances that it will engage in conflict behavior increase as well.”⁷⁶ Developing a *Theory of Conflict Behavior*, they have identified the *possible* causes of conflict behavior, arguing that conflict behavior can occur for six main reasons: incompatible goals, solidarity, organization, mobilization, hostility, and resources; theoretically, “the parties (to possible future conflict) may have or believe that they have incompatible goals, they each may have achieved high solidarity, they may have organized for conflict, they can mobilize their conflict resources, they may be hostile toward their opponents, and they may have sufficient material resources.”⁷⁷ It does not necessarily mean that all the six reasons must exist altogether as a precipitant to conflict occurrence. Only a conflict might arise due to two causes (such as the incompatible goals and permanent/emerging hostility conditions that are assumingly primary pillars for initiating conflicts) or more, relying on this theoretical view.

⁷⁵ Ho-Won Jeong, *Understanding Conflict and Conflict Analysis* (London, California, New Delhi, and Singapore: SAGE Publications Ltd, Inc., India Pvt Ltd, and Asia-Pacific Pte Ltd, 2008), 18.

⁷⁶ Otomar J. Bartos and Paul Wehr, *Using Conflict Theory* (The USA, New York: Cambridge University Press, 2002), 8.

⁷⁷ Ibid, 9-10.

Supporting that, in IR theory, conflict term itself is seen generally as the *incompatibility of interests* as a basic ground to violent or non-violent actions taken aggressively or non-cooperatively by opposing parties in a conflicting or competitive relationship.

In the same context, it is argued that fundamental denial of rights, economic disparity, elite manipulation, long-held historical vendettas, and growth in general social chaos are conditions fostering identity (or intra-state) conflicts.⁷⁸ In contrast, tolerance for diversity, change in the conflict circumstances (e.g., one side's sudden victory), and suffering and exhaustion are factors causing the elimination and preclusion of these conflicts.⁷⁹ Further, these factors contribute to ethnic (or intra-state) conflict: "competition over economic resources and economic modernization, historical animosities, anarchical situations in collapsed states, ethnocentric beliefs, and leaders' manipulations of identities for political gain."⁸⁰ Thence, it is fair to demonstrate that natural and economic resources, political setting/domination, cross-group ideology, historical rivalry, and state fragility are essential factors in intra-state conflict causation and inter-state conflict initiation if we dismiss the last factor. Besides, in theory, causes of political violence in civil wars and guerrilla warfare are ascribed generally to *structural* reasons, economic inequality, ethnic fanaticism, social and political oppression, and acute grievances. More specifically, the organized or systematic political violence in civil wars and guerrilla warfare occurs where (income) inequality is high, the economy is mainly agrarian, and assets are immobile and unequally distributed, proving that *opportunities* of an organizational or geographical nature drive the costs of engaging in violence.⁸¹

1.3.4. Stable Peace, Reconciliation, and Conflict Management Success

Bar-Siman-Tov introduces a conceptual framework for normatively linking an interrelationship between stable peace and reconciliation, arguing that stable peace requires identifying "three clusters of necessary conditions: mutual satisfaction, (interaction) structural-institutional conditions, and (strategic and social) learning"⁸² that

⁷⁸ Maynard, *Healing Communities in Conflict: International Assistance in Complex Emergencies*.

⁷⁹ Ibid.

⁸⁰ Kaarbo and Ray, *Global Politics*, 258.

⁸¹ Carles Boix, "Civil Wars and Guerrilla Warfare in the Contemporary World: Toward a Joint Theory of Motivations and Opportunities," in *Order, Conflict, and Violence*, ed. Stathis N. Kalyvas, Ian Shapiro and Tarek Masoud (The USA, New York: Cambridge University Press, 2008), 216-217.

⁸² Bar-Siman-Tov, "Dialectics Between Stable Peace and Reconciliation," 64.

are preconditions of stable peace and interrelated with reconciliation. Stable peace is a condition resembling that of democratic peace should one exclude the liberal and democratic orientation of nation-states involved in such a relationship as a general rule. Namely, stable peace expresses circumstances among nations in which states prefer to resolve any possible conflicts in peaceful means, where the war probability between them becomes the most unexpected outcome under a mutual cooperation environment defining the manner governing their joint understandings. Bar-Siman-Tov's contribution in this area is essential because of focusing on drawing the lines on the modality of achieving this sort of peace within and among nations undergoing a state of conflict or war. In his own words, the establishment of stable peace is being brought about "only when the sides to a peace agreement are satisfied with the peace agreement and after the underlying structural-institutional, cognitive, and emotional conditions of a protracted conflict have been transformed to the mutual satisfaction of the sides involved via a process of learning and reconciliation."⁸³

Contextually, reconciliation might be a "natural, spontaneous process"⁸⁴ occurring on the bottom-up level among populations to create and sustain familiarity and mutual understanding between them regarding their diversified attitudes, norms, values, and political and social cultures, or it might be a "planned sociopolitical strategy as a top-down aspect."⁸⁵ In the latter case, reconciliation is a peacemaking process achieved by political leaders during conflict resolution efforts to end a state of conflict or war based on purposefully advance towards cooperation and harmony of interests between disputing parties while addressing socio-psychological features for restoring *durable* peace to conflict societies manifests primarily.

One of the critical works on such a theme is that of Louis Kriesberg, who shows *Dimensions of Reconciliation*, specifying them in truth, justice, regard, and security as quite broad phenomena where none is wholly encompassed in any strategy of promoting

⁸³ Ibid, 62.

⁸⁴ Tamar Hermann, "Reconciliation: Reflections on the Theoretical and Practical Utility of the Term," in *From Conflict Resolution to Reconciliation*, ed. Yaacov Bar-Siman-Tov (The USA, New York: Oxford University Press, 2004), 43.

⁸⁵ Ibid.

reconciliation.⁸⁶ So, at any given time, reconciliation efforts will tend to emphasize some dimensions more than others while the reinforcing actions⁸⁷ generally must involve some degree of mutuality⁸⁸ and multilateralism in making them by the parties to a given conflict, except for actions that already necessitate unilateralism in activating them such as making an apology for the other side. Since truth is structurally *subjective* (i.e., *conflict actor-related*) and, in some cases, manufactured by political elites or ruling classes, agreeing on one normative truth that conveys its probable objectivity might leave the reconciliation dimensions under a state of an incomplete balance. However, the dimensions are still vital for resolving and transforming conflict societies into sustainable peace-state. Considering a sequence in bringing these dimensions into action more effectively, avoiding possible clash over their actual implications, we can assume that: regard comes first, then security; and over time, a minimum sufficient or maximum level of justice could seize a place among previously conflicting parties, and simultaneously, *agreeable* truth between these pre-conflict emergence's challengers/defenders might arise.

Ultimately, it is crucial to notice that “the relative primacy of various (reconciliation) dimensions tends to vary over time as reconciliation evolves during the transformation and resolution of a particular conflict.”⁸⁹ Thence, reconciliation is a *dynamic* process even after being achieved, *not* a static mechanism till being *thoroughly* accomplished when substituted by normalized normalization, stabilized stabilization, and perpetual acceptance and cooperation between *formerly* disputing sides under a state of “*ultimate*” stability of peace within and between nations.

On conflict resolution success, a conceptual model is introduced to help anticipate and assess countries at risk of internal conflict and state collapse, highlighting the importance of political legitimacy and showing how an international community can implement, consecutively per conflict stage, these mechanisms: prediction, early warning; preventive

⁸⁶ Louis Kriesberg, “Comparing Reconciliation Actions within and between Countries,” in *From Conflict Resolution to Reconciliation*, ed. Yaacov Bar-Siman-Tov (The USA, New York: Oxford University Press, 2004), 85.

⁸⁷ Kriesberg differentiates between reconciliation dimensions and the “the actions that move antagonistic parties toward their reconciliation along these dimensions. Reconciliation actions are actions undertaken by one or more parties that have been engaged in a destructive conflict or oppressive relationship. Other parties may facilitate, encourage, or otherwise support such actions” (ibid, 83).

⁸⁸ Ibid, 85.

⁸⁹ Ibid.

diplomacy; peace enforcement, and peacemaking; peacekeeping and peacebuilding; and post-conflict economic and political integration, for the reduction of conflict.⁹⁰ Moreover, the “global experience in war-to-peace transitions can provide valuable lessons for making, owning, supporting, and sustaining peace... (whereas) the international community’s participation in the peace process has to be defined and led by (national interventions) in accordance with (these native people’s) needs and aspirations.”⁹¹

At last, it can be said that in post-conflict reconstruction, following the settlement of conflicts in accordance with international community intervention, the groups’ leaderships willingness to involve in such efforts, and the leaders’ ability to bring their followers along on the path to peace, the conflict-torn societies can be truly rebuilt with the people living there buying into this process with their hearts and minds.⁹² In addition to that, for bringing stability in a post-conflict society, “parallel forms of order emerge as local powerbrokers (fought) turf wars and international officials apply Western institutional templates... For order, (it) is founded on agreement and predictability, which are primarily influenced by indigenous norms, cultural undercurrents and legacy issues.”⁹³ Nevertheless, one may ask why a strategic approach based on a set model describing normative conflict exits with related decision-making process occurring interactively among warlords or conflict actors is necessary for conflict resolution and transformation, although direct international arbitration and adjudication or/and mediation and negotiation efforts may be applicable as conventional modes for achieving a symmetrical purpose. The answer lies in this research finding: “redrawing boundaries and recognizing the right of self-determination for all ethnic/(conflicting) groups is not feasible in most situations and would not necessarily prevent the continuation of conflict”⁹⁴ even if implemented. Thence, one comprehensive diplomatic strategic insight

⁹⁰ Pauline H. Baker, “Conflict Resolution: A Methodology for Assessing Internal Collapse and Recovery,” in *Armed Conflict in Africa*, ed. Carolyn Pumphrey and Rye Schwartz-Barcott (Triangle Institute for Security Studies), (The USA: The Scarecrow Press, 2003), 139-147.

⁹¹ Nat Colletta, Markus Kostner, Patricia Cleves and Johanna Mendelson, “Toward an Architecture for Sustainable Peace and Development: Lessons from The World Bank’s Experience,” in *Conflict Prevention and Post-Conflict Reconstruction; Colombia: Essays on Conflict, Peace, and Development*, ed. Andres Solimano and with foreword by President Andres Pastrana (The USA, Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank, 2000), 193.

⁹² Stefan Wolff, *Ethnic Conflict: A Global Perspective* (The USA, New York: Oxford University Press, 2006), 187.

⁹³ Alice Hills, *Policing Post-Conflict Cities* (The UK, London & the USA, New York: Zed Books Ltd, 2009), 120.

⁹⁴ Kaarbo and Ray, *Global Politics*, 258.

addressing conflict management through a grand strategy or focused theoretical-strategic modeling might fill the gap in complex situations more properly where the international, regional, or national security becomes at stake due to inflamed internal or inter-state conflict or war.

1.4. Media Discourse, Politics, and Conflict Management: Converged Theoretical Review

1.4.1. Peace Agendas and Media Discourse

From the perspective of pluralism, liberalism, internationalism, liberal institutionalism, and neo-liberalism peace agendas, peace is seen as an (existing) institution expressed through institutionalizing liberal norms in political, economic, and social structures of the national, regional, or/and global system, based on cooperation, openness, free co-existence, and democratic governance.⁹⁵ The *liberal peace* thesis, therefore, is an outcome of employing those approaches nationally and internationally, within and beyond the nation-states' borders in a universal framework. Meaningfully, through constructing peace by actors with the necessary knowledge and resources, a *perpetual peace*, or *liberal peace*, is embodied in the UN system and post-Cold War international society.⁹⁶ The question now is, “does initiating a war for purely preventive or defensive reasons by a coalition of states/(great) powers versus an aggressor or aggressive (state/non-state) actors in the international system lie in the realm of that perceived universal liberal peace?”

In his book “*International Conflict Management*,” Butler refers to the collective security phenomenon in our contemporary world from a post-Westphalian perspective, where it occurs when⁹⁷ a- the state sovereignty is in decline; b- the UN peace operations target intra-state as well as inter-state conflict; and c- the liberal institutions and political culture are being cultivated in the short run, through peace operations and state-building missions. This debate figures out precisely the third generation of conflict management, when peacekeeping operations _ executed through a consensus between international actors, and international intervention became linked with achieving liberal peace in the

⁹⁵ See in, Richmond, *Peace in International Relations*.

⁹⁶ Richmond, *Peace in International Relations*.

⁹⁷ Michael J. Butler, *International Conflict Management* (United Kingdom: Routledge, 2009).

conflict zones after the Cold War ended. The second generation of conflict management, however, was dedicated to *conflict resolution*, focusing on ensuring an *ideal or liberal peace* existence leading to the notion of a *win-win peace*, contrasting to the first generation, which represents the *negative peace* or what is well-known as the *survival or victor peace* in political Realism – when one party wins at the expense of the other(s). Moreover, within the ideal or liberal peace, the “public and private actors, operating at the level of the group or individual, are empowered to construct a *positive peace* which directly addresses the *societal roots* of conflict, rather than merely its state-level issues.”⁹⁸ This ideal or liberal peace (i.e., the positive peace) embodies the ideal norms further when not entailing any form of international military intervention contradicting the peace achieved during the third generation of conflict management. Interestingly, the liberal peace agenda tends to be both compatible and capable for long-lasting implementation and sustainability in the Middle East, entangling with others – if we consider that some approaches in IR, such as the *negative or victor’s peace*, cannot resolve the conflict’s roots for reaching a durable peace-state in the dispute zones.

On the other hand, some strategies and tactics are used outside the liberal peace’s conceived standards and norms for conflict resolution. Focusing on non-state armed actors during a conflict, the *Realist approach*, for example, deals with arguing on using *force or coercive power*. Accordingly, several strategies or tactics are utilized here; some are:⁹⁹ coercion diplomatically or militarily, control and containment, marginalization and isolation of non-state actors’ activities, enforcing splits and the internal rivalry between members of non-state actors’ groups, and using bribery and blackmail engaging with members/leaders of such groups and obligating them for cooperation. Otherwise, the *institutionalist approach* concentrates on two main (*soft*) modes of tactics:¹⁰⁰ a- bargaining, considering that the non-state armed actors are rational players driven by their own political interests that could be achieved through diplomacy and peace agreements; and b- co-optation and integration in the political setting. Obviously, opting for the

⁹⁸ Richmond, *Peace in International Relations*, 102.

⁹⁹ Claudia Hofmann and Ulrich Schneekener, “Engaging Non-state Armed Actors in State and Peace-Building: Options and Strategies,” *International Review of the Red Cross* 93, no. 883 (Sep. 2011): 603-621.

¹⁰⁰ Ibid.

mediation and negotiation strategies applied among parties to a given conflict is a feature that distinguishes the first mode.

In some cases, the war economy or disputed territories become keystones in escalating or re-escalating prolonged conflicts, not only political interests. Again, the bargaining strategies can be re-shaped as an exit if the non-state armed actors are counted as *rational*, seeking to jump on the *diplomatic train* to reach their interests (economic, territorial, geopolitical, or otherwise). That conditions or requires getting the bargaining side – either state actor(s), or collective group of states (i.e., nations-coalition) in a joint (peacekeeping) mission, who is more powerful in an asymmetric-confrontation, inclined to give such an opportunity of *diplomatic representation* to the weaker or less powerful side, the non-state armed actor(s), provided that this (weak) side is *not de facto irrational*. Thus, certainty about the uncertain is necessitated, here, at even a minimum level. In the same context, having non-state armed actor(s) integrated into the political setting can be seen as an *infrastructure* of the conflict resolution within that institutionalist approach's second mode, paving the way for power-sharing tactics taking shape between (*major*) conflict sides in the post-conflict stage.

From another perspective, the discourse theme appears inherently in the IR discipline in the post-structuralist contributions to peace. Through the work of pioneer scholars such as Michael Foucault and others, post-structuralism in IR interrogates the relationship between knowledge and its expression and power in a universal, rational, and intersubjectiveness-based-objectivity to know about the order, truth, war, and peace, investigating in the production and re-production of binaries suggesting good versus evil, or peace versus war as an instance.¹⁰¹ In contrast, “constructivists rest their efforts on persuasion, which may not easily lead to results but if a behavioral change occurs, it will – in theory – be sustainable, as the motivation to maintain conform behavior may over time be internalized by the (non-state armed/conflicting) actor(s).”¹⁰²

In this regard, processes of *socialization* or *re-socialization* are supposed to be more effective in integrating non-state armed actors or (primary) conflicting parties in the post-conflict society by involving them in the state's institutions; specifically, for those groups

¹⁰¹ See in, Richmond, *Peace in International Relations*.

¹⁰² Hofmann and Schneekener, “Engaging Non-state Armed Actors in State and Peace-Building: Options and Strategies,” 607-608.

who are concerned with improving their local/international image in ideological/political antagonism-generated conflicts. Furthermore, practices of *naming and shaming* strategy targeting non-state armed actors or other conflicting sides are considered an intense social pressure in the short run, however, for persuading them to accept certain agreements or understandings. In addition to the possibility of employing *reconciliation* approach diplomatically, or another of *transitional justice* applied through methods such as early elections procedures, conducting a referendum, constitutional conventions changes, or security guarantees in the post-conflict stage provided to these (previously marginalized/conflicting) actors/parties. If used as a whole, or partially, those means aim at changing unacceptable conflictual, peace-spoiling, or/and terrorist behaviors of non-state armed actors or any dispute side in favor of the conflict transformation norms and objectives.

Comparingly, post-structuralism stands at the discourse mode, however, from another scope. That is, it considers knowledge as a *subjective* matter produced and re-produced through a discourse, which is constructed and dominated by the (conflict) society's political authority or elites, dispersing their power by re-producing the meaning and truth. So, the truth of war (or peace) is *not* an objective matter but a mirror of facts-political re-production by the stakeholders (i.e., the state/dominant non-state actors) vigorously representing their (class-related) hegemony and interests.

Other approaches outside the realm of IR employ discourse and ideology in theorizing the political authority functions in society in relation to the citizens' expected roles in this regard. Combining the ideology, hegemony, and discourse altogether, Louis Althusser, in 1971, has defined what he named the Ideological State Apparatuses (ISA) as consisting of¹⁰³ the religious ISA (churches), the educational ISA (schools), the family ISA, the legal ISA, the political ISA (i.e., the political state-system, including the different political parties), the trade-union ISA, the communications ISA or mainstream media (i.e., press, radio, and television), and the cultural ISA (e.g., the literature, the arts, and sports). These apparatuses contribute to gaining consent in favor of the dominant ideology inside the society (i.e., the ruling/capitalist class's ideology) without using violence or repression

¹⁰³ Louis Althusser, "Ideology and Ideological State Apparatuses (Notes Towards an Investigation)," in *Media and Cultural Studies: Keywords* (Revised Edition), ed. Meenakshi Gigi Durham and Douglas M. Kellner (USA, UK and Australia: Blackwell Publishing, (2001, 2006)), 79-87.

means dominant in other state institutions such as the police and army, which Althusser called Suppressive State Apparatuses. Correlating Althusser's ISA, hegemony thesis, and Foucault's discourse theory, Mattei argued that such ideological apparatuses operate in two ways:¹⁰⁴ firstly, they make hegemony more acceptable reached at least in part by a diffusion of power (through a discourse) needed to gain consensus between a plurality of individuals over the political authority/government practices, voluntarily; and secondly, they make ideology a cross-class concept, thus going beyond the narrow Marxist idea of ideology as a class-specific device.

Simultaneously, as a pioneer of post-structuralism, Michael Foucault considered that the political authority uses the discourse to disperse its power through what he called *discursive formations*.¹⁰⁵ He extended the precedent *structuralism* to our current *post-structuralism*, describing the relationship between the ruling class in society and its power exerted upon ordinary individuals through a system of discourse, ideology held by the elites, and the hegemony of political authority ideology-oriented-discourse in schools, media, religious institutions, etc., manifesting through systemic-surveillance functions' echoes. Foucault's discursive formations work first by *including* acceptable individual behaviors according to specified lines by a *regime of truth* composed of elites, discourse, power, knowledge, and a truth re-produced to serve the meaning intended by these elites in society. Moreover, another opposite process *excludes* other behaviors that do not fit or go outside those drawn lines by the political authority's discourse. From here, Foucault defined the process significantly related to the previous ones of inclusion and exclusion. That is the *binary division and branding* mode of the authority's discourse, through which ordinary individuals see the facts from the eyes of the ruling elite(s) who determine(s) what is good or evil, who is normal or abnormal based on re-producing the knowledge and therefore the truth for serving their interests, formulating a disciplinary society through another relevant mode of *coercive assignment*.¹⁰⁶ The last modality defines a constant *surveillance* system or an all-seeing eye inside the social body practiced upon all individuals living within during their daily life circle.

¹⁰⁴ Ugo Mattei, "A Theory of Imperial Law: A Study on US Hegemony and the Latin Resistance," *Indiana Journal of Global Legal Studies* 10, no. 1/14 (2003): 383-448.

¹⁰⁵ See, Michel Foucault, *The Archaeology of Knowledge* (London: Routledge, 1989).

¹⁰⁶ Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Pantheon Books, 1977).

The productively well-organized surveillance system in modern history is directly related to the Panopticon prison¹⁰⁷ of Jeremy Bentham, designed at the end of the eighteenth century (1791). Here, Foucault's contributions appear through widening the concept of *Panopticism* seen by its first developer, Bentham, as a procedure of subordination of bodies and forces, for increasing the utility of (political) power while practicing the economy of the prince. Foucault described Panopticism as the general principle of new *political anatomy* whose object and end are *not* the relations of sovereignty (relevant to the king) but the relations of the discipline of a whole disciplinary social body (based on collective-disciplinary behavior of ordinary citizens observed, controlled, and thus governed in every institution) that assures an infinitesimal distribution of the power relations or what he considers the *disciplinary power* of political authority.¹⁰⁸ In this respect, ensuring control over its subjects in society, in a strengthened way, the political authority exercises such a disciplinary power further through a Panoptic media discourse constructed to be a mass-visibility (or surveillance) instrument causing the occurrence of standard and desired behavioral change(s) under that perspective.

That is to say, from Foucault's view, media, prisons, and other powerful institutions such as schools and churches in society are the eyes that monitor the ideas, attitudes, and behaviors of every person, considering that the television has the power to make certain kinds of ideas and forms of behavior *visible*, excluding the other ideas and behavioral patterns¹⁰⁹ that cannot be acceptable to be internalized by the mass-audiences according to the authority guidelines. In a comprehensive vision, Panopticism that diffuses an authority's power _ which became instilled into every individual consciousness within a Panopticon *discourse* of the ruling elite and its *discursive formations*, reverses a mass-surveillance mechanism derived from the very idea of Panopticon prison to be a widened notion of shaping an '*imprisoned*' social body, which is the disciplinary society. Employing the surveillance or the all-seeing eye instrument as one of Foucault's

¹⁰⁷ The Panopticon prison building designed by Jeremy Bentham in 1791 as an all-seeing eye place has been constructed for enabling an observer (the guardian) to watch all the prisoners without being observed. Including a central tower and peripheral cells, the building contains lights of the tower directed *intensively* towards each cell, making every prisoner sure that he is under constant surveillance (even if not) by the observer, who the prisoners can never watch. This way, a behavioral change is desired, expected, and waited for by separating the cells from one another first and reducing the risks of the prisoners' precedent crimes to occur through continuous surveillance imagined in their consciousness second.

¹⁰⁸ Foucault, *Discipline and Punish: The Birth of the Prison*, 208-216.

¹⁰⁹ Dan Laughey, *Key Themes in Media Theory* (England: Open University Press, 2007).

Panopticism and disciplinary power's means and applying it in a system for achieving behavioral changes among ordinary individuals of given communities, Fogg introduced its persuasive technology and surveillance model. Based on Fogg's work, behavior is changed when the observer is given the ability to *reward or punish*, causing that the observed subject tries to meet the observer's expectations, provided that the surveillance is overt since secret monitoring (i.e., covert surveillance) cannot be persuasive technology.¹¹⁰

Tackling the conflict roots during conflict resolution and transformation phases, assumingly, it is crucial to identify how to apply the disciplinary society theme to such a domain of competing or conflictual interests, integrating it into the so-called culture industry. Pointing out the contributions of Theodor Adorno and Max Horkheimer in the culture industry theorization and the political economy of mass media, it can be said that they considered the "problems of mass culture and the relationship between ideology and capitalism in terms either of an elite/mass or a base/superstructure distinction."¹¹¹ Both connected the mass culture media products such as Hollywood films and Pop music to the political economy of mass media, seeing these products as goods/commodities of the entertainment industry that serve the capitalist society or the (ruling) capitalist elites specifically. Horkheimer and Adorno demonstrated that the culture industry commodities are such that they can be alertly consumed even in a *state of distraction* where each one is a model of the gigantic economic machinery, which, from the first, keeps everyone on their toes, both at work and in the leisure time which resembles it.^{112/113}

Accordingly, Adorno emphasized that the culture industry exists in the *service* of third persons, maintaining its affinity to the declining circulation process of capital, to the

¹¹⁰ Julie Leth Jespersen, Anders Albrechtslund, Peter Øhrstrøm, Per Hasle and Jørgen Albretsen, "Surveillance, Persuasion, and Panopticon," *PERSUASIVE 2007*, LNCS 4744 (2007): 114.

¹¹¹ Nicholas Garnham, "From Cultural to Creative Industries: An Analysis of the Implications of the "Creative Industries" Approach to Arts and Media Policymaking in the United Kingdom," *International Journal of Cultural Policy* 11, no. 1 (2005): 17.

¹¹² Max Horkheimer and Theodor W. Adorno, "The Culture Industry: Enlightenment as Mass Deception," in *Media and Cultural Studies: Keywords* (Revised Edition), ed. Meenakshi Gigi Durham and Douglas M. Kellner (USA, UK and Australia: Blackwell Publishing, (2001, 2006)), 45-46.

¹¹³ For Adorno and Horkheimer, consumers are forced to accept what the culture industry provides, which keeps people *sleepy, obedient, and subservient* to the *status quo* of existing power structures as the products of the culture industry that possesses ulterior motives to repress imagination and render the *masses* socially and politically *inactive*, given that the capitalist classes use the culture industry to spread their ideas and values – their advertising-driven ideology – through the popular consciousness (Laughey, *Key Themes in Media Theory*).

commerce from which it came into being.¹¹⁴ Under Adorno's perspective, that mirrors a triple-relationship between an entertainment-led-capital ideology, borrowed individualistic-art principle (i.e., the star system of the mass culture's popular films and music), and relevant commercial exploitation. For Adorno and Horkheimer, it was not a manipulative use of ideology and propaganda but a general shift to the commodification of cultural products and the alienation of the cultural producer as a wage laborer within increasingly concentrated large-scale corporations.¹¹⁵ So, the mass culture industry from this scope embodies an economically guided-*ideological* hold inside democratic or non-democratic capitalist regimes.

Based on that, the mass media-content consumers became the subjects who consciously or unconsciously internalize the mass-culture industry's products, which are translated into popular films, music, and advertisement, expressing the (economic/political) elites' advertising-driven ideology, and reflecting the elites' interests in either a democratic or non-democratic capitalist society. Hence, managing the media discourse at the edges of the mass-publics minds in a conflict-inflamed region is significantly connected to managing the conflicts aroused explicitly within or at the borders of this region's states. Strikingly, managing conflicts necessitate that those subjects should adopt a conflict-resolution/transformation-oriented-generic (news) media agenda adapted to and traverses the limits of their political setting and the existing power structures through being exposed to neo-mass culture media commodities (i.e., neo-popular films, music, and advertisements) produced to be in harmonization with conflict resolution and transformation taken steps nationally and internationally. Furthermore, re-producing the *disciplinary society* notion of Panopticism to be applied in an '*anti-conflict course*' conceived within the popular consciousness in a region destabilized by conflicts such as the Middle East is assumed to reinforce (implemented) peace processes and renouncing violence and hatred themes, stimulated by another peace-supported and supporting *intentional* media discourse. Simultaneously, the mass-culture products will be undergoing a '*regeneration process*' in the same line with what we called "peace-broker discourse," as explained later.

¹¹⁴ Theodor W. Adorno, *The Culture Industry: Selected Essays on Mass Culture*, edited and with an introduction by J. M. Bernstein (London and New York: Routledge, 1991).

¹¹⁵ Garnham, "From Cultural to Creative Industries: An Analysis of the Implications of the "Creative Industries" Approach to Arts and Media Policymaking in the United Kingdom," 17.

1.4.2. Conflict Management, Media, and the Diplomatic Approach

A model of ethno-political conflict had been developed, composed of a system of four equations to estimate which factors are significant in leading to an outbreak of conflict¹¹⁶ when the subjects of these equations were factors considered workable interdependently to determine levels of rebellious conflict or rebellion, mobilization, grievances, and repression.¹¹⁷ Suppose they existed together as a cause of conflict, not its effect, at a significant level; in that case, those elements could explain why the 2010s Arab revolutions erupted _ and the ensuing conflicts in the aftermath _ on the popular base level. The peacebuilding missions are assumed to be a geopolitical action here for restoring peace and building the nation inflicted by the war/conflict under the supervision of the United Nations organization and its concerned agencies. That is seen as an attempt to overpass an ensuing conflict to reach a temporal or permanent peace-state.

Crucially, once the peacebuilding mission is dispatched in the conflict zone, its function concentrates on achieving two main processes: the first is political institutionalization, and the second relates to economic liberalization.¹¹⁸ Within the domain of political institutionalization lies the direct external involvement sub-process in shaping governmental institutions of the conflict society, which is well-known as nation/state-building that is considered an extended goal of the international intervention implemented by the United Nations after the Cold War (1948-1991). On the other hand, the economic liberalization comprising open (capitalist) economies and self-oriented/governed (free restrictions) markets goals, is another objective adopted by the United States through several aid programs and plans as a leader of the free world after the collapse of the Soviet Union in the early 1990s. This objective witnessed an expansion in many regions around the globe, under the UN's manner for assisting in recovering the war/conflict-torn economies through peacebuilding missions.

¹¹⁶ In this respect, the variables of the gross domestic product (GDP) growth and the natural log of a country's total population have been found to enhance one's ability to predict civil war; at the same time, the GDP per capita found as a strong predictor of a country's likelihood of ever experiencing domestic political violence (Benjamin E. Bagozzi, "Forecasting Civil Conflict with Zero-Inflated Count Models," *Civil Wars* 17, no. 1 (2015): 8).

¹¹⁷ N. Iswaran and D. F. Percy, "Conflict Analysis Using Bayesian Neural Networks and Generalized Linear Models," *Journal of the Operational Research Society* 61, no. 2 (2010): 332.

¹¹⁸ See in, Kai Michael Kenkel, "Five Generations of Peace Operations: From the "Thin Blue Line" to "Painting a Country Blue,"" *Revista Brasileira de Política Internacional (Rev. Bras. Polit. Int.)* 56, no. 1 (2013): 122-143.

Differently, the diplomatic trajectory is another key method traced in conflict management other than the UN peace-operations' international military intervention. Concerning this, Michael Butler showed that states are more likely to employ *negotiation, mediation, adjudication, and arbitration* diplomatic approaches in foreign policy crises under one or more of these conditions:¹¹⁹ a. when the appeal, utility, and experience of violence is diminished; b. in crises involving weak, nascent, and/or transitional political entities; c. in crises involving fewer actors, and/or crises not embedded within protracted conflicts; and d. in crises in which international governmental organizations (IGOs) are significantly involved. Furthermore, *power-sharing* appears as a significant solution during the conflict settlement and resolution stages, particularly for political and territorial interests-based conflicts. That encourages factions to commit credibly to a peace settlement by providing guarantees against exclusion, focusing on the security dilemma inherent in negotiations, making parties to the peace process reassured about their fate in a post-conflict setting, and exhibiting commitment to the peace process.¹²⁰

In the same context, the role of *media diplomacy*, television diplomacy, or the so-called CNN effect often works influentially in also promoting conflict settlement and resolution – not militarily. Considering that the televised ultimatum President Kennedy sent to the USSR about the 1962 Cuban Missile Crisis, Nixon's visit to China in 1972, and Sadat's 1977 visit to Jerusalem were not acts of propaganda (or public diplomacy) but designed to achieve *breakthroughs* in crises and conflicts.¹²¹ The latter cases thus express efforts exerted relying on *media diplomacy* manifesting as an appeal through mass media for conflict resolution officially as well overtly. Moreover, a typology of communicative strategies of media in the conflict has been suggested where five media strategies are illustrated in correspondence with which stages media coverage is dedicated to focusing on, as follows:¹²² a. conflict escalation, where journalism becomes a war-inducing

¹¹⁹ Michael J. Butler, "Context, Process, and Structure: Correlates of Conflict Management in Foreign Policy Crisis," *Journal of Global Security Studies* 3, no. 2 (2018): 163-180.

¹²⁰ Marie-Joëlle Zahar, "Understanding the Violence of Insiders: Loyalty, Custodians of Peace, and the Sustainability of Conflict Settlement," in *Challenges to Peacebuilding: Managing Spoilers During Conflict Resolution*, ed. Edward Newman and Oliver Richmond (The USA, New York: United Nations University Press, 2006), 49.

¹²¹ Eytan Gilboa, "Diplomacy in the Media Age: Three Models of Uses and Effects," *Diplomacy and Statecraft* 12, no. 2 (2001): 10.

¹²² Dmitrii P. Gavra and Alyona S. Savitskaya, "Mass Media in Interstate Conflicts: Typological Model "Peace-conflict Journalism Multidimensional Approach"," *Russian Journal of Communication* 4, no. 3-4 (2011): 258-259.

machine, b. conflict intensifying, if media works on warming up artificially of a conflict level or scale, c. conflict resolution, which is an ideal mode of peace journalism or/and media diplomacy, d. outside observation (i.e., the non-involvement and unbiasedness of conflict discourse), and e. concealment, which indicates the principle of hiding information during a conflict coverage.¹²³

Furthermore, the role played by third parties pursuing track-two diplomacy,¹²⁴ employing journalists as mediators acting independently in pre-negotiation stages to bring opponents to the negotiation table, is the distinctive characteristic of what is called *media-broker diplomacy*.¹²⁵ Still, participating in mediation efforts and some negotiation forms necessitates that third parties seek the best moment to interfere for achieving high utilities for all sides by peace versus war. The theory suggests that during the conflict climax, the conflict matureness phase plays a key role in promoting both parties' involvement in the settlement or resolution efforts, even if temporarily, of an ongoing conflict when their interests become at stake. It is the so-called *mutually hurting stalemate* moment.¹²⁶ Within this stage, no conflicting party perceives or counts on achieving a victory when all suffer, on a significant scale, from initial losses, battle zone-humiliation, or sudden defeat confronting one another.

Playing on opting for the best response to be received from both conflicting parties by accepting the mediation first and actively participating in it second, the mediator is assumed to exploit that assured mutual predicament, which, expressing the conflict ripeness factor, appears as the triumph momentum's moment for the diplomatic trajectory. Nevertheless, some conflict parties move to that stage solely to earn time re-configuring their combat preparations and strategies and then re-initiating the war or

¹²³ In general, Gavra and Savitskaya explained four ideal types of mass media and how it functions within the conflict structure; these are i. media as an *actor-supporter* _ when it takes part in the conflict supporting one side, which is the *conflict support strategy*; ii. media as an *actor-hider*, participating in the conflict by keeping secret about it, that is the *conflict hushing up strategy* (ibid, 256). The third and fourth types are iii. media as a *non-actor* — *reflector*, if media does not participate in the conflict but only informs on it, which is the *conflict reflection strategy*; and iv. media as a *non-actor* — *hider*, which does not participate in the conflict and does not inform on it _ that is the *conflict ignoring strategy* (ibid, 256-257).

¹²⁴ The third parties of a conflict include *formal* as well as *informal* representatives of superpowers, neutral states, international and regional organizations, etc., functioning as mediators in pre-or/and-during negotiation phases. At the same time, track-two diplomacy refers to the *unofficial* mediation and *informal* forms of negotiation that the mentioned representatives can conduct where ordinary individuals (e.g., journalists, and influential characters/actors) may also take part in or practice.

¹²⁵ Gilboa, "Diplomacy in the Media Age: Three Models of Uses and Effects."

¹²⁶ Butler, *International Conflict Management*.

conflict. So, the more the mediator is skillful professionally, the more the mediation's outcome and, therefore, diplomacy's output come in favor of conflict resolution, not the opposite.

Through the mediation and negotiation course, many internal and external challenges face those who persist in drawing its lines. Given that peace negotiations take place when both conflicting parties accept the military outcome moving forward for determining political, economic, and/or territorial payoffs to be obtained by each in the post-conflict/war (geo)political setting, "peace agreements that elicit compliance are particularly vulnerable to insider spoiling since attachment to the agreement is a function of expected gains from membership."¹²⁷ Thus, if one side's expectations have not been met through a reached peace agreement, pact, accord, or treaty, it is more likely that this party will turn its back to the diplomatic course as a traced path of achieving its war interests. Alternatively, the same side might not fulfill a negotiated agreement's terms, either thoroughly or partially according to its own interests ascertained, as long as this side's conjectured gains from the peace process are not satisfied.

In the same context, *neutral* mediators have incentives to hasten to reach an agreement at the expense of its quality because they engage in mediation for only one purpose: ending the war, regardless of whether the ensuing agreement is sustainable or not.¹²⁸ In comparison, *biased* mediators work on ensuring the existence of stipulations in an agreement guaranteeing the interest of *their* side, making the latter agrees to costly concessions (in some cases) for protecting their protégés, providing a sustaining principle in the peace arrangement.¹²⁹ Such a process is generally considered conducive to democracy and durable peace through its mechanisms of power-sharing, third-party security guarantees, justice provisions, etc.¹³⁰ Between the neutral and biased mediation, third parties themselves may bring incentives for *spoiling* the peace process¹³¹ in terms

¹²⁷ Zahar, "Understanding the Violence of Insiders: Loyalty, Custodians of Peace, and the Sustainability of Conflict Settlement," 45.

¹²⁸ Isak Svensson, "Who Brings Which Peace? Neutral Versus Biased Mediation and Institutional Peace Arrangements in Civil Wars," *Journal of Conflict Resolution* 53, no. 3 (June 2009): 446-469.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ In the same regard, the diaspora impact in settling or resolving a conflict should be considered. Having both positive and negative influences, diaspora groups can wield significant influence in creating or hindering international pressure, support, and funding for consolidating or opposing a peace process (Edward Newman and Oliver Richmond, "Obstacles to Peace Processes: Understanding Spoiling," in

of resources, recognition, and favoritism to one or the other party.¹³² It may occur, for instance, by exploiting achieving an advance in the peace process trajectory to raise opportunities for getting aid from international donors, which may be seen as an end in itself of spoiling behavior made by a third party or any conflicting side participating in this process.

Lastly, a debriefing process used in peacemaking and conflict resolution practices resembles another track for conflict management. This process can be defined as a conversational act designed to supplement practice and support individuals holistically, which is best integrated within a reflective manner of conflict transformation used mainly by peacemaking practitioners¹³³ through a *partner debriefing*¹³⁴ process as one example. The last is a process of quasi-external perspective that may serve as a conflict reflection means by requiring the practitioners to describe their actions and views in potentially novel ways regarding conflict to someone unfamiliar with project specifics.¹³⁵ For instance, conducting conversations with those diplomats, analysts, brokers, or partners, who contributed to the conflict management during the Rann of Kutch crisis of 1965 between India and Pakistan over boundary disputes, might productively assist in getting utilized experience or preeminence regarding peacemaking in the Middle East for concerned third parties. Unlike media-broker diplomacy, the debriefing process employs intentionally, comprehensively, and reflectively in a simulative method the thoughts and previous practice of peacemaking practitioners in conflict resolution zones.

Challenges to Peacebuilding: Managing Spoilers During Conflict Resolution, ed. Edward Newman and Oliver Richmond (The USA, New York: United Nations University Press, 2006), 1-19).

¹³² Newman and Richmond, "Obstacles to Peace Processes: Understanding Spoiling."

¹³³ Jacquie L. Greiff, Matthew Graville Bricker, Philip Gamaghelyan, Margarita Tadevosyan and Shu Deng, "Debriefing in Peacemaking and Conflict Resolution Practice: Models of Emergent Learning and Practitioner Support," *Reflective Practice* 16, no. 2 (2015): 254-268.

¹³⁴ The term '*partner debriefing*' describes a process involving a third party who has had little to no direct exposure to a practitioner or group's prior work and engages the practitioner(s) in a process of assisted introspection (ibid, 258).

¹³⁵ Ibid.

CHAPTER TWO: THE APPLIED GAME THEORY IN IR AND CONFLICT MANAGEMENT; THEORY, APPLICATION, AND THEORETICAL DEVELOPMENT

2.1. The Applied Game Theory in IR and Conflict Management: Theoretical Debates

2.1.1. Perfect Deterrence Theory of Inter-state Conflict Management

Developing game theory in IR, particularly in the security studies and deterrence field, Frank C. Zagare can be considered a pioneer game theorist. The latter did not only apply game theory to these areas of specialization, but Zagare developed with D. Marc Kilgour in 2000¹³⁶ what they called Perfect Deterrence Theory (PDT), differentiating between it and the precedent Classical Deterrence theory in IR that traces its roots to Realism thought, as come later. Perfect Deterrence Theory is “a general theory of interstate conflict that applies to a wide variety of real-world circumstances, including acute crises and both conventional and nuclear deterrence relationships.”¹³⁷ Depending on game theory as a methodological foundation, they built the PDT of “a set of closely related game-theoretic models that are explored under conditions of complete and incomplete information.”¹³⁸

The Perfect Deterrence Theory (PDT) is defined as “a general theory of conflict initiation, escalation, and resolution, relevant to strategic interactions between both nuclear and non-nuclear states”¹³⁹ based on building some related game-theoretic models. Zagare differentiates between *Rudimentary Asymmetric Deterrence Game*, *Generalized Mutual Deterrence Game*, and *Unilateral Deterrence Game*.¹⁴⁰ Firstly, in the *Rudimentary Asymmetric Deterrence Game*, there are two players; the Challenger, who either accepts the *Status Quo* or makes a *Demand* for reversing it. Also, the Defender who chooses to *Concede* for avoiding a *Conflict* allowing for the outcome *Challenger Wins*; or resorts to

¹³⁶ Frank C. Zagare and D. Marc Kilgour, *Perfect Deterrence* (The UK: Cambridge University Press, 2000).

¹³⁷ Frank. C. Zagare, “Deterrence Theory, Then and Now: There Is No Going Back,” *St Antony’s International Review* 9, no. 1 (2013): 157.

¹³⁸ *Ibid.*

¹³⁹ Frank. C. Zagare, “Toward a Unified Theory of Interstate Conflict,” *International Interactions* 33, no. 3 (2007): 307.

¹⁴⁰ *Ibid.*

Resist or Defect choice where an all-out conflict arises. In this game, the Defender, having an incredible threat to deter the Challenger, rationally prefers *Challenger Wins* outcome to *Conflict*. Moreover, the Challenger contests the *Status Quo* if it prefers *Challenger Wins* to *Status Quo*.

Shedding light on the *Generalized Mutual Deterrence Game*, it can be said that “two outcomes are consistent with rationality when the two players (now called States A and B) are afforded threats that are both credible and capable.”¹⁴¹ One of these outcomes is consistent with the *Status Quo* – thus yielding a successful deterrence, while the other is not, which associates with *conflict* when the mutual deterrence fails. For the *Unilateral Deterrence Game (UDG)*, in which both players, Challenger and Defender, lack credible threats, each prefers *Back Down* over *Conflict* or *Fight*. Assumingly that the Defender’s threat is capable in this unilateral deterrence game with existing an incredible threat held by the Challenger, the latter prefers *Status Quo* to *Conflict*. Therefore, the deterrence succeeds with a preserved *Status Quo*. On the other hand, one instance of an *incapable* threat of a Defender is a causal explanation of the Rhineland crisis of 1936 developed within the confines of the game-theoretic model of asymmetric or unilateral deterrence by Zagare.¹⁴² The two players in this crisis are Germany (Challenger) and France (Defender). The German choices are either to contest the military status quo in the Rhineland or to accept it. When Adolf Hitler decided to reverse the status quo by remilitarizing the Rhineland in 1936, France’s choices were to resist or not. The latter choice was the case of the day with an outcome *France Concedes*.¹⁴³

About the conditions of *capability and credibility* in the Perfect Deterrence Theory, Zagare argues that¹⁴⁴ successful deterrence absolutely requires a *capable* threat, whereas in (PDT) *capable* threats emerge as necessary but not sufficient conditions for deterrence success and that *credible* threats are neither necessary nor sufficient for peace; generally,

¹⁴¹ Ibid, 314.

¹⁴² Frank. C. Zagare, “Analytical Narratives, Game Theory, and Peace Science,” *Contributions to Conflict Management, Peace Economics and Development* 16 (2011): 19-35.

¹⁴³ Under what Zagare and Kilgour, in their 2000 book, called Attack equilibrium, Challenger (i.e., Germany) demands an alteration of the Status Quo (at node 1) regardless of its type, but a Soft Challenger (which Germany was in 1936) plans to back down (at node 3) in the event that Defender (i.e., France) resists at node 2, where hard Defenders always resist at node 2 and Soft Defenders (like France in 1936) always concede (ibid, 25).

¹⁴⁴ Zagare, “Toward a Unified Theory of Interstate Conflict.”

greater *credibility* is associated with a higher probability of successful deterrence.¹⁴⁵ Identifying NATO's Conflict with Serbia over Kosovo in 1999 as an instance of deterrence, Quackenbush and Zagare employed a set of interrelated game models of the Perfect Deterrence Theory, reaching that: i. crises occur whenever a defender's threat to respond in kind *lacks* the *capability* or is *insufficiently credible* to deter aggression.¹⁴⁶ ii. When extended deterrence *breaks down*, the ensuing conflict is most likely to remain *limited* when a defender's escalatory *threat* is both *capable and credible*; and that iii. crises are more likely to *escalate* when at least *one* of those two conditions is *not* satisfied.¹⁴⁷

In the same context, Kilgour and Zagare used a **generic two-stage escalation model** of two players, Challenger and Defender, to ask whether and when *limited conflicts* can occur.¹⁴⁸ Limited conflicts do not occur in the model when Defender's threat to respond-in-kind is noncredible and extremely unlikely when Defender (who can concede, respond-in-kind, or escalate) is seen strictly to prefer a response-in-kind to immediate capitulation when challenged.¹⁴⁹ That is to say that, at node (1) of the game, the Challenger either accepts the Status Quo or makes a Demand. So, at *node (2)* and in response to the Challenger's Demand, there are three options for the Defender: i. The Defender may Concede. ii. The Defender may Defy responding-in-kind to the Challenger's Demand. Here, at node (3), the Challenger may make a Demand to the Defender's Defying with a *Limited Conflict* ensuing as an outcome. Rather, the Challenger may Escalate at node (3). If at node (4), Defender Defies only (instead of escalating responding-in-kind), the *Challenger Wins* outcome will result at the node's end. If the Defender Escalates instead at node (4), *All-Out Conflict* arises. iii. The Defender may Escalate, and sequentially, the Challenger can make a Demand to the Defender's Escalation move with the *Defender*

¹⁴⁵ For Zagare, in the PDT, not all deterrence situations are equally likely to succeed, assuming that: i. the status quo is potentially very stable in asymmetric or one-sided deterrence situations; ii. deterrence, however, is more tenuous when deterrence is mutual; iii. highly dissatisfied states are the most difficult to deter, and reciprocal strategies offer the best prospects for peace; iv. in contrast, the unilateral, hard-line policies tend to result in conflict, either limited or all-out (ibid, 323).

¹⁴⁶ Stephen L. Quackenbush and Frank C. Zagare, "Game Theory: Modeling Interstate Conflict," in *Making Sense of International Relations Theory*, ed. J. Sterling-Folker (The USA, Colorado: Lynne Rienner, 2006), 112.

¹⁴⁷ Ibid.

¹⁴⁸ D. Marc Kilgour and Frank C. Zagare, "Explaining Limited Conflicts," *Conflict Management and Peace Science* 24 (2007): 65-82.

¹⁴⁹ Ibid, 65.

Escalates/Wins as an outcome, or the Challenger can Escalate _ that results in an *All-Out Conflict*.

Zagare employed the generic game-theoretic escalation model with incomplete information to construct theoretically an explanation of the 1914 European war that involved Austria–Hungary, Germany, Russia, France, and the United Kingdom. He suggested that general war broke out in Europe in 1914 because both Austria–Hungary and Germany (Challenger) believed that Russia (Defender) would stand aside if Austria moved aggressively against Serbia, where the war can be said to be *unintended* rather than to be understood as *accidental*.¹⁵⁰ On an incorrectly perceived limited conflict in Europe, one should refer to that the limited conflicts are most probable under a Constrained Limited-Response Equilibrium that only occurs when there is uncertainty about Defender’s willingness to respond in-kind to an initiation where (more possibly thought that) Challenger initiates, and Defender concedes.¹⁵¹

A different game model, called the ***Tripartite Crisis Game (TCG)***, which was also introduced by Zagare and Kilgour,¹⁵² was designed to “capture the mixed motives and contradictory impulses of ***extended deterrence*** relationships,”¹⁵³ developing a *general theory of interstate crisis* initiation and resolution. In this game, there are three players: Challenger, Protégé, and Defender. Challenger can choose to make *No Demand* of Protégé preserving the *Status Quo* or make a *Demand* of an alternation of the status quo initiating a crisis. The Protégé, consequently, can *Concede*, allowing for the *Challenger Wins* outcome to emerge; or *Hold Firm*, giving thus the opportunity to Defender to begin its play in the sequential node. Between *Support* and *Not Support* choices, if Defender prefers to *Support* Protégé to *Not Support* and the Challenger goes for *Fight* choice, the conflict breaks out. Whereas the outcome *Challenger Concedes* results if the Challenger *Breaks Down* with Defender’s *Support* action. Should Defender choose to *Not Support*, Protégé can either go for *Realigning*, severing its relationship with an unreliable

¹⁵⁰ Frank. C. Zagare, “Explaining the 1914 War in Europe: An Analytic Narrative,” *Journal of Theoretical Politics* 21, no. 1 (2009a): 63-95.

¹⁵¹ Kilgour and Zagare, “Explaining Limited Conflicts.”

¹⁵² See, Frank C. Zagare and D. Marc Kilgour, “Alignment Patterns, Crisis Bargaining, and Extended Deterrence: A Game-Theoretic Analysis,” *International Studies Quarterly* 47 (2003): 587–615.

¹⁵³ Frank. C. Zagare, “The Moroccan Crisis of 1905–1906: An Analytic Narrative,” *Peace Econ. Peace Sci. Pub. Pol.* (2015): 4.

Defender, or maintaining a worthy relationship with this Defender by choosing *Protégé Loses*.¹⁵⁴

Two main implementations of the (TCG) must be mentioned illustrating this game's applications in IR: the Moroccan crisis of 1905-1906;¹⁵⁵ and the so-called Blank Check issue,¹⁵⁶ which followed the Sarajevo crisis in 1914.¹⁵⁷ Zagare interprets the crisis of 1905–1906 in the context of the Tripartite Crisis game, an incomplete information game model, and one of its proper subgames, the Defender-Protege subgame.¹⁵⁸ He demonstrated that throughout the crisis, the Germans (Challenger) contested the status quo because they believed that the British (Defender) would fold over support of the French (Protégé) position at the Algeciras's conference (with an assumed outcome of *Protégé Realigns* or *Protégé Loses*), giving way (i.e., *Challenger Concedes*) when it was more than apparent that their belief was incorrect.¹⁵⁹ That is, the British preferred to maintain their entente relationships with France (choosing to *Support Protégé*), preserving the alignment pattern that defined the European state system up to 1914. The incomplete information game model of the (TCG) has also been used to describe and

¹⁵⁴ The Tripartite Crisis Game interprets the impact of Protégé's threat on Challenger's optimal behavior as follows:

- i. When Challenger is willing to fight to back up its demand but is nonetheless only weakly or moderately motivated, Protégé's threat to realign – though directed at Defender, can dissuade Challenger from initiating a crisis.
- ii. But when Challenger is willing to fight and stands to gain a great deal, Protégé's threat may actually prompt Challenger to make a demand.
- iii. The Protégé's threat to realign (therefore) sometimes bolsters deterrence and sometimes undermines it, which explains why some alliances are stabilizing while others are associated with crises and war. (Zagare and Kilgour, "Alignment Patterns, Crisis Bargaining, and Extended Deterrence: A Game-Theoretic Analysis," 587)

¹⁵⁵ Moroccan crisis (1905-1906) is considered one of the leading events to World War I, in which Germany sought to undermine the French control over Morocco. Interestingly, the United Kingdom aligned with France, ensuring the latter's right in Morocco as a protectorate at the Algeciras Conference convened in Spain 1906 when the crisis was resolved by signing a treaty affirming the French control.

¹⁵⁶ "Following the assassination of the heir to the throne, Austria-Hungary considered taking military action against Serbia. Thereupon Kaiser Wilhelm II declared that Germany would support the Danube monarchy as required by alliance obligation – this was the so-called blank cheque" or the Blank Check issue of 1914. "The 'Blank Cheque' of 1914," Federal Foreign Office: The Political Archive, March 21, 2014. <https://www.auswaertiges-amt.de/en/aamt/politiscal-archive/-/215224>. "Accessed Date 06/15/2022."

¹⁵⁷ The Sarajevo crisis refers to the interrelated diplomatic and military escalations among the major European powers following the assassination of the heir of the Austro-Hungarian throne, Archduke Franz Ferdinand, and his wife on June 28, 1914, by a Bosnian-Serb nationalist. Under this crisis, the Austro-Hungarian empire accused Serbia of complicity in the attack, issuing an ultimatum to the last and initiating, with Germany, unintentionally the Great War of 1914.

¹⁵⁸ Zagare, "The Moroccan Crisis of 1905–1906: An Analytic Narrative."

¹⁵⁹ Ibid.

explain the so-called blank check issued to Austria by Germany in early July 1914. In a three-player game model, Serbia was represented as Challenger, Germany was the Defender, and Austria was the Protégé. “An equilibrium analysis of the Protégé-Defender subgame suggests that in 1914 there were several rational strategic possibilities, not all of which were associated with unconditional German support of Austria,”¹⁶⁰ the so-called blank check issue. Accordingly, it is best to think of the Archduke’s murder, the assumed challenge by Serbia in the Sarajevo crisis, as but one of several important steps on the road to war; the event that helped the blank check was issued and cashed by Germany (Defender) to Austria (Protégé).¹⁶¹

Ultimately, on critiques of game theory uses in conflict management, Zagare argues that¹⁶² criticisms raised by scholars such as Alexander J. Field in 2014 on questioning the utility of game theory (and its rationality assumption) as a strong normative or predictive method in the strategy’s guidance during conflicts, particularly in interpreting the absence of nuclear war during the Cold War, have no solid basis for standing on. In his own words, the “mutual deterrence (that dominated the superpowers relations along with the Cold War) can, in fact, be reconciled with rationality and that game theory is a powerful tool for understanding interstate conflict.”¹⁶³ Subjecting the developed theory of general deterrence _ the Perfect Deterrence Theory _ to a systematic test by examining general deterrence from 1816 to 2000, Quackenbush proved that the empirical record strongly supports the predictions of the Perfect Deterrence Theory.¹⁶⁴

Needless to say, other studies have been conducted on applying game theory to conflict management based on building generic games of interstate conflicts away from employing the Perfect Deterrence Theory’s related models. One of which focuses on historical junctures whereby imperial expansion reached and conflicted with China, Japan, and Korea. While the structure of his game-theoretic model is determined by the attitude of the target country and the type of foreign power, Hong analyzed the process

¹⁶⁰ Frank. C. Zagare, “After Sarajevo: Explaining the Blank Check,” *International Interactions* 35 (2009b): 124.

¹⁶¹ Ibid.

¹⁶² Frank. C. Zagare, “Explaining the Long Peace: Why von Neumann (and Schelling) Got It Wrong,” *International Studies Review* 20 (2018): 422.

¹⁶³ Ibid.

¹⁶⁴ Stephen L. Quackenbush, “General Deterrence and International Conflict: Testing Perfect Deterrence Theory,” *International Interactions* 36, no. 1 (2010): 60-85.

of conflict resolution using standard game theory and the theory of moves, which assumes different rules of play of moves and countermoves, arguing that¹⁶⁵ the latter provides more coherent accounts for dynamic aspects of imperialist interstate conflict in modern East Asia. Another study has used game theory in the conflict management field, which examined the politics of mine action in Afghanistan, relying on normative and game theoretic analysis. In formulating a grand strategy for post-conflict societies, that study demonstrated that applying a normative model of the *game* and *decision*-theoretic principles provides a better understanding of the beneficial influence of the mine action on the restoration of Afghan socio-economic conditions and its peacekeeping and peacebuilding effects.¹⁶⁶

2.1.2. Game Theory Applications in IR: Conflict Management and (2 × 2) Games in the Decision-Theoretic Deterrence Theory's Chicken Model and the Prisoner's Dilemma

Deterrence as an instrumental practice of managing and maintaining the global and regional security order is seen as a “power accumulated by actors singly or collectively (usually in alliances) to threaten serious harmful consequences so as to ward off attacks or other noxious behavior or when used, to demonstrate those harmful consequences for the edification of potential opponents.”¹⁶⁷ In this context, the deterrence nature had changed after it was a practice employed within the frame of security strategy implemented by one nation or collective group of nations (i.e., alliance) _ when the scale of the classic balance of power system's wars escalated to being destructive with the outbreak of two world wars. The change thus had occurred coinciding with witnessing the fatal consequences of those major power wars. Meanwhile, deterrence as an (inter)national security maintaining tool shifted from being one facet or standard of broader security strategy used for *preventing wars or via wars* to being an independent

¹⁶⁵ Seung-Hun Hong, “Strategic Behaviour in Imperialist Interstate Conflict: A Game-Theoretic Analysis,” *SSRN Electronic Journal* (2015): 1-21. Available at SSRN: <https://ssrn.com/abstract=2601670> or <http://dx.doi.org/10.2139/ssrn.2601670>. “Access Date 06/15/2022”

¹⁶⁶ Filip Van Der Linden, “The Politics of Mine Action: Normative, Game and Decision Theoretic Approaches to Post-Conflict Problems Caused by Landmines and Explosive Remnants of War. Case Study: Afghanistan” (Doctorate Dissertation, The University of Antwerp and the Royal Military Academy, Belgium, 2007).

¹⁶⁷ Patrick M. Morgan, “The State of Deterrence in International Politics Today,” *Contemporary Security Policy* 33, no. 1 (2012): 86.

security strategy used separately only to *prevent (catastrophic) wars*, either nuclear or non-nuclear.

Not only the absence of major (non)nuclear war between the international system's polar (the USA and USSR) during the Cold War (1948-1991) refers to the success of deterrence strategies during this period. Extended deterrence of the system's states and actors within these states has been the strategy of the day up to our present time. That "became central to international politics, involving alliances, interventions, arms transfers, power projection efforts, military training programmes and non-proliferation pressures."¹⁶⁸ By the end of the Cold War in nearly 1991, however, the deterrence strategies activation in stabilizing the global system became less remarkable than before, though still capable, with the system's states moving towards liberal interdependence and cooperation more than conflict in their inter-relations. Paradoxically, in the 21st century, deterrence became a dual-standard practice; as a stabilizing strategy made by the Western powers primarily, and a counterstrategy used by Weapons of Mass Destruction (WMD)-seeking rough states (e.g., North Korea, Iran, and Iraq during Saddam Hussein reign) or rising Russia, China, Venezuela, etc., for confronting Western sanctions or threat(s) of using force in getting these states and powers in the desired course of action regarding issues of nuclear proliferation, open markets, or human rights. With the emergence of phenomena such as international terrorism, cyberattacks, biological wars, and nuclear proliferation (among others), deterrence, again, as an effective counter-threat power, shifted to seize a more vital position in our contemporary world. Still, the need to search for ways of how to best use and apply deterrence for preserving regional and global security is now a highly underlying issue in the relevant theoretical debates.

2.1.2.1. Classical Deterrence Theory: Structural Deterrence & Decision-Theoretic Deterrence

Besides the Perfect Deterrence Theory (PDT) mentioned previously and the theoretical contributions related to introduced by Zagare and Kilgour in 2000 on conflict initiation, escalation, and resolution for managing conflicts among either nuclear or non-nuclear states, another theory has preceded it in the field, that is, Classical (or Rational)

¹⁶⁸ Ibid, 87.

Deterrence Theory (CDT). Two strands of the (CDT), which is derived from Realism¹⁶⁹ in IR and its related balance of power¹⁷⁰ system, emerged in the discipline; the first is the Structural (Neo-Realist) Deterrence Theory. The other is the *rational choice-based-variant* that the game theorist Frank Zagare in his 1996 article¹⁷¹ called Decision-Theoretic Deterrence Theory, the same term we adopt to indicate this strand of the Classical Deterrence Theory in the theoretical parts to come later.

Structural Deterrence Theory traces its roots from the axiom agreed on by Structural Realists that international stability is achieved by the distribution of power among the system's states, particularly the great powers. So, the parity principle in accumulating political, economic, and military capabilities sets the rules of stabilizing the system, from that perspective, taking into consideration the bipolar system of the post-World War II period. Given that World War I occurred while an almost symmetrical distribution of power under a semi-bipolar system existed in the form of two alliances had been taking place, the inquiry arose on the nature of power accumulation itself. Differently, acquiring symmetrically nuclear power by the system poles (i.e., the US and USSR) was seen, in this context, as another root cause besides the bipolarity in stabilizing the international system of the day.

Nuclear arsenal possession by the system's powers was not accounted for by Structural Realists during the Cold War as a dilemma insofar as a way of distributing power that deters each from initiating a major war and sequentially stabilizing the system _ given a retaliatory second-nuclear strike capability (should a nuclear state attack first) and the unbearable cost of war. Once unipolarity had been replacing the balanced bipolarity in the wake of the Cold War, Structural Realists considered, more, the selective proliferation of nuclear weapons by nuclearizing rising states in Europe like Germany and France as a re-directed trajectory of distributing power among the system's great powers for avoiding

¹⁶⁹ Realism is a key theory in the International Relations discipline that emerged through a series of theoretical debates conducted in the United States after the Second World War (1939-1945), explaining the Cold War (1948-1991) between the US and the Soviet Union in particular, and the root causes of wars generally. There are two leading schools of Realism; Classical Realism crystalized in our modern history through Hans Morgenthau's 1948 book "*Politics Among Nations: The Struggle for Power and Peace*;" and Structural (Neo-) Realism founded through Kenneth Waltz's 1979 book "*Theory of International Politics*."

¹⁷⁰ Balance of power is a concept that refers to the distribution of power among the international system's (great) powers where no single power/state or a coalition of powers/states can overwhelm the other(s).

¹⁷¹ Please refer to, Frank. C. Zagare, "Classical Deterrence Theory: A Critical Assessment," *International Interactions* 21, no. 4 (1996): 365-387.

the war possibility by making it the most costly and terrible outcome for all. In either case, nuclear power distribution served as a balance of power mechanism in parity relationships, and both were deterrence means for the international system structure's stabilization purpose _ until an *irrationality dilemma* of the nuclear proliferation, associated with some rogue states such as North Korea and Iran, emerged by the early 2000s. On the other hand, the *Decision-Theoretic Deterrence (DTD) Theory* focuses on the "interplay of outcomes, preferences, and rational choices in determining interstate conflict behavior."¹⁷² The (DTD) theory is identified in a huge part through the so-called game of Chicken. In this context, "in developing either formal or informal rational choice models based on the payoff structure of the game of 'Chicken,' early decision-theoretic deterrence theorists like Schelling (in his 1960 book "*The Strategy of Conflict*"¹⁷³)... fully embrace *the* central conclusion of structural deterrence theory: that war in the nuclear age is 'irrational'."¹⁷⁴

In explaining *the game of Chicken*, it can be said that there are two rational players in this game with only two strategies to be selected: either to Cooperate (C) by accepting the status quo or Defect (D) by reversing it. Based on Realism thought, each player seeks to maximize its utility in a noncooperative game between the two players, supposing that they are State I and State II. In accordance with the Realist perspective of a zero-sum game where one wins at the expense of the other, the status quo (or compromise) outcome when the two states move to Cooperate lies within the national interests' frontiers for both by avoiding the (nuclear) war among them that might destroy these system's (two) nuclear polar (i.e., State I & State II in the Chicken game-model). Basically, since Structural Realists associated the stability of the international system with a balance of power under bipolarity and selective nuclear-power acquisition that makes war between the two poles the most costly and worst catastrophe to occur, the (DTD) theorists built and developed such a rational-choice model (i.e., the Chicken game and its based models) that also conveys the system bipolarity as a stability-condition as well as the war among superpowers as the "*ultimate evil*" if arose in the nuclear age. In the light of an expected utility (or critical risk) model developed by the (DTD) theorist Daniel Ellsberg in 1959

¹⁷² Zagare, "Classical Deterrence Theory: A Critical Assessment," 365.

¹⁷³ See, Thomas C. Schelling, *The Strategy of Conflict* (England: Harvard University Press, (1960, 1980)).

¹⁷⁴ Frank. C. Zagare, "Reconciling Rationality with Deterrence: A Re-Examination of the Logical Foundations of Deterrence Theory," *Journal of Theoretical Politics* 16, no. 2 (2004): 111.

that rests upon three assumptions of “incomplete information nature of the game of Chicken, the rationality of expected utility (i.e., the players as the expected utility maximizers), and subjectivity”¹⁷⁵ in making choices; we summarize the game of Chicken, considering that no player has complete information about what strategy the other will use in the game. So, under a level of uncertainty, each selects its strategic action according to its own *subjective* calculations of the *best* utility *expected* from its own possible moves and the *other's* as well.

In sum, these four possible outcomes may result in the Chicken game: a. State I and State II may choose to Cooperate, obtaining their next-best outcome in the game (3, 3), and preserving the Status Quo. Thence, there is no possibility of (nuclear) war in the real-world circumstances of the game. Under a (DTD) theoretical view, this war becomes irrational and unthinkable in terms of providing two conditions: the costs of war among both states in the nuclear era are unbearable and expensive enough to prevent this war; and, the quantitative and qualitative arms race between the system two poles is to be (semi-) symmetrical as to witness that *no* superpower can threaten (or overwhelm) the other with a more advanced, comprehensive, or effective (nuclear) defensive system,¹⁷⁶ while both have the second-nuclear strike capability advantage. In theory, the stabilization of the international system relying on such mutual general deterrence relations based on the game of Chicken interactions is achieved by agreeing with the Structural Deterrence paradigm of the balance of power system. b. The next possibility is that: State I, predicting that State II will go for cooperation, chooses to Defect for yielding its best outcomes in the game, with State II having its next-worst payoffs, which are: (4, 2) for State I and State II, respectively. c. State II seeking to get an advantage from a possible choice of cooperation strategy made by State I this time, prefers to Defect with reversed utility indicates: (2, 4). d. Suppose both states decided to stand firm and Defect, with no tactics followed for altering the position taken by an opponent. In that case, the resulting outcome is the conflict or irrational and accidental (nuclear) war with the worst payoffs for both in the game: (1, 1); see Figure 1.

In the game of Chicken, choosing the (Defect, Cooperate) pair of strategies and the (Cooperate, Defect) one are two Nash-Equilibrium positions, once considering that

¹⁷⁵ Zagare, “Classical Deterrence Theory: A Critical Assessment,” 375.

¹⁷⁶ See, *ibid*, 365-387.

moving to the (Cooperate, Cooperate) pair of strategies is merely the *Status Quo* outcome among the international system's two poles. However, in some conflict situations, the mutual-cooperation outcome of the (Cooperate, Cooperate) strongly represents a *compromise-equilibrium* that can end a state of conflict or possible war among the system powers, reflecting the best response to each other's strategy choice when using their strategies simultaneously. Therefore, *theoretically*, this study considers it as the *third* Nash Equilibrium position in the game of Chicken under these circumstances.

2.1.2.2. Conflict Management & The Prisoner's Dilemma Game

For strategizing the optimal behavior of two great powers concerning the accumulation of nuclear arsenal during the Cold War's arms race, a game-theoretic model has been implemented in the (nuclear) deterrence field, that is, the *Prisoner's Dilemma game*¹⁷⁷. This game's origins are rooted in the idea of how two prisoners imprisoned in separate cells will be acting rationally if no one knows about the other's used strategy, where each has only two strategies to use; to a. Admit, or b. Deny. Both prisoners have prior information that there are four possible outcomes in this situation, which can be explained as follows: i. If the two prisoners Admit, they will be in jail for five years (5Y,5Y). ii. If only the first prisoner Admits and the second Denies, the first will be free, and the second will be in jail for ten years (0Y, 10Y). iii. If the first prisoner Denies and the second Admits, conversely, the first will be imprisoned for ten years, and the other will be set free (10Y, 0Y). iv. The last possibility is that if both Deny, then each will be charged and put in jail for only one year (1Y,1Y); see Figure 1.

Accordingly, the Admitting strategy in this game is the dominant one for both players, given that everyone is always better off whenever using it. Assuming that the two prisoners are rational actors, no one would choose to Deny even if its related payoffs (one year, one year) when both choose it are higher than that case of moving to the Admitting strategy jointly: (five years, five years).

The reason lies in the risk taken by the player who prefers to Deny (imprisoned for ten years) if the other decides to Admit (for a possibility of being released) under uncertainty

¹⁷⁷ "The prisoner's dilemma game was developed in the 1950s by Merrill Flood and Melvin Dresher at RAND. Poundstone offers an interesting account of the context in which game theory arose and some of its first developers" (Geçkil and Anderson, *Applied Game Theory and Strategic Behavior*, 37).

about the other's choices since each prisoner is in a separate cell. Based on that, using the (Admit, Admit) pair of strategies is the *dominant strategy equilibrium* for the Prisoner's Dilemma game.

Comprehensively, "rational choice principles of mutual deterrence in (2×2) games elaborated for Prisoner's Dilemma and for Chicken are generalized to a variety of other, asymmetric games in which players' preferences satisfy a Condition for Mutual Deterrence."¹⁷⁸ That is to say, uncertainty about subsidiary actors' preferences in these asymmetric games is conjectured making a player may "adopt a deterrence strategy, no matter the opponent's preferences in fact... (and) unless all subsidiary actors hold deterrable preferences, the ordering of the player cannot be guaranteed to be deterrable."¹⁷⁹

At last, shifted from grappling with mutual deterrence during the Cold War to coping with asymmetric threats, a new wave of deterrence research emerged focusing on strategies for dealing with terrorism, and WMD-seeking rogue states, with a broader concept of deterrence incorporating non-nuclear and even non-military actors¹⁸⁰ in the global security environment. Other studies have been conducted to find an answer to the utility of using nuclear weapons after the Cold War to deter possible aggression in the battle zone, not only a nuclear attack; also, to investigate the inevitability of no first use policy. The no first use policy is mirrored in the arguments in which the United States declared that the only purpose of its nuclear weapons is to deter others who possess them from using theirs; that is, in no circumstances will this country use nuclear weapons first.¹⁸¹ Nuclear weapons are seen, in this context, as an *ineffective* deterrent against non-nuclear attacks, thanks to US nuclear or deterrence strategy. Moreover, the policy of no first use contributed to "reducing the risks of accidental nuclear escalation or nuclear use from miscalculation, as well as supporting non-proliferation and disarmament efforts."¹⁸²

¹⁷⁸ Thomas Fogarty, "Deterrence Games and Social Choice: Asymmetry, Aggregation of Preferences, and a Conjecture About Uncertainty," *International Interactions* 15, no. 3-4 (1990): 203.

¹⁷⁹ Ibid.

¹⁸⁰ Jeffrey W. Knopf, "The Fourth Wave in Deterrence Research," *Contemporary Security Policy* 31, no. 1 (2010): 1-33.

¹⁸¹ John P. Holdren, "The Overwhelming Case for No First Use," *Bulletin of the Atomic Scientists* (Special Issue: Nuclear Weapons Policy and the US Presidential Elections) 76, no. 1 (2020): 3-7.

¹⁸² Steve Fetter and Jon Wolfsthal, "No First Use and Credible Deterrence," *Journal for Peace and Nuclear Disarmament* 1, no. 1 (2018): 102.

2.1.3. Further Research: A Combined Dual-Form of an Applied Prisoner's Dilemma of Nuclear Deterrence State and Chicken Game

2.1.3.1. An Applied Prisoner's Dilemma of Nuclear Deterrence State

This part explains how to apply the Prisoner's Dilemma game-theoretic model to a nuclear deterrence state between Great Power A (GP-A) and Great Power B (GP-B) in a bipolar international system during the Cold War; that we called "*An Applied Prisoner's Dilemma of Nuclear Deterrence State*." Under a theoretically well-known application, both the (GP-A) and (GP-B) have these two strategies: a. Building Up a Nuclear Arsenal in an Arms Race, or b. Not Building Up. Tracing the reasoning of the Prisoner's Dilemma model, we illustrate the resulting possibilities of a nuclear deterrence state in numerical values where $(0 < 1 < 2 < 3 < 4 < 5)$, considering these utility assumptions: $\{(0)$ is the worst; (1) is next-worst; (2) is moderate; (3) is highly moderate; (4) is next-best; (5) is the best $\}$, as follows: a. If both (GP-A) and (GP-B) choose to (Build Up) their nuclear arsenals, the payoffs are $(3, 3)$ for the first and the second, respectively, where both are highly moderate. That resembles the (Admit, Admit) outcome mentioned above. b. When (GP-A) prefers to (Build Up) while (GP-B) moves to the (Not Building Up) choice, the first gets its best utility in the game, and the second suffers its worst, with payoffs: $(5, 0)$, similarly to the (Admit, Deny) case in the Prisoner's Dilemma game. c. Otherwise, if (GP-B) moves to (Build Up) and (GP-A) prefers (Not Building Up), in a (Deny, Admit) symmetrical case, the utility, again, is reversed: $(0, 5)$. d. If both (GP-A) and (GP-B) use the (Not Building Up) strategy, all become better off, achieving their next-best utility in the game: $(4, 4)$. Equivalently, the last reflects the case of picking the (Deny, Deny) actions in the original model.

Employing the Prisoner's Dilemma's rationality, it appears that using the (Building Up a Nuclear Arsenal in an Arms Race, Building Up a Nuclear Arsenal in an Arms Race) pair of strategies by the (GP-A) and the (GP-B) consecutively, in a nuclear deterrence state during the Cold War in real-world circumstances, is the *dominant strategy equilibrium*.

Strikingly, both actors are better off whenever choosing the (Building Up) strategy (i.e., the dominant one), achieving better payoffs in the game regardless of what the other prefers. Given that no actor is certain that the other might use (as a *rational* player seeking an expected *best* utility by Building Up its nuclear arsenal should the other not) the "Not

Building Up” strategy if one plays it on its own, none reasonably would be better off by taking such a *critical* risk.

2.1.3.2. A Combined Dual-Form of an Applied Prisoner’s Dilemma of Nuclear Deterrence State and Chicken Game

Integrating some main assumptions of the *game of Chicken* with those of an *Applied Prisoner’s Dilemma of Nuclear Deterrence State* under a *combined dual-form* reflecting main axioms of both, see Figure 1, it is concluded that:

When the (Great Power A) and the (Great Power B) in a bipolar international system choose the (Building Up) strategy, they mirror their willingness to stand firm and Defect, but not by suffering from *Conflict* _ as the worst outcome of choosing (Defect)² in the Chicken game. Differently, they decide not to go back by pushing forward, reversing the status quo of (Not Building Up) nuclear arming.

In a second case, the (GP-B) decides to move to (Not Building Up) its nuclear arsenal while the (GP-A) chooses to (Build Up). The (GP-B)’s choice becomes an advantage to (GP-A) as in the Chicken’s (Defect, Cooperate) case, considering that (GP-A) Defects by (Building Up), and (GP-B) Cooperates by (Not Building Up). The difference here lies in that the (GP-A) achieves its best utility in the game, agreeing with those outcomes of both the game of Chicken and the Applied Prisoner’s Dilemma, but the (GP-B) gets its worst utility (not only next-worst as in the Chicken game).

The third case is a reversed one of the second, that is when (GP-A) decides (Not Building Up) a nuclear arsenal, achieving an advantage to (GP-B) that chooses to (Build Up) its nuclear arsenal.

The last case resembles a situation where both (GP-A) and (GP-B) prefer the (Not Building Up) choice. That might have been an actual case if only Great Power A (i.e., the USA) conceded its nuclear program in the aftermath of World War II, hindering the incentive given to Great Power B (i.e., the USSR) to do likewise by the beginning of the Cold War in the late 1940s within a bipolar system and the arms race associated to between these powers.

From an inclusive perspective, the mutual choice of the (Not Building Up) strategy means that both actors move to (*preserve the status quo*) by choosing to *Cooperate* over that,

maintaining the national interests of each superpower by avoiding a nuclear war possibility. In a noncooperative game of the Chicken model, a similar case exists of mutual cooperation _ if this game was to be broadened to imply cooperation over issues among the system's powers that not cooperating or defecting over them by all does not necessarily revoke the conflict worst outcome. More obviously, in the (Not Building Up)² case, both could have achieved the next-best utility by securing their societies versus possible irrational or accidental nuclear war to probably occur in a second/future play of that related to using simultaneously the (Building Up) strategy _ the contemporary state. Thence, another joint axiom of combining the Chicken and the Applied Prisoner's Dilemma models is reflected, that is, each actor obtains its *next-best* payoff by cooperating on maintaining the status quo or mutually denying changing it. Still, (reversing the status quo) in this combined dual-form is the dominant strategy equilibrium by choosing (Building Up)², defecting from the status quo of (Not Building Up). At the same time, mutually *reversing the status quo* is the worst outcome when conveying the reasoning of waging *conflict* or accidental (nuclear) war in the Chicken game.

On the other hand, (preserving the status quo) by the (Cooperate)² _ that might be one of the Chicken's equilibria if related to a compromise-equilibrium, which is equivalent here to (Not Building Up)², cannot be *rationally* an equilibrium (as in the Applied Prisoner's Dilemma) given the risk taken if the (Not Building Up) strategy is *multilaterally* not being used.

2.2. A Conflict or War Impediment Strategic Approach, Part I: Deception

Hypergame Model of Interstate Conflict (DHMIC)

2.2.1. The (DHMIC)'s Main Assumptions

2.2.1.1. Basic Assumptions

-The (DHMIC) is based on a second-level hypergame (HG), in which misperceptions about the game or/and reality exist, and at least one player is aware that a hypergame is being played and there is a misperception in the game.

-In this hypergame model, there are two players: the first is Power I, and the second is Power II.

The Game of Chicken		State II	
		Cooperate	Defect
State I	Cooperate	<i>Status Quo</i> (3, 3)	<i>Advantage to State II</i> <u>(2, 4)</u>
	Defect	<i>State I Wins</i> <u>(4, 2)</u>	<i>Conflict Worst Outcome/Irrational War</i> (1, 1)

The Prisoner's Dilemma Game		The Second Prisoner	
The First Prisoner	Admit	<i>Advantage to Both</i> <u>(5 Years, 5 Years)</u>	<i>Advantage to the First</i> (No Imprisonment, 10 Years Imprisonment)
	Deny	<i>Advantage to the Second</i> (10 Years Imprisonment, No Imprisonment)	<i>Risky Possible Outcome</i> (One Year, One Year)

A Combined Dual-Form of an Applied Prisoner's Dilemma of Nuclear Deterrence State and Chicken Game		(GP-B)	
(GP-A)	Building Up	<i>Status Quo Reversed</i> <u>(3, 3)</u>	<i>Advantage to (GP-A)</i> (5, 0)
	Not Building Up	<i>Advantage to (GP-B)</i> (0, 5)	<i>Status Quo Preserved</i> (4, 4)

Figure 1: The Game of Chicken; the Prisoner's Dilemma Game; and a Combined Dual-Form of an Applied Prisoner's Dilemma of Nuclear Deterrence State and Chicken Game

Source: Prepared by the author.

We abbreviated both as (P-I) and (P-II), respectively, where each might be super, great, or middle power, conditioning that the client, agent, puppet, or dominated states do not lie within this hypergame-model's confines of interactions.

-Given that it is a second-level hypergame model, every player in a perceived hypergame cannot realize or know exactly about the other player's preference vector. Besides the misperceptions that exist when reasoning about the other's strategic choices; also, deception manifests depending on the lack of information about a player's actual actions, moves, beliefs, and perceptions.

-Each player, either (P-I) or (P-II), perceives the hypergame relying on available information, specifying some equilibria while perceiving the other player's game and how this actor understands the game and reality. In sum, our "Deception Hypergame Model of Interstate Conflict (DHMIC)" can be denoted as: $\{HG = (HG)_1 + (HG)_2\}$, where the $(HG)_1$ is the hypergame perceived by (P-I), consisting of the game played by (P-II) as (P-I) understands it, that is: $\{(HG)_1 = (G)_2\}$. Likewise, the $(HG)_2$ is the hypergame understood by (P-II) that is composed of the game played by (P-I) as (P-II) perceives it; this is denoted as: $\{(HG)_2 = (G)_1\}$.

-The (DHMIC) represents an actual hypergame where a common knowledge about the conflict exists, relating outcomes between individual games and dismissing equilibria perceived within each player's hypergame if it would not be equilibria for the entire hypergame played.

-The mapping function applied within the (DHMIC) is an attempt to balance unbalanced models when applying hypergame theory to conflict management. That aims to facilitate managing complex conflicts that (may) exist in real-world circumstances if uncertainty, misperception, and deception become a triple-dimension controlling or restricting the nation-state or any power's behavior in its relationship with other powers in the international system.

So, we focus on the state actors in this modeling, seeking to stabilize the system structure once the misperception/deception is revealed or countered and the equilibria are reached and settled.

2.2.1.2. Theoretical Assumptions

-The model relies on two theoretical backgrounds discussed in the above theoretical survey. The first is the Decision-Theoretic Deterrence Theory and the second strand of the Classical/Rational Deterrence Theory. At the same time, the first variant of the last, the Structural or Neo-Realist Deterrence theory, is applied, which focuses on how to balance the system between two or more great powers, in particular, distributing political, economic, and/or military power between them (approximately) equivocally so that no one state/power or group of states/powers can overwhelm the other. That is the well-known *balance of power* system. Comparingly, the Decision-Theoretic Deterrence Theory concentrates on studying decision-making relations between actors (i.e., states) in the system, attempting to stabilize the system's structure through theoretical predictions on how each actor might behave, making rational decisions when confronting other actors in the system who are assumed to make rational choices in the same course.

-The famous Chicken model as the prominent and dominant game model in the Decision-Theoretic Deterrence Theory reflected a normal form representation of game theory, where the players make their decisions in a simultaneous move. There are mainly four rational possibilities: a- either both players/nation-states choose to cooperate, and the outcome is a compromise with payoffs next to best for all; b- both choose to defect, thus getting their worst payoffs in the game moving to conflict outcome; or that one state defects and the other cooperates, where the one that defects gets its best in the game, and the other that chooses to cooperate gets its next worst payoff under one-side cooperation situation. The Nash or optimal equilibria in the Chicken game model are represented in three cases: the mutual cooperation or compromise outcome and the two cases when one defects and the other cooperates. Within the same modeling, the theory confirms two main strategy categories: the first is well-known as the "Tit-for-Tat," explaining the cases when all players cooperate or all defect; and the second is known as "Tat-for-Tit," which is the opposite, describing the situations where one prefers to cooperate and the other defects, and vice versa.

-Our "Deception Hypergame Model of Interstate Conflict" is based on not only developing the Decision-Theoretic Deterrence Theory's uses in IR where misperception, different information, and uncertainty exist about the reality or the game itself in a complex conflict modeling function. Also, the (DHMIC) attempts to integrate the Asymmetric Escalation Game, which is one strand of the Perfect Deterrence Theory,

explained above, with the Decision-Theoretic Deterrence Theory under one deception hypergame-model manner. The Perfect Deterrence Theory was introduced by Zagare and Kilgour in 2000 as a remedy to the precedent game models that were built on rationality assumptions and proved to be incomplete or inconsistent theoretically in many ways, reconciling the international relations theory with the applied game theory excellently. Effectively, they showed why and how conflicts ensue, escalate, and are resolved interstate; how limited conflicts arise; further, when and how extended deterrence exceeding a crisis initiation succeeds (i.e., preventing an all-out conflict), or fails, allowing the conflict outcome to be in play.¹⁸³

-The built model depends, in part, on the explanation of the Asymmetric Escalation Game, which is one of the incomplete information models developed by Zagare and Kilgour in 2000, that Zagare applied to the Cuban Missile Crisis 1962,¹⁸⁴ criticizing precedent theoretical attempts of using game theory in interpreting the crisis in his 2014 research work,¹⁸⁵ as illustrated later. Within the Asymmetric Escalation model, as explained previously, there are two players: Challenger and Defender, where the Challenger may prefer not to make a demand preserving the status quo or make a demand overturning it. Under the same game, the Defender may concede, defy responding in kind, or escalate. The Defender defying stimulates the Challenger to make a demand only, sequentially, resulting in a limited conflict or escalating where the Defender in the following node can also escalate, allowing for all-out conflict to ensue or defy only, leaving the Challenger to win. If the Defender responds to the Challenger's Demand by escalating instead of conceding or defying, and the Challenger escalates likewise, an all-out conflict outcome arises. If the Challenger backs down, preferring to respond to the escalation by making a demand only, thus not countering escalating, this player allows the Defender to win as an outcome.

-In our model, we reconcile the (P-I) and (P-II)'s preference vectors, actions, and moves, and each perceived hypergame's equilibriums where misperceptions/deception and

¹⁸³ See in, Zagare and Kilgour, *Perfect Deterrence*; Kilgour and Zagare, "Explaining Limited Conflicts."

¹⁸⁴ Frank. C. Zagare, "General Explanation of the Cuban Missile Crisis," in *International Journal of Peace Economics and Peace Science*, Vol. 1, No. 1., ed. Manas Chatterji and Chen Bo (The UK: Cambridge Scholars Publishing, 2016), 91-118.

¹⁸⁵ Frank. C. Zagare, "A Game-Theoretic History of the Cuban Missile Crisis," *Economies* 2 (2014): 20-44.

misled understanding or misinformation exist in complicated circumstances of managing conflict interstate, with the following: a. The assumptions, strategies, and equilibria included in the Decision-Theoretic Deterrence Theory's Chicken game model; b. the strategic preferences, game moves and countermoves, and equilibria theorized within the Asymmetric Escalation Game model of the Perfect Deterrence Theory. So, a developed hypergame-theoretic model is introduced _ as to come below.

-This study's developed (Deception Hypergame Model of Interstate Conflict)'s *hypothesis* that we seek to prove its validity is: "The initial stability in the system powers' conflict and deterrence relation is achieved through joint equilibria simultaneously occurring and the opponent-directed-capable and credible threat-existing in a mutual deterrence relationship, under certainty and perception, or uncertainty and deception conditions."

2.2.1.3. Complementary Assumptions

-The Deception Hypergame Model of Interstate Conflict is composed of: a. Deception hypergame played first, which we called "Play I: Deception Hypergame." b. Sub-hypergame played second, and is initiated by (P-I), which we called "Play II: Deception-Derived Sub-(HG)." c. Sub-hypergame played third and initiated by (P-II), naming it "Play III: The (DTD-AE)'s Deception Sub-(HG)" where the (DTD-AE) abbreviation indicates "Decision-Theoretic Deterrence & Asymmetric Escalation."

-In the (DHMIC), the (x, y) refer to payoff to Power I (P-I), and payoff to Power II (P-II), consecutively. At the same time, the (4, 3, 2, 1, 0) numbers indicate the payoffs as follow: "4 = Best; 3 = Next-Best; 2 = Next-Next-Best, and Next-Zero-State Worst; 1 = Zero-State Worst; 0 = Minus-State Worst," where $\{0 < 1 < 2 < 3 < 4\}$.

-The arrow used in our modeling at a strategic preference node refers to that it is the **rational choice** made in the hypergame, depending on: a. Decision-Theoretic Deterrence theory's Chicken Game's assumptions; b. Perfect Deterrence Theory's Asymmetric Escalation Game's assumptions; c. The assumed rationality of each player, which relies on the player's perceptions about the game and reality, its beliefs and available information on how the opponent reasons and what its perceptions in the game are, the *subjective* probability of preferred actions, and the *expected* utility and its maximization

calculations _ where the last two are borrowed from the rationality arguments in game theory.

-The “Constrained Limited Response Equilibrium (CLRE)”^{186/187} is used in our Deception Hypergame Model of Interstate Conflict, however, under different conditions. The (CLRE) is employed here not because the Defender _ assuming that it is (P-II), was thought to be soft or soft-hard, surprising the Challenger, assumingly (P-I), by a limited response. In contrast, we used the (CLRE) because (P-II) at one node of Play II could reveal that it is a deception hypergame or could not (i.e., the actual case) but acting upon uncertainty conditions and starting a deception sub-hypergame on its own _ where (P-I) is not aware that there would be a counter-hypergame being played, or that it would have misperception/deception in a deception hypergame it initiated. So, the reached equilibria were not considered Perfect Bayesian Equilibria¹⁸⁸ that Zagare and Kilgour mainly proved in developing their Perfect Deterrence Theory. Rather, we defined each of them

¹⁸⁶ Under a CLRE, there is uncertainty about Defender’s willingness to respond in-kind to an initiation where Challenger misjudges Defender’s intentions and is surprised by a limited response (Kilgour and Zagare, “Explaining Limited Conflicts”). Challenger at such a point prefers to not escalate, making a demand only and limited conflict arises, as it concludes that Defender will counter-escalate, and an all-out conflict will occur (ibid). Furthermore, Zagare explaining the Cuban missile crisis from the Asymmetric Escalation Game-model’s perspective, demonstrated that only the Constrained Limited Response Equilibrium is “consistent with the beliefs, the action choices of US and Soviet decision makers and, significantly, with the political bargain that ended the crisis” (Zagare, “General Explanation of the Cuban Missile Crisis,” 91). This (CLRE) occurs: “if Defender is Hard at the first level (i.e., defying or escalating), (and) then it is also likely Hard at the second level (i.e., counter-escalating if Challenger escalated first), which is why Challengers never escalate first” (ibid, 102) when Defender defies/responds-in-kind; and therefore, what Zagare called here Limited Conflict, Brokered Settlement, or Compromise outcome results. Also, another significant equilibrium may take place under the Asymmetric Escalation model, resulting in the *Limited Conflict* same outcome, which is the Escalatory Limited Response Equilibrium (ELRE). According to Zagare, the (ELRE) exists only when a tactically Hard Defender is much more likely to be of type Hard-Soft than of type Hard-Hard _ where Hard Challengers tend to escalate first given that Defender will most likely back off and the equilibrium will be *Challenger Escalates (Wins)* (ibid). Thus, a Limited Conflict outcome can *only* occur with either the (CLRE) or (ELRE) equilibrium, from the Perfect Deterrence Theory perspective. Under our (DHMIC), if (P-II) backs down after responding-in-kind and (P-I)’s escalation firstly, that is because the last is an irrational actor in the system and backing down by (P-II) is the “*non-rational choice*.” That, if made, has the least probability ever in a game between equally or equivalently (super, great, or middle) powers of the international system in real-world circumstances. So, we dismissed employing the (ELRE) in our modeling.

¹⁸⁷ See, Kilgour and Zagare, “Explaining Limited Conflicts;” Zagare, “A Game-Theoretic History of the Cuban Missile Crisis;” Zagare, “General Explanation of the Cuban Missile Crisis.”

¹⁸⁸ Under the enlarged manner of Perfect Bayesian Equilibria, there is an equilibrium emerges at the end of each node of two or more players’ interactions in an extensive form game, where players make their moves sequentially. Also, Perfect Bayesian Equilibrium is determined depending on the type of players and whether they are hard or soft, aggressive or cooperative, or reliable/non-reliable, for example, where a player can acquire updated information at any node about the other player’s type, changing the course of moves, and the equilibria resulting based upon that.

as *Nash equilibrium of the hypergame*, the theoretically well-known as *hyper Nash equilibrium*, under some given conditions explained.

-According to that, our (DHMIC) seeks to reach Nash Equilibria, which occurs when all players simultaneously make their best response to the other players' strategy choice, achieving their best payoffs in the game where no player may have the incentive to deviate. Here, we determine the equilibrium relying on the made action's rationality, coinciding with that rationality of all players when making their moves responding to one another, not on the type of the player _ that we keep unchanged (i.e., two powers in the system). Moreover, Nash Equilibria are used in the precedent Decision Theoretic-deterrence Theory's Chicken game model on whose assumptions, partially, we build our deception hypergame model.

-Therefore, in the (DHMIC), we define Nash equilibria positions achieved either in a hypergame or what we call a sub-hypergame that resembles the precedent sub-game,¹⁸⁹ but rather in a played hypergame. More clearly, if Nash equilibrium occurs in a sub-hypergame that starts from any node of the entire hypergame, we call "sub-hypergame perfect Nash equilibrium," tracing the roots of the well-known sub-game perfect Nash equilibrium addressed in extensive forms of game models.

2.2.2. The (DHMIC)'s Perceived Hypergames and Individual Outcomes

2.2.2.1. The (P-I)-(HG)₁

The (HG)₁ here is the hypergame perceived by (P-I), which answers how this player reasons about the other player's game, that is, the (P-II)'s (G)₂. In the context of a general (DHMIC), the (P-I)-(HG)₁ is composed of: a. "Plays I and II's Deceiver "(P-I)"-Perceived HG;" and b. "Play III's Deceived "(P-I)" -Perceived HG." That we explain as follows:

2.2.2.1.1. Plays I and II's Deceiver "(P-I)"-Perceived HG

In these (HG)₁'s plays, Plays I and II, Power I (P-I) is the only player who knows that there is a hypergame being played and that (P-II) has misperceptions about the game.

¹⁸⁹ The sub-game is a game that emerges from any node of the last branch in an extensive form game resembling a tree of branches and nodes and is defined by its sequential-move nature. The sub-game may be played in the future, and within which if Nash equilibrium occurs, it is called sub-game perfect, provided that the same equilibrium will be reached through every sub-game emerging from any other node of that last branch.

Therefore, the following explanation is introduced based on (P-I)'s perceptions and beliefs about the entire hypergame. Under "Plays I and II," (P-I) has a preference vector including these actions: {(Demand); (Defect "D" in the Tat-for-Tit); (Conditional Cooperation/Cooperation "CC/C" in the Tit-for-Tat); and (Defect in the Tit-for-Tat)}. Here, the (Tat-for-Tit) and (Tit-for-Tat) strategies are borrowed from the Decision Theoretic-Deterrence Theory to be used differently in sequential-move multiple games. Both players choose to cooperate, or all prefer to defect in the (Tit-for-Tat) strategy; that is what we refer to as: (C-C; D-D). Rather, one player cooperates, and the other defects, and vice versa, in the (Tat-for-Tit) strategy, which we denoted as: (C-D; D-C). Within this perceived hypergame, (P-I) understands that (P-II) has a preference vector consisting of a. (Cooperate), b. (Defect), and c. (Conditional Cooperation) actions under the (Tit-for-Tat) strategy.

**Plays I and II's Deceiver
“(P-I)”-Perceived HG**

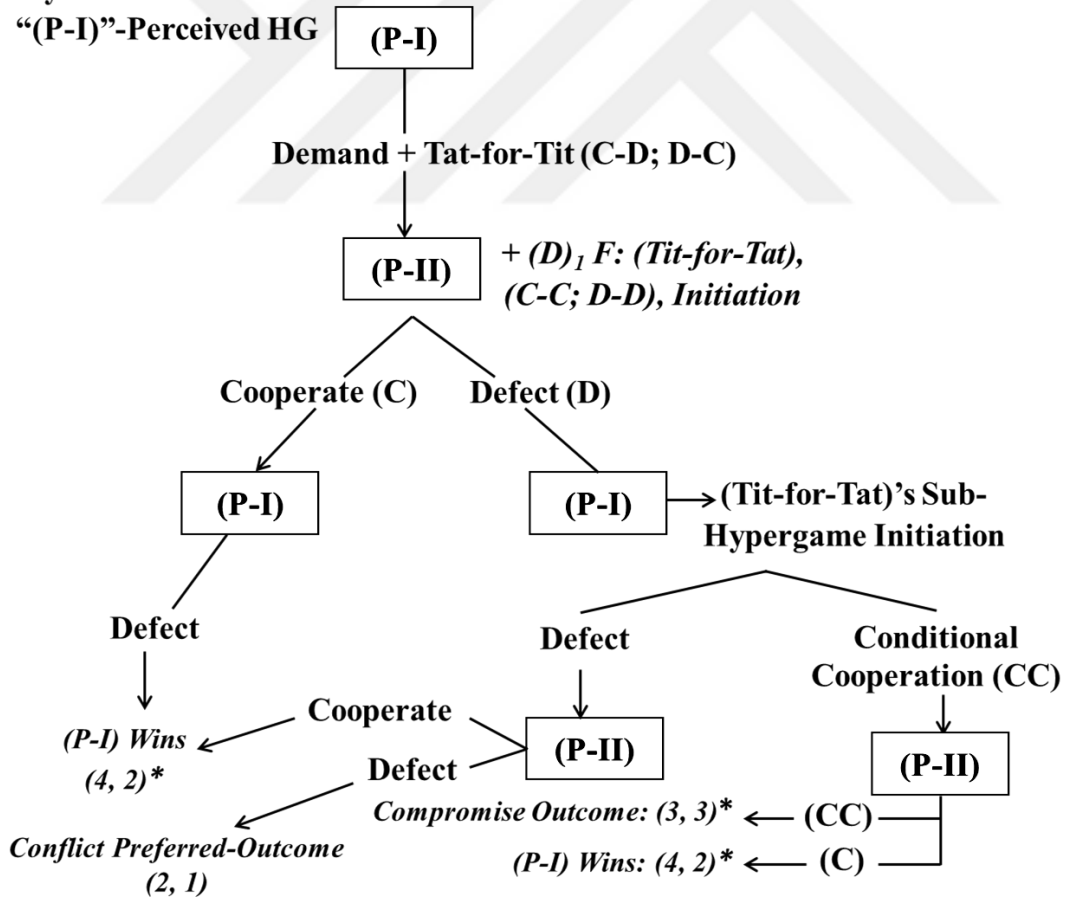


Figure 2: Plays I and II's Deceiver “(P-I)”-Perceived HG

Source: Prepared by the author.

The (HG)₁'s perceived interactions-course: (P-I) understands that it starts the game, employing a Deception Factor $\{(+ D) F\}$ versus (P-II). The first makes a demand for altering the status quo, moving to play the (Tat-for-Tit), and deceiving (P-II) about its perceptions and beliefs of the reality of conflict _ while the misled information and misunderstanding about its actual actions (i.e., decisions) and moves exist.

Also, (P-I) realizes that (P-II) would move sequentially to either (Cooperate) or (Defect) actions under the mentioned uncertainty. Given that it is a game played among powers of the international system, where a conflict takes place, (P-I) perceives that (P-II) is *rationally* better off if it chooses to (Cooperate). Namely, (P-II) would understand that the other clashing/conflicting power in the system (i.e., P-I) is also better off by the (Compromise Outcome) _ if it preferred the (Cooperate) choice, first, to (Defect), stabilizing relations among super, great, or middle powers within this system. (P-I) would pick the (Defect) action, however, in a sequential move, deceiving (P-II) about its (Tat-for-Tit) strategy preference. Thus, the first perceived equilibrium by (P-I) in (HG)₁ occurs, resulting in its "*Victory Outcome*" with payoffs: (4, 2).

Another possibility exists in the (HG)₁, within which (P-I) understands that (P-II) may reveal the Deception Factor $\{(+ D) F\}$ and decide to choose the (Defect) action under *uncertain certainty* conditions (i.e., when the Deception Factor is exposed), not *certain uncertainty* ones (i.e., when the Deception Factor exists implicitly). Accordingly, (P-I) initiates a sub-hypergame, correcting the previous deception it practiced and moving to a (Conditional Cooperation "CC") choice. So, it leaves no rational choice to (P-II) other than picking the (Conditional Cooperation "CC") action, or the (Cooperate "C") one, in a sequential move. Therefore, the "*Compromise outcome*" arises, with payoffs: (3, 3), if (P-II) chooses the (Conditional Cooperation) same strategic preference. Rather, it is the "*(P-I) Wins*" outcome that occurs where the payoffs are: (4, 2), should (P-II) move to the "*unconditionally*" (Cooperate) action. The last outcomes are the second and third perceived equilibriums by (P-I) within (HG)₁.

Under other circumstances, (P-I) may perceive that (P-II) would prefer to (Defect) than to (Cooperate) after revealing the deception factor (if it occurred), reasoning about the (P-I)'s preference of moving to compromise by cooperation. Alternatively, (P-I) may acquire information or reasons that (P-II) *rationally* will (Defect) if it chooses (CC), for whatever

reason. In either case, (P-I), that initiated the hypergame, perceives an expected utility of choosing to (Defect) first in the sub-hypergame, which results in: a. The “*Conflict Preferred-Outcome*” with (P-II)’s choosing the (Defect) action in a played-(Tit-for-Tat) strategy, sequentially, so that (P-I) alters the status quo through war rather than peace (i.e., compromise). b. Instead, it is the “*(P-I)’s Victory Outcome*” if (P-II) prefers to (Cooperate), avoiding the war possibility in a re-played (Tat-for-Tit) strategy by (P-II) only here. This outcome is the fourth perceived equilibrium by (P-I) in (HG)₁. The perceived payoffs are (2, 1) in the first case (i.e., the Conflict) and (4, 2) in the second (i.e., the equilibrium); see Figure 2.

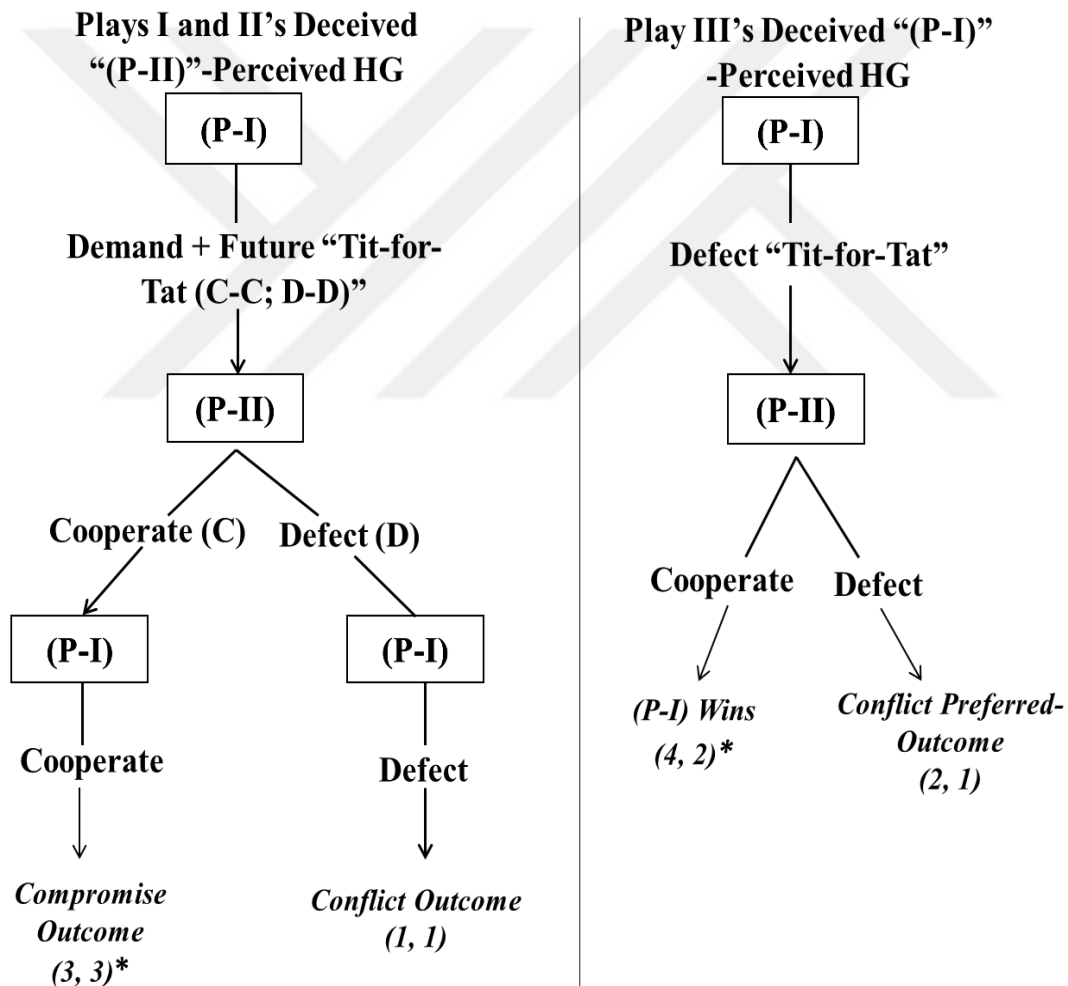


Figure 3: Plays I and II’s Deceived “(P-II)”-Perceived HG, and Play III’s Deceived “(P-I)”-Perceived HG

Source: Prepared by the author.

2.2.2.1.2. Play III's Deceived "(P-I)"-Perceived HG

In the third play of the actual hypergame, (P-I), not perceiving that there is a hypergame being played or that it has misperceptions in the game, understands that once it plays (Defect in the Tit-for-Tat) as a war stratagem, (P-I) has but only two strategic choices: a. (Cooperate), avoiding the credible possibility of conflict, where (P-I)'s perceived equilibrium occurs (i.e., (P-I) Wins) with payoffs: (4, 2); or b. (Defect), where the "*Conflict Preferred Outcome*" results with: (2, 1) as perceived numerical gains. In the latter case, (P-I) realizes that altering the status quo is better achieved by war, not diplomacy, in terms of "*defecting first*" in a (Tit-for-Tat)'s sub-hypergame it initiated; see Figure 3. Despite being part of its perceived Play II, the perceived Play III, with a repetitive or almost unchanged perception about (P-II)'s played-game, would prove to be misinterpreted by (P-I), as to come below.

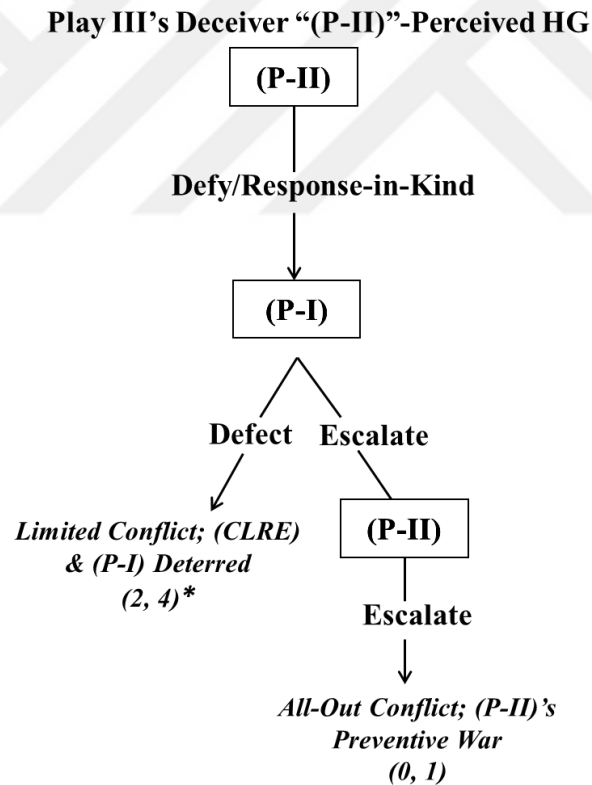


Figure 4: Play III's Deceiver "(P-II)"-Perceived HG

Source: Prepared by the author.

2.2.2.2. The (P-II)-(HG)₂

The (HG)₂ here is the hypergame perceived by (P-II), indicating how this player reasons about the other player's game or the (P-I)'s (G)₁. Under the general (DHMIC), the (P-II)-(HG)₂ is composed of: a. "Plays I and II's Deceived "(P-II)"-Perceived HG;" and, b. "Play III's Deceiver "(P-II)"-Perceived HG." Both we explain as follows:

2.2.2.2.1. Plays I and II's Deceived "(P-II)"-Perceived HG

Within the (HG)₂'s Plays I and II, Power II or (P-II) has no knowledge that there is a. a hypergame being played, or b. a deception or misperception in the game. (P-II) understands that (P-I)'s (Demand) action means no more an act to move to the diplomacy track between both powers. Accordingly, (P-II) perceives that the (P-I)'s preference vector includes: the (Demand) and (Future "Tit-for-Tat (C-C; D-D)") strategic choices in terms of witnessing no aggressive action picked by (P-I) first that may refer to an earlier possibility of the war outcome. Based on that, (P-II) has a preference vector composed of the (Cooperate) or (Defect) actions in a (Tit-for-Tat) used strategy.

Under this stage of the hypergame, (P-II), misperceiving the actual actions or moves of (P-I), prefers to (Cooperate), understanding it as the rational choice rather than defecting. It perceives, therefore, that (P-I) is better off by the "*Compromise Outcome*" so that it will choose to (Cooperate) sequentially. That is the (P-II)'s only perceived equilibrium in "Plays I and II" of (HG)₂ with payoffs (3, 3), avoiding the "*Conflict Outcome*," which results in the zero-state worst payoffs for both: (1, 1) if all moved to the (Defect) choice in the game; see Figure 3.

2.2.2.2.2. Play III's Deceiver "(P-II)"-Perceived HG: The Maneuvering Sub-Hypergame

Following the previous Play I and Play II, (P-II) being strategically surprised by (P-I)'s (Defect) choice in a (super, great, or middle) powers (perceived) game, chooses to neither (Cooperate) nor to (Defect), escaping the "*(P-I)'s Victory*" perceived outcome with payoffs: (4, 2), as well as the "*Conflict*" one with the (1, 1) realized worst-gains. Strikingly, (P-II), in an initiated sub-hypergame, perceives that it can move to (Defying or response-in-kind) choice, where the "*(P-I) Deterred*" outcome takes place, with the payoffs reversed: (2, 4), if (P-I) backed down and chooses to (Defect) only, not to escalate.

Thence, (P-II)'s perceived equilibrium of the (HG)₂'s "Play III" occurs. Otherwise, (P-II) may rationally prefer the (Escalate) choice, expecting a "*Preventive War Outcome*" and confronting an aggressive actor (i.e., (P-I)) in the system _ if this actor/power chooses to (Escalate) first; see Figure 4. The payoffs received, in that case, are: (0, 1), where (P-I) gets its minus-state worst payoff or the most-worst at all, granting (P-II) the legitimate justification when escalating first to rally against it in a collective or common-good security-necessitated war.

2.2.3. The (DHMIC)'s Actual Interactions and Equilibria in a Mapping Function Relates Outcomes Between Individual Games

Under this hypergame model, (Power II) can never reveal the Deception Factor {+(D) F} but makes its choices with existing *certain uncertainty* about (Power I)'s actual actions and moves or its real played-game _ the player who started the deception hypergame. Namely, this model simulates real-world circumstances of conflict interstate under different information, beliefs, perceptions, understandings, and interpretations conditions. Within these actual interactions, the (Power I)'s strategic preference vector includes not only the actions perceived in its understood hypergame but also, it is composed of a more diverse set of strategic actions. These are: "(Not Demand); (Demand + Tat-for-Tit (C-D; D-C)); (Defect (D)); (Cooperate (C)); (Conditional Cooperation (CC)); (Cooperate Only); (Defect Only); (Escalate)." Likewise, (Power II)'s set of strategic preferences is consisted of: "(Cooperate (C)); (Defect (D)); (Conditional Cooperation (CC)); (Cooperate Only); (Defy/Response-in-Kind); (Escalate); (Defy Only/Retreat)" actions. In each play, the *arrow* drawn at a node's end refers to the rational choice preferred to the other for a given player at that move. Sometimes two reasonable actions at the same move become preferred under different conditions explained.

2.2.3.1. The (DHMIC)'s Play I: Deception Hypergame

- "Play I" begins with (Power I) or (P-I) choosing to alter the status quo, which is the rational choice for this player, at this move, initiating a deception hypergame. Given that the expected utility for both players at the "*Status Quo Outcome*" is: (2, 2), if (P-I) prefers the (Not Demand) choice, (P-I) moves first, making a (Demand) for a higher utility to result at another position of the game.

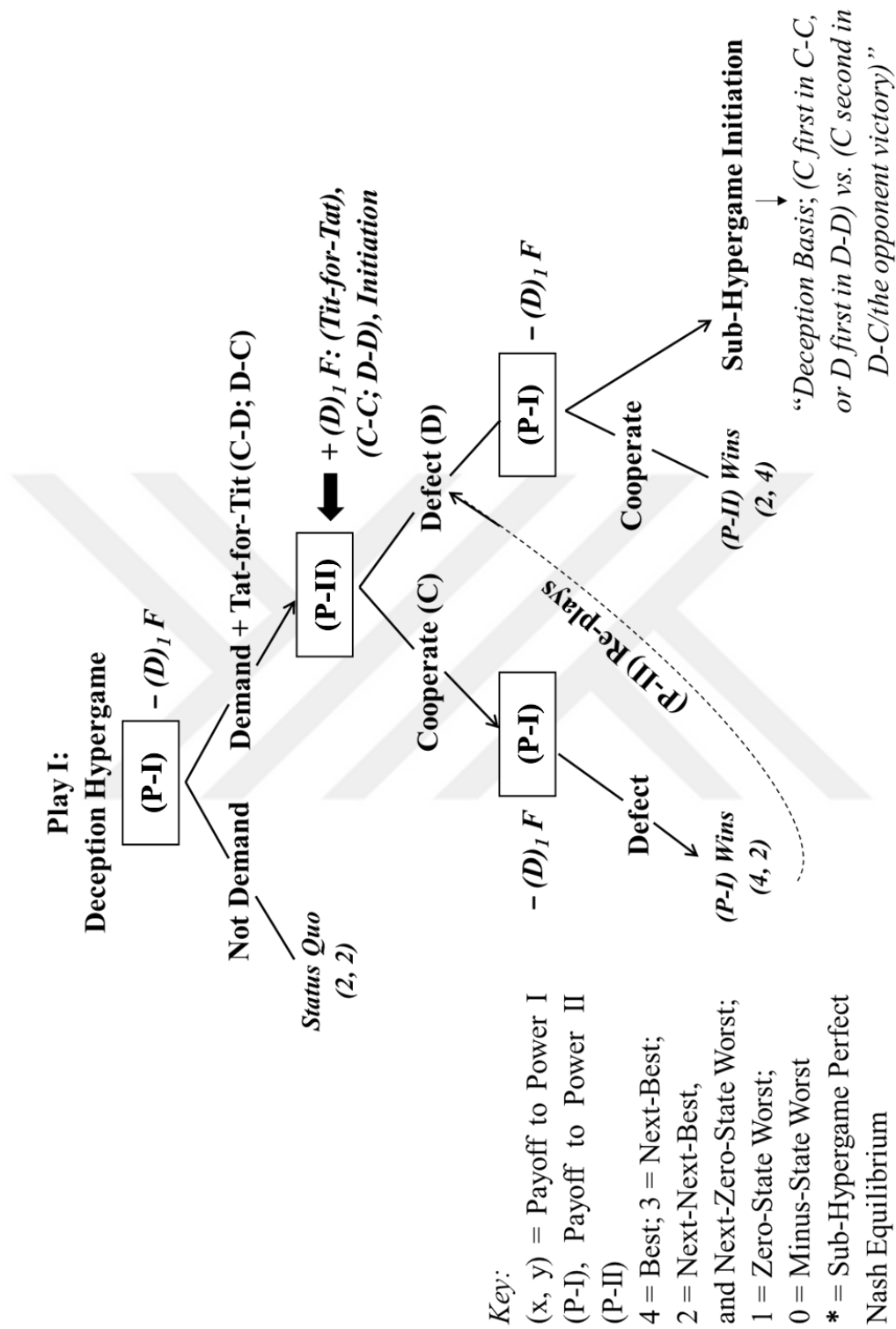


Figure 5: Play I; Deception Hypergame

Source: Prepared by the author.

The probability (p) of (P-I)'s preferring of that rational choice, (Demand), is: ($0.5 < p \leq 1$), whereas it is: ($0 \leq p < 0.5$) of the (Not Demand) action.

-Having the first-play advantage, (P-I) prefers to use the (Tit-for-Tit) strategy, (C-D; D-C), while deceiving (P-II) of future using of the (Tit-for-Tat) one, (C-C; D-D), to act likewise.

-Being deceived in the game _ by considering the lack of (correct) information about (P-I)'s actual beliefs and perceptions, (Power II) or (P-II) moves to the (Cooperate) action sequentially. That is the (P-II)'s perceived rational choice, expecting the "*Compromise Outcome*" equilibrium to occur instead of a would-be ensuing conflict situation if both defect under a (*misperceived*) (Tit-for-Tat)-strategy.

-In a sequential move, (P-I) chooses its second-perceived rational choice in "Play I," that is: (Defecting) where ($p = 1$), after deceiving (P-II) about its actual moves or the game played. So, the "(P-I) Wins" outcome occurs out of the (Cooperate, Defect) used strategies _ where the first is made in a (Tit-for-Tat) misperceived game by (P-II) while the second is made in a deceiving (Tit-for-Tit) one by (P-I).

-(P-II) as super, great, or middle power prefers to re-play, changing the payoffs' position reached, picking the (Defect) action where ($p = 1$) under *certain uncertainty* conditions. Thus, (P-II) understands that (P-I) might prefer the (Defect) choice in a sequence if its played strategy is (Tit-for-Tat) or the (Cooperate) one if the used strategy is the (Tit-for-Tit). (P-II) reasons, therefore, that it will be either the "Conflict Outcome" with both are worst off, or the "(P-II) Wins" equilibrium with its victory resulting.

-After (P-II)'s move, (P-I), who is the deceiver in this hypergame's level, reasons that it is better off to start a sub-hypergame from the (P-II)'s (Defect) choice's node more than when choosing to (Cooperate) under its played (Tit-for-Tit) deceiving-strategy; see Figure 5. So, the deceiver's "(P-I)" deception basis is to choose (C) first (i.e., conditional) in a (C-C) game with the "*Compromise Outcome*" results or (D) first in a (D-D) one. That is rather than a. picking (C) second in a (D-C) game allowing the "*Opponent Victory/(P-II) Wins*" outcome to occur with payoffs: (2, 4); or b. choosing (D) second in a (D-D) game, when the conflict output takes place to which it is not prepared yet or perceiving at this exact stage of its deceiving played-hypergame.

2.2.3.2. The (DHMIC)'s Play II: Deception-Derived Sub-(HG)

In this sub-hypergame, (P-I) having no misperception, or (Deception Factor)'s impact of (Play I) that we denote as: $(- (D)_1 F)$, can either choose the (Defect "D") strategic preference or the (Cooperate/Conditional Cooperation "C/CC") one, where $(0.5 < p \leq 1)$ in the two cases. Restoring the (P-II)'s previously perceived (and played) course of the game under the (Tit-for-Tat) strategy, (P-I) chooses any action (i.e., "C/CC" or "D") where both are rational-choice tracks under given circumstances.

2.2.3.2.1. Case I: (P-I) Reasoning About Cooperated (CC) Strategy

Track I of Case I: (P-I) reasons that if it moves to the (Conditional Cooperation) choice, (P-II) becomes better off by choosing the (Conditional Cooperation) or (Cooperate Only) action, sequentially. The "*Compromise Outcome*" occurs with payoffs: (3, 3), if (P-II) acts likewise, moving to the (Conditional Cooperation) choice. The probability of "(P-II)'s preferring to the (Conditional Cooperation "CC") action after (P-I)'s (CC) one" is $(0.5 < p \leq 1)$, which is the rational choice of this interaction track. The resulting "*Compromise Outcome*" is the **first Nash equilibrium of the entire hypergame**. Considering that both players reach this solution point through an emerging sub-hypergame, we call that "**sub-hypergame perfect Nash equilibrium.**" Here, each player made the best response to the other's strategy choice simultaneously, where no one may have the incentive to deviate from the reached position or the best payoffs it could achieve in the game.

In another possibility, (P-II) being deceived in this sub-hypergame may move to the (Cooperate Only) action. Accordingly, the "*Disguised Compromise; Disguised Opponent-Victory*" outcome occurs, where the "*actual*" payoffs (i.e., not the misperceived ones) are: (4, 2). The probability of preferring the (Cooperate Only) possibility by (P-II) after (P-I)'s (CC) action is $(0.5 < p \leq 1)$. Still, it is not an equilibrium in the entire hypergame since (P-II) would rationally prefer to deviate from this reached position once the deception is revealed. Namely, this outcome is *not stable* with (P-II) misperceiving that both achieve the "Compromise Outcome" payoffs (i.e., "3, 3"), while they are not. In sum, the last hypergame-situation occurs when the second actor or (P-II) concedes more or non-equivalently in an extended level or scale for the first actor or (P-I)'s interests in an "unbalanced or semi-balanced deterrence" relation.

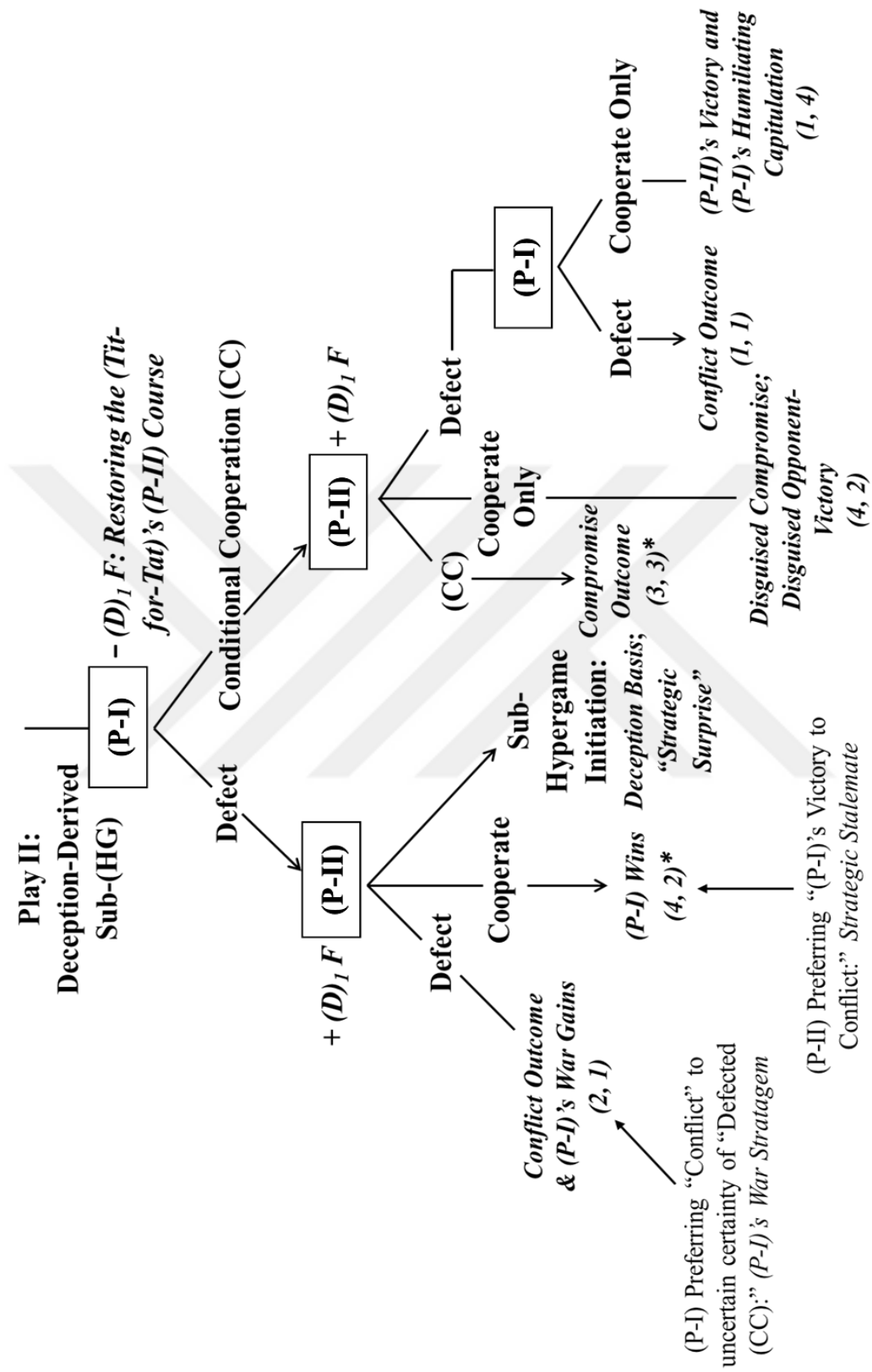


Figure 6: Play II; Deception-Derived Sub-(HG)

Source: Prepared by the author.

Further, the “*Disguised Compromise or Disguised Opponent-Victory*” outcome becomes in play when the first actor (i.e., deceiver), deceiving the second, cripples this deceived, under a disguised extended “extreme or limited”-threat case, whereas the second (i.e., deceived) does not act likewise in a symmetrical level or scale.

Track II of Case I: (P-II) reasoning that (P-I) is better off by the (Compromise Outcome) if it picked a cooperation choice sequentially, may move to the (Defect) action instead, where $(0 \leq p < 0.5)$. However, (P-II) makes a risky choice, perceiving that it maximizes its expected utility of the game using the (Tit-for-Tit) strategy rather than the (Tit-for-Tat) one. At the same time, (P-II) is still deceived due to the Deception Factor’s impact of “Play I” or the $(+ (D)_1 F)$, while acquiring no (correct) information for revealing the deception, and still not having a knowledge that there is a hypergame being played or that it has misperceptions in the game. So, with (P-II) understanding that it leaves, but only one rational choice to (P-I) to move to (i.e., the (Cooperate) action) in a sequence, (P-II) gives (P-I) under this interaction-track the *impulse* to go to conflict, alternatively.

The deceiver (P-I) perceives that (P-II)’s (Defect) move, following its (CC) action made first, means that this player (i.e., “P-II”) seeks *relative gains* at the expense of (P-I)’s losses, if the last chooses (C) second in a (D-C) formula, contradicting its deception basis of the sub-hypergame it initiated. The probability of (P-I)’s choosing to (Cooperate Only) second here is $(0 \leq p < 0.5)$. If picked, (P-II)’s (Defect) choice results in the “*(P-II)’s Victory and (P-I)’s Humiliating Capitulation Outcome*,” in terms of defeating (P-I) twice now in the entire hypergame after (P-I)’s preferring to initiate a sub-hypergame than to (Cooperate) in Play I, and then playing the (CC) strategy in Play II losing conflict gains it sought to seize through mutual-cooperation and (misperceived) “Compromise Outcome.” Based on that, the payoffs achieved by (P-II)’s second (Defect) choice and (P-I)’s second cooperation action (i.e., “CC” first and “Cooperate Only” second) become: (1, 4), so that (P-I) gets its zero-state worst payoff in the hypergame, with (P-II) getting its best.

Moving from the previous configuration, the deceiver (P-I) is better off by preferring to (Defect) second, as a *rational choice*, in response to the strategic surprise made by (P-II) — when the latter moved to the (Defect) action rather than a cooperation move of (“CC,” or “Cooperate Only”), responding otherwise to the (P-I)’s (CC) choice made first.

Therefore, (P-I) now does not only avoid the outcome: “(P-II)’s Victory and (P-I)’s Humiliating Capitulation” but also it responds-in-kind, answering the strategic surprise by another and achieving the conflict gains by the war (even if unexpected) instead of diplomacy; at a time when (P-II), the deceived, misperceived that it would be the occurrence of “Conflict Outcome.” The probability of picking (Defect) action by (P-I) under this context is: $(0.5 < p \leq 1)$. Rationally, (P-I) brings, at this position, the worst utility not to itself alone, but defeating (P-II) strategically with payoffs: (1, 1) for both. Thus, (P-I) makes (P-II) also get what would-be (P-I)’s worst gains only, (1), if this player (i.e., “P-I”) picked (Cooperate Only) action or cooperation second after (P-II)’s (Defecting) second; see Figure 6.

2.2.3.2.2. Case II: (P-I) Reasoning About a Defected-(CC) Strategy

Under this case, the deceiver (P-I) reasons that (P-II) is rationally better off by moving to the (Defect) strategic choice sequentially if it chooses the (Conditional Cooperation) one. Given that (P-I) gets its zero-state worst payoff, (1), in both cases, suppose that (P-II) chooses to (Defect) in response to (P-I)’s (CC) if picked, (P-I) moves first to the (Defect) choice, under *uncertain certainty* of “Defected Conditional Cooperation Strategy,” starting the sub-hypergame and expecting maximized utility to result.

(P-I)’s move of (Defecting) first is a war stratagem that left no *perceived* rational choice to (P-II) except opting for the (Cooperate) action, while causing a strategic stalemate to this player where the “(P-I) Wins Outcome” occurs with payoffs: (4, 2). That is the “*second sub-hypergame perfect Nash equilibrium*” of the entire hypergame. Here, (P-II) changes its previously perceived and used (Tit-for-Tat) strategy, playing the (Tat-for-Tit) one under *certain uncertainty* conditions with the Deception Factor (+ (D)₁ F) is still in play. The probability of (P-II)’s moving to the (Cooperate) choice here is: $(0 < p < 1)$.

If (P-II) moves to (Defect), then it is the (P-I)’s war stratagem success when leading (P-II) to the war or conflict choice after preparing for this war, using the (D) strategy first in a re-played game (i.e., the sub-hypergame). Under this condition, (P-I) can achieve its *conflict gains* through war rather than compromise with complete readiness for the action. The probability of the (P-II)’s (Defect) action is: $(0 \leq p < 0.5)$, with payoffs: (2, 1). Namely, (P-I) becomes slightly better off, getting its next-next-best in the hypergame, and (P-II) is worse off.

Dealing with *certain uncertainty* about (P-I)'s actual game, actions, and moves, (P-II) has another *rational choice's* track, that is, the (Sub-Hypergame Initiation), see Figure 6, where $(0.5 < p \leq 1)$. Still deceived and misperceiving (P-I)'s actual beliefs and perceptions about the game and the reality of conflict under the lack of (correct) information, (P-II) chooses to move to initiate a *strategic surprise* versus (P-I) as a deception basis in a re-played (hyper)game.

2.2.3.3. The (DHMIC)'s Play III: The (DTD-AE)'s Deception Sub-(HG)

(P-II) is the deceiver in this hypergame or Play III, and the only one who knows that there is a hypergame being played or that (P-I) has misperceptions about it. (P-II) has two strategic preferences starting the sub-hypergame; either to (Defy/Respond-in-Kind) or (Escalate) first. Given Play II's moves' order, the rational choice for (P-II) in Play III becomes the (Response-in-Kind), where $(0.5 < p \leq 1)$. At the same time, the other possible action's (i.e., the (P-II)'s (Escalate "first") choice) probability is: $(0 \leq p < 0.5)$. In Play III, there is no *new* Deception Factor that affects (P-II), but it is still deceived due to Play I's Deception Factor, where we denote this relation as: $\{- (D)_3 F \ \& \ (+ (D)_1 F)\}$. Simultaneously, there is a Deception Factor operated versus (P-I) by (P-II) in Play III, while (P-I) is not influenced by the Deception Factor that existed in Play I _ since it was the deceiver within; we refer to this as $\{+ (D)_3 F \ \& \ (- (D)_1 F)\}$. Also, Play III of the (DHMIC) reflects a (Decision Theoretic-Deterrence and Asymmetric Escalation's Deception Sub-Hypergame), which we abbreviate as "(DTD-AE)'s Deception Sub-(HG)."

2.2.3.3.1. Case I: (P-II) Responding-in-Kind

Play III begins with (P-II) choosing the (Response-in-Kind) action, defying (P-I) in the hypergame; see Figure 7. The deceived (P-I), in this play, understands that such a strategic surprise may not secure its victory if the "Conflict Outcome" occurs. Under this condition, (P-I) has two preferences. The first is to (Defect Only), avoiding the escalation of conflict, where the outcome: "*Limited Conflict and (P-I) Deterred*" occurs, representing the "***third sub-hypergame perfect Nash equilibrium***" in the entire hypergame. That equilibrium indicates the first position of a *Constrained Limited Response Equilibrium* or **(CLRE)₁** in the (DHMIC), where the payoffs are: (2, 4). The (CLRE) concept, as well as the basic

modeling of Play III, are borrowed from the Asymmetric Escalation Game of Perfect Deterrence Theory, which we adjusted, refining it to use under different circumstances.

Thus, within Case I, (P-I) that defected in Play II, threatening (P-II) by a war gains' military seizure-directed-(Defect) choice, is surprised by (P-II) maneuvering it in Play III, moving to a deterrence-choice, and threatening further a capable and credible counter-escalation if (P-I) escalated first. The probability of (P-I)'s moving to the (Defect Only) choice is: $(0.5 < p \leq 1)$, which is the *rational choice* for this player consequently.

A possible sequential "*non-rational choice*" may take place when (P-II) picks the (Defy/Response-in-Kind) action in Play III. That is, (P-I)'s moving to (Escalate "first") preference of probability: $(0 \leq p < 1)$, considering that this player chose to (Defect) first in Play II. Therefore, the *rational choice* for (P-II) is to (Counter-Escalate/Escalate) where $(0.5 < p \leq 1)$ and the outcome "*All-Out Conflict; (P-II)'s Preventive War*" occurs; simultaneously, the payoffs become: (0, 1).

The last possibility explains that (P-I) provides (P-II) with the legitimate justification to rally against it in a preventive necessitated war. Either a collective security war (i.e., on a global level initiated through states-coalition against a system's aggressor(s)) or another for the common good (i.e., on a regional level waged by one nation or/and with the participation of some regional nations). Thence, if (P-II) gets its zero-state worst payoff (i.e., "1") in the entire hypergame, now, (P-I) becomes more severely worse off, accumulating its minus-state worst payoff _ or *zero* according to the used numerical-utility values, while being struck by a deterrence maintaining-waged-war/all-out conflict directed against it.

That reflects in part the old philosophy of preserving deterrence via wars _ not only to use deterrence strategy for preventing wars (i.e., the contemporary perspective), under these conditions: a. If pre-efforts of keeping deterrence for avoiding wars failed. b. If this waged war/conflict is swept away from the homeland of any super/great power (i.e., the initiator power) and the (via war/conflict) deterrence-practicing-power (i.e., the responding anti-power). c. If this deterring war/all-out conflict is waged *collectively*.

Under a less probability when $(0 \leq p < 0.5)$, (P-II) may opt for the (Defy Only/Retreat) *non-rational choice* in response to (P-I)'s (Escalate "first") action.

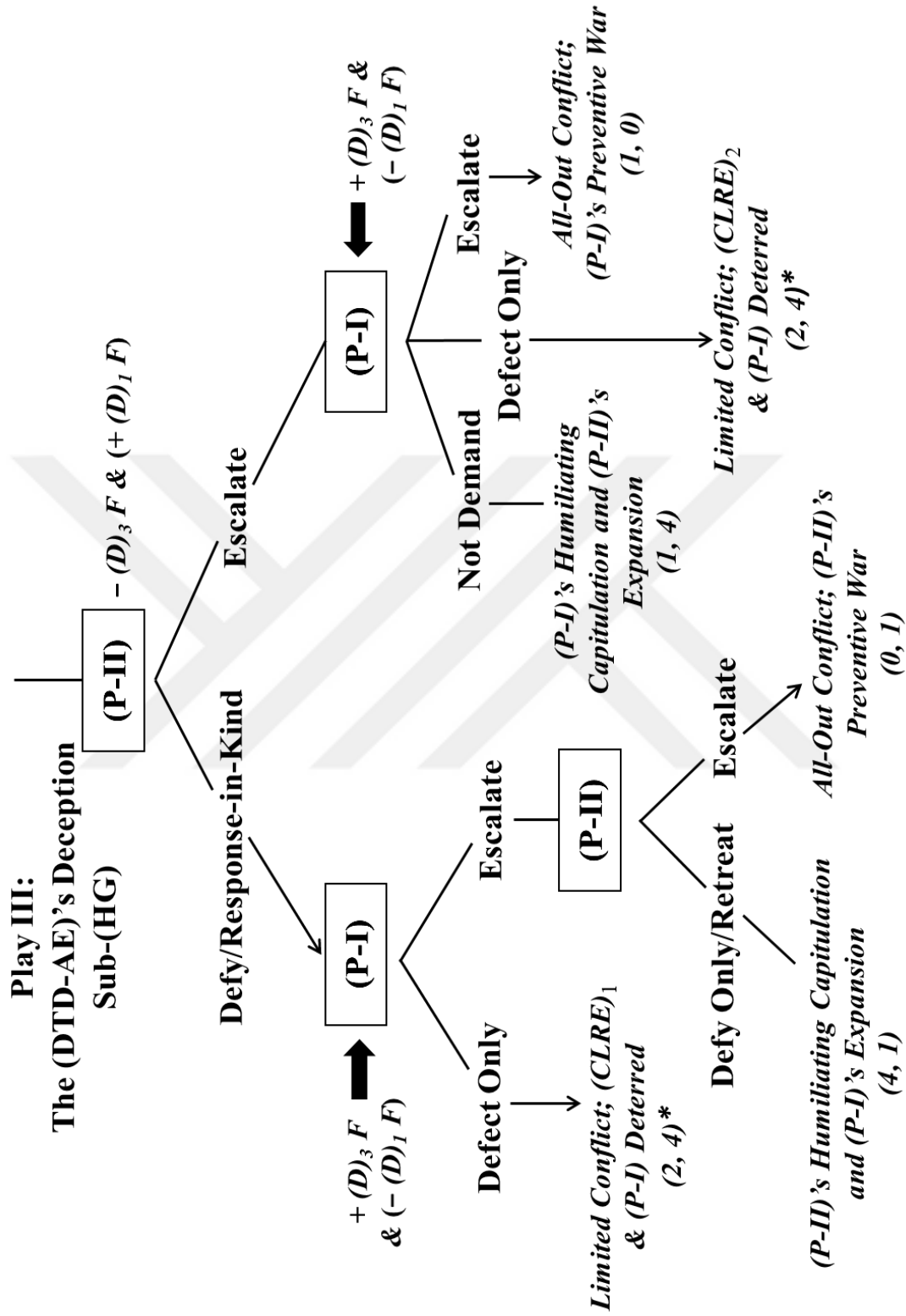


Figure 7: Play III; the (DTD-AE)'s Deception Sub-(HG)

Source: Prepared by the author.

In that case, the resulted outcome is: “(P-II)’s *Humiliating Capitulation and (P-I)’s Expansion*,” with payoffs: (4, 1). Thus, (P-I) gets its best utility, and (P-II) accumulates its zero-state worst yield so that the first wins (i.e., (P-I)’s Expansion) at the expense of the second’s losses (i.e., (P-II)’s Capitulation) in a relative gains’ hypergame-situation.

2.2.3.3.2. Case II: (P-II) Escalating

While (P-II) is the deceiver in Play III and still deceived about (P-I)’s Deception Factor of Plays I and II, it may prefer to (Escalate) first. That would be a non-rational move, contradicting that of the (Defy/Response-in-Kind) rational choice _ given the last’s highly probable (*sole*) rational choice of (P-I)’s (Defecting Only) sequentially, accompanied by high probability-equilibrium occurring, therefore. Comparingly, the (Counter-Escalation/Escalate) action competes as a *rational choice* with the (Defect Only) one if (P-II) chooses to (Escalate) first, starting the sub-hypergame. According to that, (P-I) has three strategic preferences, illustrated in Figure 7; these are: First: (P-I) may concede its (Demand) of altering the status quo made at the beginning of the entire hypergame in Play I; however, (P-I) loses severely choosing to (Not Demand) at this game’s stage. The outcome that occurs, in this case, is “(P-I)’s *Humiliating Capitulation and (P-II)’s Expansion*,” with payoffs: (1, 4). The (Not Demand) preference is *not* the rational choice for (P-I) in Play III if (P-II) preferred to (Escalate) first than to (Respond-in-Kind). The probability of (Not Demand) action is: $(0 \leq p < 0.5)$.

Second: The first *rational choice* for (P-I) if (P-II) escalated first is to (Defect Only) where $(0.5 < p \leq 1)$. Consequently, the “*Limited Conflict; (P-I) Deterred*” outcome occurs, with payoffs: (2, 4), which is the “*fourth sub-hypergame perfect Nash equilibrium*” in the entire hypergame. This equilibrium represents the second position of the *Constrained Limited Response Equilibrium* or **(CLRE)₂** in our (DHMIC). Needless to say, if (P-II) initiates this sub-hypergame or Play III from the other node of Play II (i.e., the (P-I)’s (CC) node, not from the (P-I)’s (Defect) choice’s one), this sub-hypergame’s equilibriums would be the same, as long (P-II) or the initiator uses the same mixed-strategy choices of (Defy/Response-in-Kind) and (Escalate).

Third: The second *rational choice* for (P-I) if (P-II) preferred to (Escalate) first is to (Counter-Escalation/Escalate), where $(0.5 \leq p < 1)$. That is if we consider that both are (equivocally or equivalently) powers in the international system, and anyone’s escalation

is seen as a violation of the other's prestigious position among the system's actors (i.e., states) under another alliance sub-system that protects each in case of the war is initiated against it (i.e., the war against one in a given security alliance is considered a war against all). Therefore, the "*All-Out Conflict; (P-I)'s Preventive War*" outcome becomes in play, with payoffs: (1, 0) _ that are reversed from those resulting if (P-I) escalates first and (P-II) counter-escalates _ where both are worse off but (P-II) becomes more *severely* worse off. So, inversely, it is (P-II) now that provides (P-I) with the *legitimate justification* for waging a preventive, deterring war/all-out conflict against it.

2.2.4. The (DHMIC)'s Conclusion: Initial Stability in the System-Powers' Conflict and Deterrence Relation (ISPCDR)

This section focuses on setting two general conclusions of the (Deception Hypergame Model of Interstate Conflict) and its application, paving one way among many others that can be provided in further research for stabilizing the international system's structure. Whether or not the deception exists in multiple games of an unbalanced model played by and between states, the aim here is not to reveal a new facet of reality insofar as it is to set the facts (more) solid, avoiding the occurrence of potentially similar conflicts in the future. This part introduces two equations we inferred from our built model and its application, which are applicable under certainty and uncertainty conditions. We admit and recommend that too many works are needed in this field, exploring and constructing a more solidified structure of one integrated theoretical body in conflict management or, fairer to say, *conflict impediment*.

2.2.4.1. Equations' Assumptions

Through using abbreviations of some terms needed, it can be said that:

- The international system's Power I is (A_1), which is the most powerful or (para-) equal in power to "Power II."
- The international system's Power II is (A_2), which is less powerful than or (para-) equal in power to "Power I."
- Both (A_1) and (A_2) are aggressive or competitive actors, or that one actor is cooperative, and the other is aggressive or competitive.

-The international system is bipolar or multipolar, where other powers of a multipolar system competing against one another might be integrated under the same equations, given that the reasoning followed is kept static.

-(T_{A2}) is the Threat (T) practiced by (A_1) versus (A_2) so that it is the “(A_2)-directed-Threat.”

-(T_{A1}) is the Threat (T) practiced by (A_2) versus (A_1) so that it is the “(A_1)-directed-Threat.”

- $\{(\pm D) F_n\}$ is the (Deception Factor) that may exist or not in real-world circumstances within inter-nation competitive or conflictual relations, which can be used by (n) or (Number) of actors, either (A_1), (A_2), or both. Here, $\{(+D) F_n\}$ refers to existing a “*Deception/Uncertainty-Condition/State*” in given interstate-interactions, while the $\{(-D) F_n\}$ indicates that there is a “*Perception/Certainty-Condition/State*” in the same context.

-(E_a)⁻¹ is the “Equilibrium (E) achieved for (A_1) or (a),” which is an “unstable outcome,” denoting the instability of an outcome as (-1).

-(T_{A2})² is a Multiplied Threat (T^2) practiced by (A_1) versus (A_2) so that it is the “(A_2)-directed-Doubled Threat.”

- $\{(A-M)_{A1}\}$ is the “Action(s) and Move(s)” made by (A_1) and directed towards (A_2) or other powers/states in the system.

- $\{(A-M)_{A2}\}$ is the “Action(s) and Move(s)” made by (A_2) and directed towards (A_1) or other powers/states in the system.

-(- T_{A1}) is the “Non-Threat (-T) practiced by (A_2) versus (A_1),” so that it is the “(A_1)-directed-*Disabled* Threat.”

-(E_a)⁺¹ is the “Equilibrium (E) achieved for (A_1) or (a),” which is a “stable outcome,” denoting the stability as (+1).”

-(E_b)⁺¹ is the “Equilibrium (E) achieved for (A_2) or (b),” which is a “stable outcome: (+1).”

- $\{(CC)F\}$ is the (Capability and Credibility Factor of Threat T).

- $\{(CC)F1\}$ is the (Capability and Credibility Factor of Threat T) for (A_1).

-{(CC)F₂} is the (Capability and Credibility Factor of Threat T) for (A₂).

-{B_{A1}} is the “Balance of Powers Relations” achieved for (A₁) in the international system.

-{B_{A2}} is the “Balance of Powers Relations” achieved for (A₂) in the international system.

-{(E_{a+b})⁺²} is “(A₁) and (A₂)’s Equilibrium,” simultaneously occurring in interstate conflict or deterrence relation within a bipolar or multipolar international system, which is “stable for both,” denoting this as: (+2).

-{(B_{A1+A2})^{(CC)F₁+F₂}} is the “Mutually Balance of Powers Relations” achieved for (A₁) and (A₂) simultaneously within a bipolar or multipolar international system, where the {(CC)F} takes place by both (A₁) and (A₂).

2.2.4.2. Initial Stability in the System-Powers’ Conflict and Deterrence Relation (ISPCDR): The Equations and Proving the Validity of the (DHMIC)’s Hypothesis

2.2.4.2.1. Equation I: Defection and Revisionism-State in One-Sided Deterrence Relation

$$\{A_1 ((A-M)_{A1} + (T_{A2})^{(CC)F1})\} + \{A_2 ((A-M)_{A2} + (-T_{A1}))\} + \{(\pm D) F_n\} \cong (E_a)^{-1} ((A_1) + (T_{A2})^{(CC)F1}) + \{((T_{A2})^2 \{(CC)F1\} \times (A-M)_{A1}) \div A_2 ((A-M)_{A2} + (-T_{A1}))\}$$

Explanation: Taking the numerical language aside, we can explain “Equation I,” as follows: a. any action (i.e., decision) made concerning deterrence relation interstate or conflict among powers of the international system, and followed by a move (i.e., applied decision), by (A₁) _ that is conditioned by a threat practiced by (A₁) versus (A₂), which must be capable and credible; accumulating to that b. any action made in the similar trajectory, and followed by a move, by (A₂) where no threat can (ever) exist (actively/used at the moment, or non-actively/unused at the moment) versus (A₁); provided that c. there is uncertainty/deception and misperception, or certainty/non-deception and perception, conditioned by any (detering/conflicting) power towards the other. Those assumptions lead or are approximately equal to these results: a. *unstable* equilibrium occurring in favor of (A₁) where a capable and credible threat it practices versus (A₂) exists (actively or non-actively) as a condition; accumulating to that b. a doubled or multiplied capable and

credible threat manifests (actively or non-actively) in any action made, and followed by a move, by (A₁), that it is directed versus/divided into any action made, and followed by a move, by (A₂), in the same course, where *no* threat can (ever) exist (actively or non-actively) versus (A₁) under the given context.

2.2.4.2.2. Equation II: Corrected-Defection and Anti-Revisionism-State in Multiple Sides-Oriented-Deterrence Relation

$$\{A_1 ((A-M)_{A1} + (T_{A2})^{(CC)F1})\} + \{A_2 ((A-M)_{A2} + (T_{A1})^{(CC)F2})\} + \{(\pm D) F_n\} \cong (E_a)^{+1} ((A_1) + (T_{A2})^{(CC)F1}) + (E_b)^{+1} ((A_2) + (T_{A1})^{(CC)F2}) + \{B_{A1} ((T_{A2})^{(CC)F1} \times (A-M)_{A1}) \div A_2 ((A-M)_{A2} + (T_{A1})^{(CC)F2})\} + \{B_{A2} ((T_{A1})^{(CC)F2} \times (A-M)_{A2}) \div A_1 ((A-M)_{A1} + (T_{A2})^{(CC)F1})\}$$

Explanation: Assuming that: a. any action made concerning deterrence relation interstate or conflict among powers of the international system and followed by a move, by (A₁) where a capable and credible threat exists (actively or non-actively) versus (A₂); b. any action made in a similar trajectory, and followed by a move by (A₂) where a capable and credible threat exists (actively or non-actively) versus (A₁); provided that c. there is uncertainty/deception and misperception, or certainty/non-deception and perception, conditioned by any (detering/conflicting) power towards the other. Those assumptions lead to or are approximately equal to these results: a. A *stable* equilibrium occurs in favor of (A₁), wherein (A₁)’s capable-and credible threat versus (A₂) exists (actively or non-actively). b. A *stable* equilibrium occurs in favor of (A₂), wherein (A₂)’s capable-and credible threat versus (A₁) exists (actively or non-actively). c. A balance achieved for (A₁) occurs within a deterrence relation interstate or conflict among powers of the system, where (A₁)’s capable-and credible threat versus (A₂) exists (actively or non-actively) in any action made and the followed move by (A₁). That is to be directed versus or/and divided into any made action and the followed move, by (A₂), in which (A₂)’s capable-and credible threat *parallelly* exists (actively or non-actively) versus (A₁).

d. A balance achieved for (A₂) occurs within a deterrence relation interstate or conflict among powers of the system, where (A₂)’s capable-and credible threat versus (A₁) exists (actively or non-actively) in any action made and move followed by (A₂). That is to be directed versus or/and divided into any made action, and the followed move by (A₁), in which (A₁)’s capable and credible threat *parallelly* exists (actively or non-actively) versus (A₂). That is to say that: a. both parallel capable and credible threats are (directed versus,

and divided into) whenever a (severe-clashing/conflictual relation) interstate becomes in play, in the given context; b. they are (directed versus) only in a (normal or non-conflictual relation) interstate where the competition or a renewed clash principle may exist; c. they are (divided into) only in a (normal clashing/conflictual relation) interstate, considering the explained circumstances.

2.2.4.2.3. Conditionality Cases of the (ISPCDR)

The Initial Stability in (the system) Powers' Conflict and Deterrence Relation or the (ISPCDR) can be specified, based on Equations I and II's outputs, where the "Bipolarity or Multipolarity, (B-MP)" defines the international system's structure, as follows:

$$\begin{aligned} (\text{ISPCDR})_{(\text{B-MP})} &\cong \{(E_a)^{+1} + (E_b)^{+1} + (B_{A1})^{(\text{CC})F1} + (B_{A2})^{(\text{CC})F2}\} \\ &\cong \{(E_{a+b})^{+2} + (B_{A1+A2})^{(\text{CC})F1+F2}\} \end{aligned}$$

Supposing that: a. each element mentioned above has a numerical, denoting, or indicating value, where we refer to this value as (v);" b. both system's powers, either (A₁) or (A₂), have capable and credible threats versus each other, that might be active and in use or non-active and in non-use by any or all under an observed context. Thence, the conditionality of (ISPCDR) can be formulated through these three cases:

Case I: The (Relatively-Balanced (ISPCDR)) in a One-Sided Extreme or Limited-Threat State: If $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$, where: $\{(E_{va})^{\pm 1}\} > \{(E_{vb})^{\pm 1}\}$, or $\{(E_{va})^{\pm 1}\} < \{(E_{vb})^{\pm 1}\}$; then: $\{(B_{v(A1)})^{(\text{CC})F1}\} \neq \{(B_{v(A2)})^{(\text{CC})F2}\}$, where: $\{(B_{v(A1)})^{(\text{CC})F1}\} > \{(B_{v(A2)})^{(\text{CC})F2}\}$, or $\{(B_{v(A1)})^{(\text{CC})F1}\} < \{(B_{v(A2)})^{(\text{CC})F2}\}$.

Under this case, (A₁)'s capable and credible threat becomes "*active and in use*" while (A₂)'s capable and credible threat is *non-active and in non-use*, when $\{(E_{va})^{\pm 1}\} > \{(E_{vb})^{\pm 1}\}$; or vice versa when $\{(E_{va})^{\pm 1}\} < \{(E_{vb})^{\pm 1}\}$. Based on that, the equilibrium occurring might be permanently stable or not. The $\{(E_{va})^{+1}$; or $(E_{vb})^{+1}\}$ is a permanently *stable* equilibrium for Actor I or Actor II, respectively, under the (Relatively-Balanced (ISPCDR)), occurring in *perception* and (complete/incomplete) certainty conditions. In contrast, the $\{(E_{va})^{-1}$; or $(E_{vb})^{-1}\}$ is a permanently *unstable* equilibrium, namely, a temporarily *stable* one, for both under the (Relatively-Balanced (ISPCDR)), taking place in *deception* and misperception or certain uncertainty conditions, since the deceived or

misperceiving actor, whoever is, would have the incentive to deviate from a reached position under such uncertainty, once the deception or misperception becomes exposed. Comparingly, all actors rationally agree on known and correctly perceived (different) values of another equilibrium achieved under perception and (complete/incomplete) certainty conditions, as long each stand on the best position of utility they could ever obtain within a (Relatively-Balanced (ISPCDR)).

Case II: The (Outrightly-Balanced (ISPCDR)) in an Equally or Equivalently Non-activated Threat-State: If $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$, and then $\{(B_{v(A1)})^{(CC)F1}\} = \{(B_{v(A2)})^{(CC)F2}\}$, where the equilibrium is *stable*, referring to that by (+1), under whatever conditions (i.e., perception/certainty, or deception/uncertainty). Within that case, both actors' capable and credible threats are *non-active and in non-use*.

Case III: The (Incompletely-Balanced (ISPCDR)) in a Mutually Extreme or Limited-Threat State: If $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$, and then $\{(B_{v(A1)})^{(CC)F1}\} \geq \{(B_{v(A2)})^{(CC)F2}\}$, or $\{(B_{v(A1)})^{(CC)F1}\} \leq \{(B_{v(A2)})^{(CC)F2}\}$, where the equilibrium occurring in this case is permanently *unstable*, that is, temporarily *stable* only, referring to that by (-1), under perception or deception conditions. Namely, any actor, under perception and certainty or deception and uncertainty circumstances, may have the incentive to deviate from a status quo of being *threatened* if not reached *reasonably* in a relative balance's perception state. In that case, both actors' capable and credible threats become *active and in use*.

2.2.4.2.4. Proving the (DHMIC)'s Hypothesis

According to Equations I and II, the *absolute gains* obtained by state-actors (i.e., the system's powers under the illustrated manner) of cooperation or joint understandings and agreements-based-Liberalist perspective of interstate relations, manifest and defy strongly the "*relative gains*" that define a conflict and competition-dominated-Realist view of self-interested states seeking the power-accumulation goal at each other's expense. Thus, this work reflects a re-balanced view of the balance of power relations in interstate conflicts where the deterrence relationship stability becomes under question. Still, further research is necessitated in the field. Lastly, we prove the validity of our (Deception Hypergame Model of Interstate Conflict) hypothesis: The initial stability in the system powers' conflict and deterrence relation is achieved through joint equilibria

simultaneously occurring and the opponent-directed-capable and credible threat-existing in a mutual deterrence relationship, under certainty and perception, or uncertainty and deception conditions.

2.3. A Conflict or War Impediment Strategic Approach, Part II: Deterrence Entanglement Law (DEL) in Global Politics

2.3.1. Theoretical Roots and Assumptions

First: This study's developed (Deterrence Entanglement Law) is based on a (Threat-for-Deterrence) modeling, which partially uses game theory assumptions of rationality and the expected utility in explaining the interactions among two rational powers or actors conflicting in a regional or international system.

Second: The modeling depends on describing the system powers/actors' moves and countermoves during a crisis, clash, conflict, or war within extended or immediate deterrence relations, considering both perception and (complete/incomplete) certainty or deception and certain uncertainty conditions.

Third: The (Threat-for-Deterrence) modeling reconciles the misperception and deception factors with the rationality argument. The factors that distinguish hypergame models under complex-conflict situations where the difference in information, understandings, and perceptions exists among players. The players, therefore, might be deceivers or deceived within given generalizable-reasonable interactions.

Fourth: The modeling differs in its basics, purpose, and application from the *theory of moves*, which explains an interplay of moves and countermoves of players in a sequential nature's rational-choice modeling under apparent perception conditions.

Fifth: Mainly, our (Threat-for-Deterrence) modeling is a simulation of a what we call a (Deterrence Entanglement Law) in global politics, within which the *firm premise* is: The (Matter) at a move is an (Anti-matter) at this move's countermove, and the (Anti-matter) at a move is a (Matter) at this move's countermove; where:

Firstly: The (Matter) for one actor/power is an (Anti-matter) for the other at the same move and countermove, and likewise, the (Anti-matter) for one actor/power is a (Matter) for the other at the same move and countermove.

Secondly: Both the (Matter) and the (Anti-matter) are the (same Matter or Threat-Object) at the (same mutually move and countermove), while they are (different Matters or Threat-Objects) at (different mutually moves and countermoves).

Thirdly: The moves of one movement of (Matter and Anti-matter) by an actor/power, and the countermoves of its opposite movement of (Anti-matter and Matter) in the same direction by the other actor/power, are made simultaneously or sequentially.

Fourthly: A (move) and (countermove) occur in opposite ways of the same direction, composing a comprehensive “Threat-for-Deterrence” modeling of our developed (Deterrence Entanglement Law). That is to say, the modeling cases’ interrelated relations are about: {Threaten $\longleftrightarrow$ Threatened}; and {Not Threaten $\longleftrightarrow$ Unthreatened} sub-cases. Obviously, those relations are **not** about: {(Threaten, Threaten); (Not Threaten, Not Threaten); (Threatened, Threatened); or (Unthreatened, Unthreatened)} strategic preferences of two actors/powers of the system if a conflict exists. Thus, the modeling defines (Deterrence Entanglement Law) thorough cases for the conflict/war impediment purpose _ when a movement of moves and its opposite movement in the same direction of countermoves address an observed context of conflict interstate or/and deterrence relation. Therefore, the (DEL) does *not* focus on the interactive decision-making’s possible strategic actions of separate situations in a conflict, which is considered a *general law* for conflict management through governing the conflict/war impediment possibilities and equilibria first.

Fifthly: The first (Matter and Anti-matter), as well as the second, reflect two different (Threat Objects), existing in opposite ways of the same direction, that must be *equivalently* equal in *level* or/and *scale*. Based on that, a **deterrence sufficiency** condition in line with the (Threat Objects) capability and credibility criteria becomes partially or entirely fulfilled for reaching a state of balance of an (Initial Stability in (the System) Powers’ Conflict and Deterrence Relation (ISPCDR)).

Sixth: Within our modeling, “Power I or (P-I)” is an actor (i.e., state) in the international system that is in a state of clash/conflict/war with “Power II.” Similarly, “Power II or (P-II)” is the system actor that is in a state of clash/conflict/war with “Power I.” We refer to both (P-I) and (P-II) as {(Actor I), (A1), or (a)}, and {(Actor II), (A2) or (b)}, respectively. Both are clashing, or conflicting, powers/actors in a regional or international

system, where any can be (para-) equal in military, economic, political, or/and technological power to the other, or that one is more powerful than the other. Again, the (ISPCDR) is the abbreviation of “Initial Stability in (the System) Powers’ Conflict and Deterrence Relation.”

Seventh: The built (Threat-for-Deterrence) modeling is considered the extension and advanced development of the (Deception Hypergame Model of Interstate Conflict “DHMIC”) and its related (Initial Stability in the System Powers’ Conflict and Deterrence Relation “ISPCDR”)’s conditionality cases. Thence, the (Deterrence Entanglement Law) addresses: a. Case I of Relatively-Balanced (ISPCDR) where $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$; namely, $\{(E_{va})^{\pm 1}\} > \{(E_{vb})^{\pm 1}\}$, or $\{(E_{va})^{\pm 1}\} < \{(E_{vb})^{\pm 1}\}$; case II of Outrightly-Balanced (ISPCDR) where $\{(E_{va})^{\pm 1}\} = \{(E_{vb})^{\pm 1}\}$; case III of Incompletely-Balanced (ISPCDR) where $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$.

b. Three conditions: 1) The (E_{va}) or (E_{vb}) is the *value of an equilibrium* for each power/actor within the (DEL)’s cases, where both include capable and credible threats versus each other. 2) The (“Capability and Credibility of Threat” Factor, “CC(F)”) under (Balance of Deterrence, “B”) might be considered if the (Threat Object) is *in use, active, and enabled*, or *not* if the (Threat Object) is *in non-use, inactive, and disabled*. 3) The (Balance of Deterrence, “B”) of one power/actor might be *negative* (−1) if it *cannot* counter the other power/actor’s (B), or *positive* (+1) if it *can* counter it, in either the level or/and scale of deterrence. We abbreviate the (“Capability and Credibility of Threat” Factor) as the “CC(F1)” for (A1) and “CC(F2)” for (A2), given that the definition provided for Actor I and Actor II under the “Threat-for-Deterrence” modeling is employed.

c. Deterrence; as a term that means that the war or the all-out conflict is avoidable. The deterrence explained within the confines of (Threat-for-Deterrence) modeling fails should the war or all-out conflict ensue. The occurrence of *limited conflicts* is seen under the (Deterrence Entanglement Law) as one way for hindering the war or all-out conflict possibility in some actual complex-conflict situations. Thus, this view agrees in part with the old perspective of deterrence as an instrument of broader (national/international) security strategy for avoiding wars via (not wars as it had been seen before World War II but) limited conflicts. If the (Threat Object I) or (Threat Object II), which are both capable

and credible and can be active or inactive, in use for deterrence or in a non-use, and enabled or disabled within the (DEL)'s cases, is shifted to be applied in a state of *active* war or *active* all-out conflict, once again, the deterrence meant under the (DEL) is failed, and no "Balance of Deterrence (B)" positions either relative, outright, or incomplete are to be detected. That is why implementing the (DEL) is a vital line between impeding the war or all out-conflict possibilities, which is the essential purpose, if correctly its rules are employed, or witnessing them.

Eighth: The aim of our advanced modeling is therefore enhanced further to answer what if the "All-Out Conflict or War Outcome" was to be avoided before any actual-game situations occur, perception or deception ones? Namely, what if there was a "*law*" that governs the human flawed or flawless actions and behaviors, whether the actors were rational and completely or incompletely perceiving the other actors' strategic preferences in perception cases, within a regional/international system, or they were deceived or deceivers under intentional misperception-situations?

Accordingly, the (Threat-for-Deterrence) modeling differs from other (hyper)game-theoretic models in considering comprehensive cases of mutually dual moves and countermoves rather than actions in one/multi-situation(s) of conflict in a (hyper)game played by actors of the system. Thus, it expresses systemic cases for stabilizing relations among clashing/conflicting actors under (Deterrence Entanglement Law), which is a deterrence instrument needed where the peace becomes inferior to a superior state of war. If correctly applied, we assume that the all-out conflict or war is avoidable even in cases where an extended deterrence applied along with a long period of time fails and an immediate deterrence of an aggressive actor is necessitated before the war ensues.

Ninth: Ultimately, the (Threat-for-Deterrence) modeling, which is a simulation of (Deterrence Entanglement Law), primary assumption is: The conflict or war among powers or actors (i.e., states) of the international system is avoidable and maneuverable within extended or immediate deterrence spheres if the actors' conflict-position regionally or internationally is *preemptively* amended under perceived-relative, absolute, or incomplete gains' environment. That is what we move from and prove under (Relatively, Outrightly, and Incompletely-Balanced (ISPCDR)) cases, where each case

might be an equilibrium for impeding a war or conflict interstate considering given conditions.

2.3.2. The (Deterrence Entanglement Law) Explanation in a (Threat-for-Deterrence) Modeling: Three Key Cases of Mutually Dual Moves and Countermoves

2.3.2.1. Preliminary

There are some assumptions on which our (Threat-for-Deterrence) modeling is built, as follows : a. A (Threaten) move or countermove made towards (Power II) by (Power I) equals (P-II's Uncontained Matter). b. A (Threatened) countermove or move made by (Power II) in interaction with (P-I's (Threaten) move or countermove respectively, equals: (P-II's Uncontained Anti-matter). c. A (Threaten) move or countermove made towards (Power I) by (Power II) equals (P-I's Uncontained Matter). d. A (Threatened) countermove or move made by (Power I) in interaction with (P-II's (Threaten) move or countermove respectively, equals: (P-I's Uncontained Anti-matter). e. A (Not Threaten) move or countermove made towards (Power II) by (Power I) equals (P-II's Contained Matter). f. An (Unthreatened) countermove or move made by (Power II) in interaction with (P-I's (Not Threaten) move or countermove consecutively equals: (P-II's Contained Anti-matter). g. A (Not Threaten) move or countermove made towards (Power I) by (Power II) equals (P-I's Contained Matter). h. An (Unthreatened) countermove or move made by (Power I) in interaction with (P-II's (Not Threaten) move or countermove consecutively equals: (P-I's Contained Anti-matter). i. In the eight assumptions mentioned above, the (DEL)'s fundamental premise is a given, which is: "The (Matter) and (Anti-matter) are the *same* (Matter or Threat-Object) at the *same* (mutually move and countermove) _ where the (Matter) for one power/actor is an (Anti-matter) for the other at the *same* move and countermove, and vice versa. Simultaneously, the (Matter) and (Anti-matter) are *different* (Matters or Threat-Objects) at *different* (mutually moves and countermoves)."

2.3.2.2. The "Relatively-Balanced (ISPCDR)" Where $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$: Yes-No/No-Yes Case

In the Relatively-Balanced (ISPCDR), the *first* (mutually move and countermove) is

$\{(Threaten) \longleftrightarrow (Threatened)\}$, where the (Threat-Object I) of one power/actor exists, *actively* or in an *enabled* manner. Similarly, the *second* (mutually move and countermove) is $\{(Unthreatened) \longleftrightarrow (Not Threaten)\}$, where the (Threat-Object II) of the other power/actor takes place, simultaneously, in an opposite way of the same direction, however *inactively* or in a *disabled* mode.

2.3.2.2.1. Under the Relatively-Balanced (ISPCDR), Where $\{(E_{va})^{\pm 1}\} > \{(E_{vb})^{\pm 1}\}$, There Are Two Sub-cases:

Sub-case I: Power I's movement is defined by the $\{(Threaten); (Unthreatened)\}$ moves, while Power II's opposite movement, in the same direction, becomes determined by the $\{(Threatened); (Not Threaten)\}$ countermoves, consecutively; see Figure 8.

Sub-case II: Power II's movement is defined by the $\{(Not Threaten); (Threatened)\}$ moves, whereas Power I's opposite movement, in the same direction, becomes determined by the $\{(Unthreatened); (Threaten)\}$ countermoves, respectively.

Under perception and complete/incomplete certainty conditions, the utility is: $\{(S_4, S_2)^+\}$ – given that (x, y) is the payoff to (Power I), the payoff to (Power II), respectively. That outcome represents the “Opponent Victory Equilibrium,” which is *stable* since no power/actor may have the incentive to deviate from such an equilibrium or solution point occurring rationally, achieving the best position for all simultaneously and *correctly* perceived within the movement and opposite movement of both in a reasonable order.

In contrast, under deception and certain uncertainty conditions, where (P-I) is the deceiver and (P-II) is the deceived, the utility is: $\{(S_4, S_2)^-\}$ of a “Disguised Opponent-Victory Equilibrium;” see Figure 10. The latter outcome is temporarily *stable* only, which cannot be permanently stable because the deceived (P-II) misperceives it; therefore, this player may have the incentive to deviate once revealing that (P-I) misled it under a *deception/intentional misperception* state of the Relatively-Balanced (ISPCDR) case.

Within the Relatively-Balanced (ISPCDR) case of the Deterrence Entanglement Law, the (Central-Deterrence Point I) exists where: $\{(B_{v(A_1)})^{(CC)F1}\} > \{(B_{v(A_2)})^{-1}\}$, given that (-1) means that the last is a “Negative Balance of (A_2) ” with a value that cannot counter-balance the (A_1) 's (B) in either the *level* or/and *scale* under a given context of observation and its relevant factors.

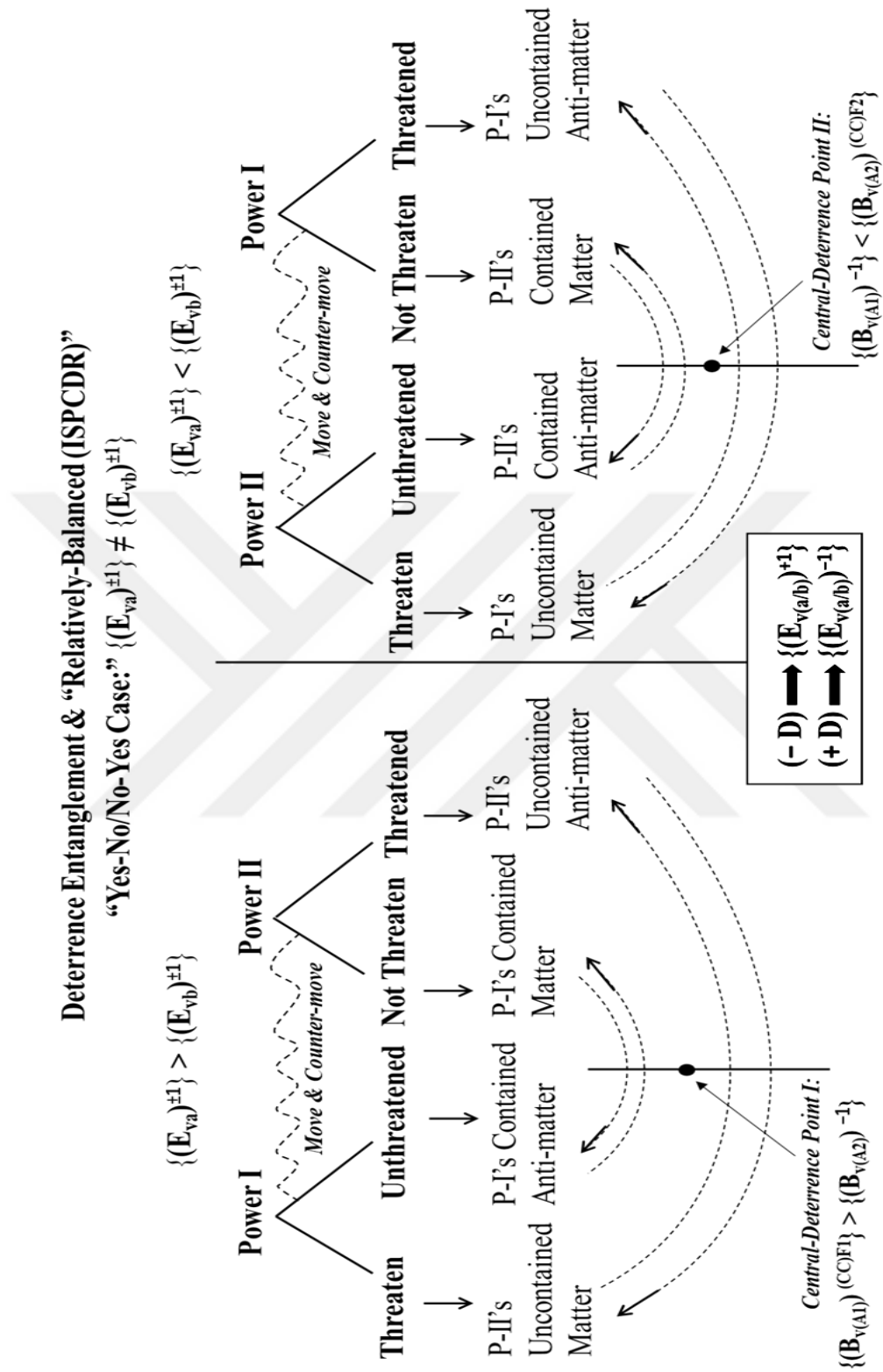


Figure 8: Deterrence Entanglement Law and the “Relatively-Balanced (ISPCDR)” Case

Source: Prepared by the author.

However, the mentioned (B) positions do not affect the validity and stability of the “Opponent Victory Equilibrium” if it existed in perception and complete/incomplete certainty conditions. The reason is that both positions of balance now include (A₁)’s capable and credible-(Threat Object) active and enabled, and (A₂)’s capable and credible-one, in an opposite way of the same direction, inactive and disabled, simultaneously, while all actors are aware of that.

2.3.2.2.2. Under the Relatively-Balanced (ISPCDR), Where $\{(E_{va})^{\pm 1}\} < \{(E_{vb})^{\pm 1}\}$, There Are Two Sub-cases:

Sub-case I: Power II’s movement is defined by the {(Threaten); (Unthreatened)} moves, while Power I’s opposite movement, in the same direction, becomes determined by the {(Threatened); (Not Threaten)} countermoves, consecutively.

Sub-case II: Power I’s movement is defined by the {(Not Threaten); (Threatened)} moves, whereas Power II’s opposite movement, in the same direction, becomes determined by the {(Unthreatened); (Threaten)} countermoves, respectively; see Figure 8.

Under perception and complete/incomplete certainty conditions, the utility is: $\{(S_2, S_4)^+\}$, of an “Opponent Victory Equilibrium,” that is a *stable* outcome, where no power/actor may have the impulse to deviate from this position that occurs depending on all players’ rationality, and correctly perceived, within the movement and opposite movement of both in a reasonable order.

In deception and certain uncertainty conditions, where (P-II) is the deceiver and (P-I) is the deceived, the utility is: $\{(S_2, S_4)^-\}$ of another case of “Disguised Opponent-Victory Equilibrium;” see Figure 10. This equilibrium is a *temporarily* stable outcome only (namely, it cannot be permanently stable like the other above case) because the deceived (P-I) misperceives it. Thus, (P-I) may have the incentive to deviate if it reveals that (P-II) misled it under such a deception/intentional misperception state of the Relatively-Balanced (ISPCDR) case.

Within the (Relatively-Balanced (ISPCDR)) case of the Deterrence Entanglement Law, the “Central-Deterrence Point II” exists where: $\{(\mathbf{B}_{v(A1)})^{-1}\} < \{(\mathbf{B}_{v(A2)})^{(CC)F2}\}$, given that (–1) means that the first is a “Negative Balance of (A₁)” _ including (A₁)’s *inactive and*

disabled capable and credible threat, which cannot counter-balance the (A₂)’s (B) in either the *level* or the *scale*, considering this given context.

2.3.2.3. The “Outrightly-Balanced (ISPCDR)” Where the $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$: 4

Noes Case

In the Outrightly-Balanced (ISPCDR), the *first* (mutually move and countermove) is $\{(Not\ Threaten) \longleftrightarrow (Unthreatened)\}$, where the **(Threat-Object I)** of one power/actor exists, *inactively* or in a *disabled* manner. Similarly, the *second* (mutually move and countermove) is $\{(Unthreatened) \longleftrightarrow (Not\ Threaten)\}$, where the **(Threat-Object II)** of the other power/actor takes place, simultaneously, in an opposite way of the same direction, also *inactively* or in a *disabled* mode. It is explained as follows:

Sub-case I: Power I’s movement is defined by the $\{(Not\ Threaten); (Unthreatened)\}$ moves, while Power II’s opposite movement, in the same direction, is shaped through the $\{(Unthreatened); (Not\ Threaten)\}$ countermoves, consecutively.

Sub-case II: Power II’s movement is defined by the $\{(Not\ Threaten); (Unthreatened)\}$ moves, whereas Power I’s opposite movement, in the same direction, becomes determined by the $\{(Unthreatened); (Not\ Threaten)\}$ countermoves, respectively; see Figure 9.

In both sub-cases, the “Compromise Equilibrium” becomes in play, where the utility is: $\{(S3, S3)^+\}$, see Figure 10, under perception and complete/incomplete certainty, or deception and certain uncertainty conditions. This equilibrium is *stable* either correctly or incorrectly perceived, since no power/actor during a crisis, clash, conflict, or war arising among both may have the incentive to deviate from this position, once reached, of the highest and most stable utility for all when making their movement and opposite movement in a *rational* order, simultaneously or sequentially.

Within the Outrightly-Balanced (ISPCDR) case of the Deterrence Entanglement Law, the “Central-Deterrence Point III” exists where $\{(B_{v(A1)})^{+1}\} = \{(B_{v(A2)})^{+1}\}$, coinciding with the occurrence of mutually “Positive Deterrence-Balance of (A₁) and (A₂).” The positivity that we refer to by (+1), under which no power or actor might threaten the other by the capable and credible (Threat Object I or II), which both become *inactive* and *disabled*.

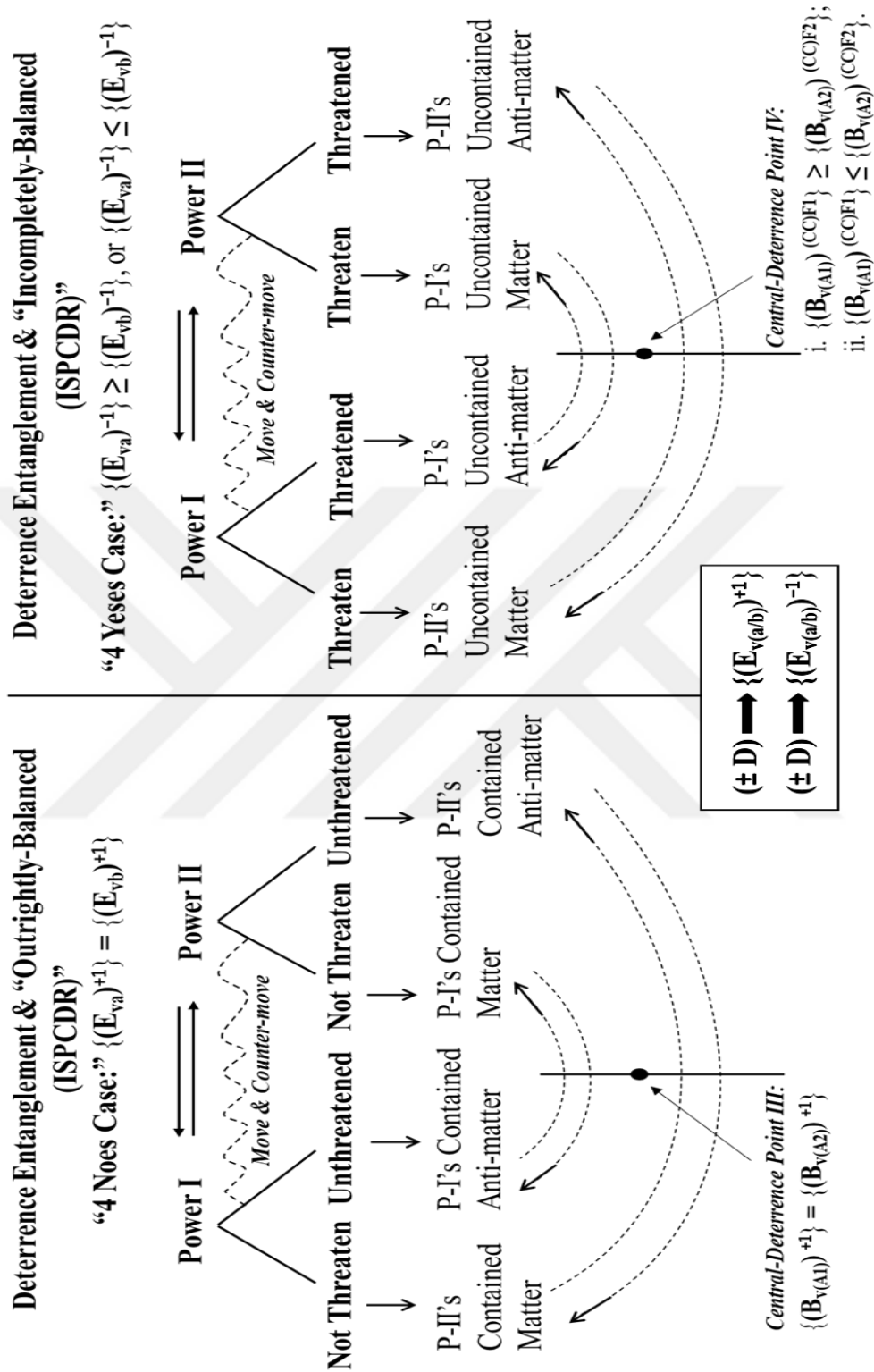


Figure 9: Deterrence Entanglement Law and the “Outrightly-Balanced (ISPCDR)” & “Incompletely-Balanced (ISPCDR)” Cases

Source: Prepared by the author.

Considering that positivity, each “*Balance of Deterrence*” position can counter the other regarding the level or/and scale _ in a given context of observation. So, comprehensively, the *perfect* or most optimal state of balance of the (ISPCDR) achieves here.

2.3.2.4. The “Incompletely-Balanced (ISPCDR)” Where $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$: 4 Yeses Case

In the Incompletely-Balanced (ISPCDR), the *first* (mutually move and countermove) is $\{(Threaten) \longleftrightarrow (Threatened)\}$, where the (Threat-Object I) of one power/actor exists, actively or in an enabled manner. Similarly, the second (mutually move and countermove) is $\{(Threatened) \longleftrightarrow (Threaten)\}$, where the (Threat-Object II) of the other power/actor takes place, simultaneously, in an opposite way of the same direction, also *actively* or in an *enabled* mode. Thus, the sub-cases of this specific case are:

Sub-case I: Power I’s movement is defined by the $\{(Threaten); (Threatened)\}$ moves while Power II’s opposite movement, in the same direction, becomes determined by the $\{(Threatened); (Threaten)\}$ countermoves consecutively.

Sub-case II: Power II’s movement is defined by the $\{(Threaten); (Threatened)\}$ moves, whereas Power I’s opposite movement, in the same direction, becomes determined by the $\{(Threatened); (Threaten)\}$ countermoves, respectively; see Figure 9.

In both sub-cases, the “Status Quo Equilibrium” occurs, which is *unstable*, (-1) under perception and (complete/incomplete) certainty or deception and certain uncertainty conditions. The reason is that any power/actor during a crisis, clash, conflict, or war arising among both may have the impulse to deviate from a position of being “*threatened*” in a status quo situation if not reached *rationally* within a perception state of relative balance case. Should a deviation to the (Relatively-Balanced (ISPCDR)) equilibrium be the case rationally and in a reasonable order where one actor’s movement is shaped by the $\{(Not\ Threaten); (Threatened)\}$ moves, or opposite movement of the same direction is defined by the $\{(Threatened); (Not\ Threaten)\}$ countermoves, the equilibrium occurring, therefore, becomes stable under perception conditions.

The utility possibilities here are: $\{(S2, S2)^{-}\}$ and $\{(S3, S2)^{-}\}$ if $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(S2, S2)^{-}\}$ and $\{(S2, S3)^{-}\}$ if $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$. The “Status Quo’s Deviations I and II” directions are illustrated in Figure 10, where the “Relatively-Balanced (ISPCDR)”

equilibrium becomes the first preferred deviation-line rationally in a “Threat-for-Deterrence” modeling. Then, the “Outrightly-Balanced (ISPCDR)” equilibrium comes second according to the probability assumptions shown: $\{P1 < P2 \leq P3\}$.

Within the Incompletely-Balanced (ISPCDR) case of the Deterrence Entanglement Law, the (Central-Deterrence Point IV) exists where: i. $\{(B_{v(A1)})^{(CC)F1}\} \geq \{(B_{v(A2)})^{(CC)F2}\}$ if $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or ii. $\{(B_{v(A1)})^{(CC)F1}\} \leq \{(B_{v(A2)})^{(CC)F2}\}$ if $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$, given that both “Balance of Deterrence” positions include “*active and enabled*” capable and credible-(Threat Objects I and II).

Accordingly, the “Status Quo Equilibrium” is a crucial solution-point for achieving an incompletely-balance of some challenging deterrence relations and complicated conflicts, avoiding the war possibility further through a **(Backward Induction Mechanism)**. Within this mechanism, it can be transformed a (Deterrence Entanglement) state from a (Relatively-Balanced (ISPCDR)) to an (Incompletely-Balanced (ISPCDR)) for reaching an (Outrightly-Balanced (ISPCDR)) third, given that shifting the (Relatively-Balanced) case to an (Outrightly-Balanced) one necessitates the (Incompletely-Balanced) connecting-state to take place first. Although the $\{P1 < P2 \leq P3\}$, still transforming (P3) into (P2) requires moving back by a transition to (P1) first. That is because of the stability in utility achieved within the (P3) case in perception and certainty conditions (or even in some deception and uncertainty cases as long the deception is not exposed) _ since the opponent is reasonably better off by securing relative gains (i.e., “S4” vs. “S2”) it could acquire at the expense of the other under an equilibrium correctly (or incorrectly) perceived. In sum, the destabilization of (P3)’s relative balance is to occur first by (P1)’s incomplete-balance interference, for achieving a rational movement to (P2)’s outright-balance second once (P3) is disrupted. In that case, both actors become rationally better off by deviating from the recently reached position of incomplete-balance but to the outright-balance position, not the relative-balance one, under the *Backward Induction Mechanism*.

The Backward Induction Mechanism can also be used as a transformation bridge between two states of status quo if one of them is most likely to be avoiding the war possibility with a successful deterrence impeding the war/all-out conflict, which represents the (Status Quo Equilibrium) within the (DEL). Comparingly, the other state of status quo is

chaotic, which takes place second after an active war or active all-out conflict occurring in the same context once the deterrence fails. In that case, both positions still reflect an unstable outcome, but the future one is more destructing than being stabilizing. At the same time, the past position becomes the most stabilizing force of an instability accompanying a status quo, to which the Backward Induction is being made, restoring the “Balance of Deterrence (B)” under the Incompletely-Balanced (ISPCDR) case.

Table Assumptions:

- i. (x, y) : The Payoff to (Power I), the Payoff to (Power II).
- ii. $\{S2 < S3 < S4\}$.
- iii. Cases Probability (P):
 - $\{P1 < P2 \leq P3\}$
 - $\{P1 + P2 + P3 = 1\}$
- iv. $(x, y)^{\pm}$:
 - It Is a Stable Outcome, (+), Under Perception & Certainty.
 - It Is an Unstable Outcome, (-), Under Deception & Uncertainty.
- v. $(x, y)^+$ Is a Stable Outcome.
- vi. $(x, y)^-$ Is an Unstable Outcome.

	Relative Gains	Absolute Gains	Incomplete Gains	
	“Relatively-Balanced (ISPCDR)” $P3$	“Outrightly-Balanced (ISPCDR)” $P2$	“Incompletely-Balanced (ISPCDR)” $P1$	
	$\{(E_{va})^{+1}\} > \{(E_{vb})^{+1}\}$ $(S4, S2)^{\pm}$	$\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$ $(S3, S3)^+$	$\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$ $(S2, S2)^-$	Cases/Utility
	$\{(E_{va})^{+1}\} < \{(E_{vb})^{+1}\}$ $(S2, S4)^{\pm}$	Deviation I Deviation II	$\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$ $(S3, S2)^-$	
			$\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$ $(S2, S3)^-$	
	(Disguised) Opponent - Victory Equilibrium	Compromise Equilibrium	Status Quo Equilibrium	

Figure 10: The Utility and Probability of the Deterrence Entanglement Cases

Source: Prepared by the Author.

Ultimately, we can interpret the (Mutually Assured Destruction “MAD”) strategy under the “Incompletely-Balanced (ISPCDR).” The (MAD) entails that if one nuclear power attacks the other through a first nuclear strike, a second capable and credible nuclear strike will follow by the attacked nation against the aggressor from other lands than the attacked ones, should the first attacked homeland be overwhelmingly destroyed. Under a case of movement of $\{(Threaten); (Threatened)\}$ and opposite movement of $\{(Threatened); (Threaten)\}$ in the same direction, by both the US and Soviet Union, no matter who has what sort of movement, a deviation from this status quo outcome became a possibility more significantly after the Cold War ended. Such a swerve took a solid shape in

accordance with developing debates over (Ballistic Missile Defense Systems, BMDs)¹⁹⁰ that are supposed to operate by relying on obstructing or disrupting nuclear missiles in case the homeland is being attacked through a nuclear strike. Here, assuming that the US deviates from the status quo outcome by acquiring the (BMDs) technology, while Russia misperceives that its old rival would move from the (MAD) equilibrium position. Rationally, Russia, in this case, will have the incentive to change a would-be (Disguised Opponent-Victory Equilibrium) once being aware that the US shifted from the Cold War's (incomplete) balance of nuclear deterrence; and vice versa.

In general, both actors, who are the international system's old competing poles (i.e., the US and Russia as the Soviet Union's successor), would have had the impulse to deviate from the (Status Quo Equilibrium) either the surrounding factors, such as the existence of the Soviet Union, remained unchanged or not, due to the instability of this outcome itself. Furthermore, the system's two powers might reach a state of Outright Balance after the Cold War, concerning the nuclear deterrence theme, by mutually acquiring the (BMDs). In the latter case, and from the (DEL)'s perspective, the (Threat Object I or the first/initiating-nuclear strike) and (Threat Object II or the second/responding-nuclear strike), which both are capable and credible, become all *inactive* and *disabled*. In sum, the (MAD) strategy equilibrium will no longer be in play if the (Relatively-Balanced (ISPCDR)) case under perception, or deception/ intentional misperception state, or another case of (Outrightly-Balanced (ISPCDR)), is reached as courses of deviation from the (Status Quo Equilibrium) that framed the nuclear deterrence nature among both powers for decades.

2.3.3. The Deterrence Entanglement Law Rules

The Deterrence Entanglement Law includes three rules, considering these assumptions:

- a. The {(Tn), (UT), (NT), (Td)} are the abbreviations to the {(Threaten); (Unthreatened); (Not Threaten); (Threatened)} moves/countermoves, respectively.
- b. The (B_{ab}) is the "Balance of Deterrence (B)" for Power I/Actor I or (a/A1), and Power II/Actor II or

¹⁹⁰ Ballistic missile defense (BMD) system is a defense system designed to intercept and destroy ballistic missiles that first emerged through President Ronald Reagan's Strategic Defense Initiative (SDI), which is a program to use a space-based technology to strike down incoming strategic ballistic missiles (Kaarbo and Ray, *Global Politics*). However, it was not until the US decision, announced in 2001, to withdraw from the 1972 Antiballistic Missile (ABM) Treaty when this withdrawal allowed the United States to conduct tests, without any conditions, for a missile defense system (ibid).

(b/A2), in the “Threat-for-Deterrence” modeling, where both sides are *opponents* in the international system. c. The (+D) indicates a (deception (D) case of inter-state conflict situations, or an intentional misperception employed by one opponent versus the other, and certain uncertainty) factor. At the same time, the (-D) points out a (perception (or non-deception/D) case, of inter-state conflict situations, and complete/incomplete certainty) factor. d. The {(CC)F1} and {(CC)F2} are the (Threat-Capability and Credibility Factor 1) of (A1) and the (Threat-Capability and Credibility Factor 2) of (A2), consecutively.

2.3.3.1. Rule I of the Deterrence Entanglement Law: Relative-Balance Rule

$$\begin{aligned}
 ((Tn)^{(CC)F1} + (UT))_{A1} + ((Td)^{(CC)F1} + (NT))_{A2} &= B_{ab} ((E_{va}) > (E_{vb}))^{+1} + (-D) \\
 &= B_{ab} ((E_{va}) > (E_{vb}))^{-1} + (+D) \\
 ((Tn)^{(CC)F2} + (UT))_{A2} + ((Td)^{(CC)F2} + (NT))_{A1} &= B_{ab} ((E_{va}) < (E_{vb}))^{+1} + (-D) \\
 &= B_{ab} ((E_{va}) < (E_{vb}))^{-1} + (+D)
 \end{aligned}$$

The Balance of Deterrence in the system powers-conflict and deterrence relation exists, **relatively**, if one actor/power’s movement of {(Threaten); (Unthreatened)} moves, and the other actor/power’s opposite-movement, in the same direction, of {(Threatened); (Not Threaten)} countermoves, and vice versa, take place regarding the (Matter and Anti-Matter) for each, or two opposite Threat-Objects, within either movement. Contextually, the first’s equilibrium (E) value (v) exceeds the second’s, with permanent stability under perception and (complete/incomplete) certainty conditions and permanently instability or temporal stability under intentional deception or misperception and certain-uncertainty ones.

2.3.3.2. Rule II of the Deterrence Entanglement Law: Outright-Balance Rule

$$((NT) + (UT))_{(A1)} + ((UT) + (NT))_{(A2)} = B_{ab} ((E_{va}) \approx (E_{vb}))^{+1} + (\pm D)$$

The Balance of Deterrence in the system powers-conflict and deterrence relation **outrightly** exists if one actor/power’s movement of {(Not Threaten); (Unthreatened)} moves, and the other actor/power’s opposite movement, in the same direction, of {(Unthreatened); (Not Threaten)} countermoves, and vice versa, occur regarding the (Matter and Anti-Matter) for each, or two opposite Threat-Objects, within either

movement. Explicitly, the first's equilibrium value *equivalently* equals the second's, with stability under intentional deception or misperception and certain uncertainty conditions or perception and (complete/incomplete) certainty circumstances.

2.3.3.3. Rule III of the Deterrence Entanglement Law: Incomplete-Balance Rule

$$\begin{aligned}
 ((Tn)^{(CC)F1} + (Td)^{(CC)F2})_{(A1)} + ((Td)^{(CC)F1} + (Tn)^{(CC)F2})_{(A2)} \\
 &= B_{ab} ((E_{va}) \geq (E_{vb}))^{-1} + (\pm D) \\
 &= B_{ab} ((E_{va}) \leq (E_{vb}))^{-1} + (\pm D)
 \end{aligned}$$

The Balance of Deterrence in the system powers-conflict and deterrence relation ***incompletely*** exists if one actor/power's movement of {(Threaten); (Threatened)} moves, and the other actor/power's opposite-movement, in the same direction, of {(Threatened); (Threaten)} countermove, and vice versa, happen regarding the (Matter and Anti-Matter) for each, or two opposite Threat-Objects, within either movement. In this given context, the first's equilibrium value might exceed or equal, or be less than or equal, the second's, with *instability* permanently or temporal *stability* under intentional deception or misperception and certain uncertainty conditions, or perception and (complete/incomplete) certainty ones.

CHAPTER THREE: A GAME-AND HYPERGAME-THEORETIC ANALYSIS

3.1. A Game-and Hypergame-Theoretic Analysis and the Developed (Conflict or War Impediment Strategic Approach)’s Applying Cases

3.1.1. Part I: The (Deception Hypergame Model of Inter-state Conflict/DHMIC) Applying Cases

3.1.1.1. The (DHMIC) and Application: Hypergame-Analysis of the Cuban Missile Crisis

3.1.1.1.1. Historical-Theoretical Assumptions and Re-assessment

In mid-October 1962, the Soviet Union was on its way to installing ballistic missiles in the neighboring state to the US shores in the Caribbean region, Cuba, when the US administration knew about the issue. On October 22, Kennedy announced a blockade around Cuba, conveying an alarm to the Soviets while the missiles were being installed. Meanwhile, when the Soviets did not pick any action for removing the missiles, and it became evident in the US that it was the Soviet triumph moment, the US began preparations for airstrikes to be carried out on the Cuban lands with the intention of invasion should the Soviets not be repelled by the alarming blockade action. Eventually, the Soviet Union under Nikita Khrushchev and the US under John F. Kennedy agreed on the political bargain as a diplomatic resolution, ending the crisis.

From the Decision-Theoretic Deterrence Theory’s perspective, theorists went so far as to apply the Chicken game-model, theorizing about the crisis initiation, continuation, and resolution. It can be said that, under that theorization, the Soviets (Defected) because the US (Cooperated) when sending an alarm only through the blockade, leaving the *Soviet Victory* as an outcome with payoffs: (2, 4) for the US, and the Soviet Union, respectively. Also, both played their (Tit-for-Tat) strategy, reaching the *Compromise Outcome* with payoffs: (3, 3), through diplomatic resolution under mutually cooperation case. The last is considered an exit for the Soviet Union if the US had chosen to (Defect) by carrying out the airstrikes, and it cooperated. Moreover, it is an exit for both if the airstrikes (i.e., US’s possible (Defect) choice) resulted in a *Conflict Outcome* between the system’s two

polar should the Soviet Union defect sequentially, where all acquire yields that are worst entirely.

The Perfect Deterrence Theory came out by another conclusion explaining the Cuban missiles crisis. Zagare applied the theory's Asymmetric Escalation Game to the crisis trajectory, arguing that a (Constrained Limited Response Equilibrium (CLRE)) is the only one under the model that can explain the crisis' ensuing, continuity, and resolution.¹⁹¹ That is, the "Challenger (i.e., Soviet Union) must believe that the Defender (i.e., US) is likely to capitulate immediately because it was thought to be tactically soft, explaining why the missiles were placed in Cuba."¹⁹² However, "Defender (or the US) would also have to respond unexpectedly, and its response would have to be in-kind (when *Limited Conflict* or *Compromise Outcome* occurs) rather than escalatory _ precisely because Defender believes that an escalatory response would lead to a conflict spiral"¹⁹³ with the outcome *All-Out Conflict* resulting.

In our hypergame analysis, we consider these surrounding dimensions of the Cuban Missile Crisis: First: Khrushchev's reversal of the policy assessment regarding keeping the ballistic missiles in Cuba and moving to the diplomatic track instead. Second: Declared Soviet statements that made Kennedy and the majority of his administration "believe that the Soviets would respond forcefully regardless of the course of action they took... (while others) feared an attack on the missile sites in Turkey."¹⁹⁴

Third: It was apparent to the Soviet Union that the US does not capitulate (immediately) once its political interests are at stake. That is when considering the fierce US response to the Soviet Union-led-North Korean invasion of South Korea in 1950¹⁹⁵ _ that also was backed by the People's Republic of China. Leading South Korea's UN-defensive forces

¹⁹¹ Zagare, "General Explanation of the Cuban Missile Crisis."

¹⁹² Ibid, 111.

¹⁹³ Ibid.

¹⁹⁴ Ibid, 108.

¹⁹⁵ "(North Korea's) Kim and (Soviet Union's) Stalin, with (People's Republic of China's) Mao Zedong's weak assurance, decided an invasion in 1950 would succeed... (however) the US government under President Harry S. Truman did not make a unilateral commitment to defend South Korea from invasion but did pledge to protect the ROK (Republic of (South) Korea) through the United Nations" (Allan R. Millett, "The Korean War," The Gilder Lehrman Institute of American History: AP US History Study Guide, para. 9-10. https://ap.gilderlehrman.org/history-by-era/postwar-politics-and-origins-cold-war/essays/korean-war?gclid=Cj0KCQiA47GNBhDrARIsAKfZ2rDK7tJRCFEhH3kVE7LSPs8DwYBuW8voETdX3MHRk0_Sa4EaJH-Wz78aAjjXEALw_wcB. "Access Date 05/30/2022"). So, it was the US-UN-ROK anti-Communist alliance forces that fought the internationalized Korean War (1950-1953) against Soviet-North Korean-Chinese Communist armies.

in a collective security operation, the US fought the war thoroughly for protecting South Korea as a strategic zone in Asia, deterring and driving the Communist invading forces back across the internationally agreed-on borderline, the 38th Parallel, between both Koreas. Thus, the US maintained the balance of power system, securing its geopolitical influence in the Eastern hemisphere, at whatever cost. Fourth: The Second-Strike Capability or the Mutually Assured-Destruction (MAD) strategy that draws the lines of the US-Soviet Union/Russia nuclear relations since the 1950s. Under (MAD), if one nuclear power attacks the other through a nuclear strike, this will be met with an assured second-strike carried out in the aggressor's homelands and launched from other non-attacked lands _ in case if the first attacked nation is overwhelmingly destroyed _ through intercontinental ballistic missiles deployed there.

Fifth: The US removal of the ballistic missiles sites in Turkey without even consulting the Turkish government, following the political bargain with the Soviets regarding the Cuban missile crisis, is theoretically considered a deal of compromise over the Turkish missiles in exchange for removing the Soviet ones in Cuba. Aydın argues about a Cuban missile deal, demonstrating that “the missiles were still in Turkey when the Cuban missile crisis broke out and became a bargaining point when the Soviets proposed that the Jupiters be withdrawn in exchange for their missiles in Cuba.”¹⁹⁶ Jupiter missiles were the US's medium-range atomic warhead missiles installed in Turkey by 1958 and becoming operational by July 1962, while the Cuban missiles installed by the Soviet Union in 1962 were medium and intermediate-range ballistic missiles. By the crisis end, “the United States State Department denied any kind of “deal” over the (Turkish) missiles, (however) they were in fact removed from Turkey in 1963, without consulting the Turkish government, which actually owned the missiles, but not their warheads.”¹⁹⁷

Sixth: The Cuban missile crisis ended only by the Soviet Union agreeing to remove the Cuban missiles in an exchange through a brokered agreement for the US assurances that it would remove its installed Jupiter missiles from Turkey and not invade Cuba.

¹⁹⁶ Mustafa Aydın, *Turkish Foreign Policy: Framework and Analysis* (Sam Papers No. 1), (Ankara: Center for Strategic Research, 2004), 70. <http://www.mustafaaydin.gen.tr/wp-content/uploads/2011/02/Turkish-Foreign-Policy-Framework-and-Analysis.pdf>. “Access Date 06/15/2022”

¹⁹⁷ Ibid.

In retrospect, on October 25, 1962, Khrushchev proposed ending the crisis through diplomatic means, namely, within three days of the American response by announcing blockade and receiving Kennedy's personnel letter and a copy from his televised address by October 22. Afterward, Khrushchev sent his first letter to Kennedy outlining the political bargain on October 26, when he received information that the US was preparing for an airstrike to be carried out in Cuba on the same day.¹⁹⁸ Thence, getting no American opposition to the first letter, Khrushchev raised a (deal) issue in a second letter *demanding* Kennedy remove the missiles from Turkey on October 27.¹⁹⁹ Here, Khrushchev, who proposed ending the crisis diplomatically on October 25, even before receiving information about the US airstrikes and invasion preparations the next day, had addressed *first* a deal of not invading Cuba on that day (i.e., October 25), while his October 27-second letter *only* addressed *demanding* of removing the Jupiter missiles.

Accordingly, there are two apparent analysis factors. First, Khrushchev was not surprised by the American escalatory response but even thought about trading or dealing over not invading Cuba (only and first). He suggested the bargain saying that: "Kennedy says to us: take your missiles out of Cuba. We respond: 'Give firm guarantees and pledges that the Americans will not attack Cuba.' That is not a bad [trade]."²⁰⁰ That occurred within three days of receiving Kennedy's letter before he became aware in the next day that the US would credibly escalate. Second, Khrushchev highlighted one and only one "mini-issue," on October 25, which is: not invading too little land (i.e., Cuba) in a region dominated by the US influence (i.e., the Caribbean), predicting and *not missing* the American intention to escalate if they escalated. At the meeting of the Soviet Presidium on October 25, he said that: "The Americans say that the missile installations in Cuba must be dismantled. Perhaps this will need to be done. This is not capitulation on our part. Because *if we fire, they will also fire*."²⁰¹ Nevertheless, he moved to strike (another) deal through the second letter, demanding the removal of Jupiters from Turkey as a *condition* of would-be successful bargaining resolving the crisis.

The questions now are; a. Should Khrushchev realize that the Americans would escalate if the Soviets did and suggest the political bargain even before knowing about the US

¹⁹⁸ Zagare, "General Explanation of the Cuban Missile Crisis."

¹⁹⁹ See, *ibid*.

²⁰⁰ *Ibid*, 113-114.

²⁰¹ *Ibid*, 113.

escalation preparations, why did he move to the missiles installation's action at first if he *merely* suspected that no political interests or maximized utility would result from it? b. If the missiles in Turkey were not the actual deal but "protecting Cuba," why did Khrushchev send his second letter just after the US showed acceptance of cooperation and compromise, in which he addressed solely one haggling issue: removing the Jupiters from Turkey, proposing it as a crucial matter of the deal, as Aydin argued, or the reached agreement on the negotiation table? Had the first letter been the strategic lure or camouflage of the second? Khrushchev *did not miss* the Americans' fierce expected response should he anger them *unexpectedly*, given the Korean War's memory, as well as he did not seek the escalation or war choice but attempted to declare intentions of avoiding war. Thus, Khrushchev reversed his policy assessment of installing ballistic missiles in Cuba (i.e., his first preferred choice) _ which are designed in the same range (i.e., medium) of those that the US had installed in Turkey first, once his second preferred action (i.e., the missiles' removal from Cuba) seemed to achieve the maximized utility he expected (i.e., not invading Cuba by the US and conditioned missiles' removal from Turkey).

Based on the previous facts and re-assessment, the Soviet Union incentive to place the missiles does not seem to be the belief of an immediate American capitulation when/after the missiles were being installed under the Constrained Limited Response Equilibrium (CLRE₁) as Zagare argued in his 2014 and 2016's game-theoretic analysis of the crisis.²⁰² Also, it was not the (manipulated) American fear of spiral of conflict with the Soviets prepared to respond forcefully to any action they took _ as Zagare demonstrated, that managed the crisis resolution course, at least synchronically given the event's surrounding "*actual*" actions and "*perceived*" equilibria by the other opponent (i.e., Soviets) at that time. Therefore, another explanation is needed here, based *not* on the game analysis but on the hypergame's _ illustrated in the next section _ since the hypergame is the game theory's extension and development facet of misperception/deception-multiple games in one modeling function.

²⁰² See in, Frank. C. Zagare, "A Game-Theoretic History of the Cuban Missile Crisis," *Economies* 2 (2014): 20-44; Frank. C. Zagare, "General Explanation of the Cuban Missile Crisis," in *International Journal of Peace Economics and Peace Science*, Vol. 1, No. 1., ed. Manas Chatterji and Chen Bo (The UK: Cambridge Scholars Publishing, 2016), 91-118.

3.1.1.1.2. Hypergame Analysis of the Cuban Missile Crisis as Interstate Conflict Case: Theoretical Model and Application

Before the Cuban Missile Crisis began, it can be said that there was a first-level hypergame played first before the second-level hypergame started, where both integrate at one point that we call: ***Mixed-Levels Hypergame***. In the first-level hypergame, there can be misperceptions and misunderstandings about the other players' preference vectors, so that it is composed of each player's perceived game. In comparison, in the second-level hypergame, at least one player knows that there is a hypergame being played and that another player has misperceptions in the game; thus, it consists of perceived hypergames by all players.

3.1.1.1.2.1. The Cuban Missile Crisis' First-Level Hypergame

In the first-level hypergame, the Soviet Union, by 1958, when the US started the deployment of Jupiter missiles in Turkey, was aware that the US had two strategic preferences: a. "Nuclearize a Neighboring State to the Soviet Union's Borders and Posing a Threat;" or b. "Not Nuclearize a Neighboring State and Not Threaten the Soviet Union's Geopolitical Security." Sequentially, the US was not _ or entirely, aware of the Soviet Union's strategic preferences; these were: "Nuclearize a Neighboring State to the United States' Borders and Posing a Threat;" or b. "Not Nuclearize a Neighboring State and Not Threaten the United States' Geopolitical Security."

The first-level hypergame of the Cuban Missile Crisis simulates the Prisoner-Dilemma model's strategy choices under incomplete information game, where there were four possible outcomes: a. both admit: (Nuclearize a Neighboring State; Nuclearize a Neighboring State) with payoffs *next-best* to both; b. one admits, and the other denies: (Nuclearize a Neighboring State; Not Nuclearize a Neighboring State) so that the first achieves its best payoff while the second gets its worst yield; c. one denies and the other admits: (Not Nuclearize a Neighboring State; Nuclearize a Neighboring State) where reversely the first gets its worst payoff, and the other gains its best one; d. Both deny (Not Nuclearize a Neighboring State; Not Nuclearize a Neighboring State) where each obtains its best payoff in a real-world situation of the game. Before the Soviet Union initiated the Cuban Missile Crisis by October 1962, the US had backed down on its move/decision of "Nuclearizing a Neighboring State to the Soviet Union's Borders and Posing a Threat,"

maintaining, therefore, the balance of power system. That is, “in 1961, the United States had begun negotiations with Turkey for closure of missile sites. Under pressure from the military, however, the Turkish government opposed the idea, and the United States dropped the matter.”²⁰³ If the US had succeeded in picking the “Not Nuclearize a Neighboring State and Not Threaten the Soviet Union’s Geopolitical Security” choice, the outcome would have been similar to that case of the Prisoner-Dilemma model of: (Deny, Deny), or (Not Nuclearize a Neighboring State; Not Nuclearize a Neighboring State). So, both would have achieved their best payoffs under that possibility of “*early*” mutually not nuclearizing.

Given that the US was not (entirely) aware of the other player or the Soviet Union’s strategic preference vector in the first-level hypergame, the Cuban Missile Crisis occurred by mid-October 1962 when the US acquired correct information about the Soviet Union’s actual move and strategic preference of (Nuclearizing a Neighboring State to the United States’ Borders and Posing a Threat). Rationally, the Soviet Union would have been better off under either situation: a. Both admit: (Nuclearizing a Neighboring State; Nuclearizing a Neighboring State). Consequently, the other player (i.e., opponent) who admitted first when the second denied might have, correctly or incorrectly, perceived that both achieve their next-best payoffs by mutually nuclearizing, and no one is worse off _ in a first-level hypergame merged in a second-level one. Rather, b. Both deny: (Not Nuclearizing a Neighboring State; Not Nuclearizing a Neighboring State), where all actors become better off or perceive that they are, in a deception hypergame. The Soviet Union sent the alarm, therefore, to initiate its second-level hypergame, which we explain below.

3.1.1.1.2.2. The (DHMIC) and the Cuban Missile Crisis in a Second-Level

Hypergame: The Model and Its Application

Applying our “Deception Hypergame Model of Interstate Conflict (DHMIC)” to the Cuban Missile Crisis, we consider that the Soviet Union is Power-I or (P-I) in the model, and the United States is Power-II or (P-II).

(P-I) in the crisis preferred to make a (Demand) by installing the missiles in Cuba, say by mid-October 1962, altering the status quo, and deceiving (P-II) about its actual played

²⁰³ Aydın, Turkish Foreign Policy: Framework and Analysis, 172.

game, and its beliefs and perceptions about the conflict while being the only player who knows that a hypergame is being played and that (P-II) has misperceptions about the game. In a sequence, (P-II), misperceiving that (P-I) would be better off by jointly cooperation choice and compromise outcome in a game of superpowers where a mutually nuclear-destruction possibility exists, preferred to (Cooperate), however, first.

Under this stage, the Soviet Union calculates that if the US does not show defecting and tolerate the action, then the outcome is: "*Soviet Union Victory*," with payoffs: (4, 2), should (P-I) play its deceiving (Tat-for-Tit) strategy, defecting second after (P-II)'s deception-directed-(Cooperate) move. That is the first perceived equilibrium according to (P-I)'s understood hypergame. The last outcome would have been the equilibrium in play if the (P-I)'s opponent (i.e., US) perceived that the "mutually nuclearizing a neighboring state" choice, when both admit or use (Nuclearizing a Neighboring State; Nuclearizing a Neighboring State) pair of strategy, would result in next-best payoffs for all. Contextually, the US preferred to (Cooperate) "first," from mid-October to October 26; sending a personal letter of Kennedy, on October 22, with a copy of his televised address to the Soviet Union's leadership when a blockade took place by the US around Cuba.

(P-I) or the Soviet Union, receiving information on October 26 that the US prepares to carry out airstrikes in Cuba and possible invasion, decided to start a sub-hypergame. Here, (P-II) or the US preferred to change the correctly perceived outcome of "(P-I) Wins," re-playing the (Defecting) choice, taking the risk of possible "Conflict Outcome" if (P-I) chose to (Defect) sequentially, under a misperceived (Tit-for-Tat) strategy. Considerably, Khrushchev, and before that on October 25, declared a proposal of his preference to a diplomatic resolution of the crisis, and that if they fire the Americans will also fire, and that it is a good trade of receiving assurances concerning Cuba resolving the crisis through a political bargain with the US. Thus, the Soviet Union was ready for America's defying action drawing the future course if the US moved to (Defect) and predicting the possibility of conflict that Khrushchev showed to avoid.

In this context, (P-I) initiated its sub-hypergame, picking a (Conditional Cooperation) action when Khrushchev sent its second letter on October 27 demanding removing the US-controlled-missiles in Turkey, after Kennedy did not oppose the cooperation and

political bargain choice included in the first letter (sent on October 26) for ending the crisis. At the same time, the available information for the US was assumed to be clear about Soviet intentions to protect Cuba (first and only) through diplomatic resolution, declared in the October 25 Soviet meeting, if known _ that took place before the Soviets knew about the US preparations of an airstrike and probable invasion the next day.

Sequentially, a (*misperceived*) “Compromise Outcome” occurred, through a brokered agreement, as the equilibrium of the day with payoffs that are “supposed” to be next-best gains, (3, 3), for both, when the Soviet Union cooperated *conditionally* removing the missiles from Cuba, and the US *unrestrictedly* cooperated removing the Jupiters from Turkey in 1963 and not invading/attacking Cuba.

Apparently, should (P-I) move to the (Conditional Cooperation “CC”) and (P-II) choose the (Cooperate) action under no “*equivalently*” conditions made, in deception-based hypergame/sub-hypergame, not acting likewise and picking the (CC) choice, the resulting outcome becomes: “*Disguised Compromise or Disguised Opponent-Victory*,” with payoffs: (4, 2). The case that we explain next.

3.1.1.1.3. Further Explanation: A Deterrence-Based/For-Deterrence Hypergame; Why and How a “Disguised Compromise or Disguised Opponent-Victory” Outcome?

Using a stratagem of *conditional cooperation* as the alternate and consequent interaction to (installing the ballistic missiles in Cuba) choice (i.e., “P-I’s Demand”), Khrushchev spread information about concerns over “protecting” little objective, however neighboring the US lands, of an island located in the Northern Caribbean Sea (i.e., Cuba). It is the same objective that the US already sought to invade by April 1961 under the Bay of Pigs invasion operation²⁰⁴ while the Soviet Union had done nothing. In the same

²⁰⁴ “On April 17, 1961, 1,400 Cuban exiles launched what became a botched invasion at the Bay of Pigs on the south coast of Cuba... The US government distrusted (Fidel) Castro (who came to power in 1959 through an armed revolt) and was wary of his relationship with Nikita Khrushchev, the leader of the Soviet Union. Before his inauguration, John F. Kennedy was briefed on a plan by the Central Intelligence Agency (CIA) developed during the Eisenhower administration to train Cuban exiles for an invasion of their homeland... The ultimate goal was the overthrow of Castro and the establishment of a non-communist government friendly to the United States... Over the next 24 hours (that followed April 17), Castro ordered roughly 20,000 troops to advance toward the beach, and the Cuban air force continued to control the skies... (consequently) the invasion was crushed later that day” (“The Bay of Pigs,” John F. Kennedy Presidential Library and Museum, para. 1-11. <https://www.jfklibrary.org/learn/about-jfk/jfk-in-history/the-bay-of-pigs>. “Access Date 05/30/2022”).

context, the Soviet Union could gain momentum during the 1962 Cuban Missile Crisis, moving to political bargain based on making a deal of:

Firstly: Public assurances of not invading Cuba. It is the same island country that became an ally *newly* just after Fidel Castro seized power in 1959 and proved to defeat the US forces “*alone*” without any (witnessed) Soviet interference or support (!) in the 1961 invasion.

More comprehensively, the deal’s first part can be seen as the camouflage or misperception delivered over the crisis resolution trajectory. Namely, the Soviet Union conditioned that the US does *not* attack Cuba when pledging not to invade it if the missiles were withdrawn so that *protecting Cuba* manifested as a declared public goal. At the same time, that request disguised the possibility that the public assurances were meant and required because the Soviets “*primarily*” sought to achieve that strategic objective (i.e., the Soviets’ (assumed) actual perception), creating their long-lasting threatening client state versus the US expansion goals. Briefly, it embodied a Soviet aim of only securing Cuba to assure that sequentially there would have been no further threat to approach Cuban lands if they accepted the compromise, which is the declared “*misperception*.”

Secondly: Private assurances of the removal of Jupiter missiles from Turkey that “became a bargaining point when the Soviets proposed that the Jupiters be withdrawn in exchange for their missiles in Cuba.”²⁰⁵

If we consider that: a. the US was negotiating with Cuba’s Castro to liberate more than 1000 prisoners of the Brigade²⁰⁶ that surrendered coinciding with the defeat in the Bay of Pigs invasion in April 1961; b. Cuba delivered some freed prisoners to the US in an airplane by December 1962, just after the Cuban crisis’ end of two months. Thence, it is remarkable that the Soviet Union was dealing as the victor peace-applying party confronting the US defeat in the Bay of Pigs, even by the agency. The side who watched to pick up the war’s spoils sequentially. In sum, asking for two issues no more, when the

²⁰⁵ Aydın, Turkish Foreign Policy: Framework and Analysis, 70.

²⁰⁶ “Almost 1,200 members of Brigade 2506 (the Cuban-exile invasion force which also included some US military personnel) surrendered... The brigade prisoners remained in captivity for 20 months, as the United States negotiated a deal with Fidel Castro... On December 23, 1962, just two months after the end of the Cuban Missile Crisis, a plane containing the first group of freed prisoners landed in the United States” (“The Bay of Pigs,” para. 14-16).

US had been in the weak position, after initiating a crisis that they knew all its trajectory's divergent tracks in advance meant that the Soviets applied a deterrence strategy against the US, which is extraordinary.

(Not invading Cuba; and getting out of Turkey) dual-strategic objective indicates a strategy translated into: (The US Deterred Westward, and the US Deterred Eastward, in an Entanglement). In the Western Hemisphere, it would have been the Communist ideology that strongly competes with the Liberalist one in Latin American countries; it is not only so. If the US had sought any future nuclearizing policy of allies _ who are enemies or may threaten the Soviet borders or Soviet geopolitical interests, it could never have pursued. The reason is that the Soviet Union secured its borders in the Eastern Hemisphere and simultaneously created its Israel state in the Western Hemisphere, that is, Cuba, through the brokered agreement's private and public assurances, respectively. The last had set the limits of a perceived (however incorrectly) one-way of the crisis' diplomatic end, if sought, rather than resorting to war. Interestingly, the Soviet Union seemed to be following in the footsteps of Great Britain in the Middle East through the famous 1916 Balfour Letter that created Israel in 1948 as a European-style client state considering a possible evacuation of the colonization's Western forces _ since the world was undergoing World War I (1914-1918) first and it had been at the edge of World War II, second, in the late 1930s.

In retrospect, it was not surprising that the US hegemony became in decline either in the West or the East while rising Russia could survive and further expand in Eastern Europe and the Middle East, after the collapse of the Soviet Union, in the 21st century early decades. Intelligibly, a deception-oriented-compromise became equal to the "Humiliating Capitulation" outcome, in that case, or fairer to say: (Disguised Soviet Victory) outcome under a deceiving "*Disguised Compromise*," where the Soviets obtained their best payoffs in real-world circumstances, leaving the US to misperceive that both got their next-best gains (i.e., "3, 3") while it achieved its next-zero-state worst; namely (4, 2) for the Soviet Union and the US, consecutively. If the Kennedy administration was convinced that it removed the missiles from Cuba, solving the crisis _ the missiles that could have been removed through an initial (Defecting) action under an international justification of invasion, that time, by mid-October 1962, liberating prisoners it sought to freed

eventually, that administration, in fact, rewrote the political history of its nation, however, not appropriately.

Should the US pick its “*Conditional Cooperation*” choice instead of *unconstrained cooperation* or “*Cooperate Only*” preference, there would have been two admitted possibilities seeking a reliable compromise. The *first* is the (mutually not nuclearizing a neighboring state) action while rejecting the (not attacking/invading Cuba) condition. The *second* is the (not attacking/invading Cuba) pledge but (nuclearizing a neighboring state/Turkey). In either possibility, the compromise would have been credible and *not* deceiving, with payoffs: (3, 3) of an *actual* “Compromise Outcome.” Furthermore, the first possibility of the (mutually not nuclearizing a neighboring state; but not pledging to not invading Cuba) is more stable. The last proves to secure more solidified balance conditions occurring if the US did not threaten the Soviet Union’s geopolitical security, leaving it to expand Eastward at the expense of partially hindering American expansion. That is to take place in exchange for restricting the Soviet Union from threatening the US’s geopolitical security in the Western Hemisphere while the US expands within, more broadly _ including possible integration of Cuba as an American state, for example, if not a client or invaded one. Under that case, the US was to be enabled to deter any (disguised) Soviet or Communist expansion or geopolitical threat in the Western Hemisphere directed against an *absolute* balance of deterrence relation among both powers.

Nevertheless, the Soviet Union’s played strategy of (*The US Deterred Westward, and the US Deterred Eastward in an Entanglement*) did and does prove its success in contemporary history followed and the future that everyone apparently witnesses _ even after the collapse of the Soviet Union through rising Russia. Briefly, the US concessions made in a deception-derived sub-hypergame, while the Soviet Union was the deceiver, besieged its expansionist policies and left it a captive to the Soviet Union’s will _ should its future deterring choices be against that will of the opponent. Strikingly, the US gave its opponent (i.e., the Soviet Union) its impediment codes to use versus it (!). The reason is that the Soviet Union/Russia became rationally better off if it responded forcefully, credibly this time, through Cuba’s relevant actions if the US approached Soviet geopolitical security’s priorities without previous “*consulting*” or repeated conditional cooperation.

Therefore, the US-deterrence's free passage versus the Soviet Union in either the Western Hemisphere or the Eastern one became restricted, and empowerment to its alliance system in both directions in extreme methods fell under question by the opponent. Simultaneously, the Soviet Union, not equivalently deterred, that had remained intact in the past up to the 1989 Eastern Europe revolutions, which caused the Soviet Union's collapse, could gain its free passage to the Middle East in Syria and Eastern Libya at an increasing influence level through rising Russia in the 21st century. It is the same choice that it would have been deprived of _ should its gate to the Middle East (i.e., Turkey) be a Western nuclearized fortification. That is if the US could have secured its massive influence in the Western Hemisphere by expanding geopolitically in neighboring Cuba, not to coexist under a continuous penetration-state due to existing a Soviets' gate to the US lands (i.e., Cuba) as an alternative status quo. Moreover, one penetration of an alliance's superpower proved to be a penetration of all members sequentially. Ultimately, it appears that the Soviet Union was *rational* enough to sacrifice its 15 republics'²⁰⁷ security priorities for a minor land of possible client state too far away from its borders under a probability of *Mutually Assured Destruction* (MAD) _ if both defected with the conflict arising. The minor puppet-state that had become the *launch button* of its opponent (i.e., the US) influence's decline age, and the *securitization one* for Russia's *firm* survival for decades to come.

In conclusion, it can be said that the Soviet Union's played-hypergame would not have succeeded if the US did not fear the second-strike capability outcome within the (MAD) possibility if the conflict had been the case. Without possible (MAD) effect, the US had been capable of deviating from the conditional cooperation course imposed upon it against its will through Khrushchev's second letter when the last correctly reasoned about the US leadership's most preferred choice (i.e., cooperation) if he moved to a (supposed) compromise outcome. Given that the Soviet Union also relied on a deterrence-directed-hypergame, which is not only based on existing deterrence relations of (MAD) but sought extra future extended-deterrence in any (relevant) symmetrical confrontation versus the

²⁰⁷ The United Soviet Socialist Republic (USSR) or the Soviet Union, established by 1924 under Russia's leadership and dissolved by 1991 after its communist government's collapse, had included 15 constituent member states. Those Soviet republics are; Russia, Ukraine, Georgia, Belorussia, Uzbekistan, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova, Turkmenistan, Tajikistan, Latvia, Lithuania, and Estonia.

US, we call that deception hypergame: “*Deterrence-Based-Deterrence and Deterrence-For-Deterrence Deception-Multiple Game.*”

Further, the Soviet Union could orient the US to the “Not Nuclearizing a Neighboring State to the Soviet Union and Not Threatening the Soviet Union’s Geopolitical Security” choice of the first-level hypergame played first, through its second-level hypergame, that is what we call: *Mixed-Levels Hypergame* in global politics. At the same time, the Soviet Union could maneuver diplomatically through a reached misperceived-compromise, or the “Disguised Opponent-Victory” equilibrium, using a binary strategy of “Not Nuclearizing a Neighboring State to the US and the Soviet Union’s Borders; Not Threatening the Soviet Union’s Geopolitical Security and Continuous Threatening the United States’ Geopolitical Security.” Thus, the Soviet Union achieved a *hyper-strategic triumph*, re-demarcating the geopolitical map of influence among the system’s two-polar the way it fits its future ambitions and expansionism goals.

3.1.1.1.4. Coda: The Cuban Missile Crisis Equilibrium’s Theoretical Proof; an Analogical Case of the Relatively-Balanced (ISPCDR)

Based on our previous theoretical explanation of the Cuban Missile Crisis under the (DHMIC), and considering that Actor I is (Power I) or the Soviet Union, that is abbreviated as (a, or A1), and Actor II is (Power II) or the US, that is abbreviated as (b, or A2), where both actors are para-equal in the military, political, and technological power, then:

The crisis’ equilibrium of “*Disguised Compromise or Disguised Opponent-Victory*” is a case resembling that of the “*Relatively-Balanced-Initial Stability in Powers Conflict and Deterrence Relation (ISPCDR)*” in a One-Sided Extreme-Threat State, which is “Case I of the (ISPCDR) conditionality,” as follows:

First: The $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$ where $\{(E_{va})^{-1}\} > \{(E_{vb})^{-1}\}$ so that Actor I’s equilibrium value (i.e., “4”) exceeded Actor II’s (i.e., “2”) in a deception hypergame-situation, should the givens and surrounding factors of the crisis’ equilibrium remain unchanged. That equilibrium was *unstable* because the deceived (i.e., the US) would have had the incentive to deviate once the deception had been revealed. Examples of the factors’ changeability are: “Cuba shifting into the Liberal block, not the Communist or non-allegiance one; the

Soviet Union's collapse; Turkey's empowerment as a Western fortification-gate by equivalently deterring methods, for confronting/repelling Soviet/Russian expansion." If the same equilibrium had been reached under *perception* and *certainty* state, it would have been *stable* since none would have had the incentive to deviate from a *correctly* perceived "Opponent Victory Outcome" if the conflict or crisis ended "jointly" based upon it.

Second: If $\{(E_{va})^{-1}\} > \{(E_{vb})^{-1}\}$, then $\{(B_{v(A1)})^{(CC)F1}\} \neq \{(B_{v(A2)})^{(CC)F2}\}$ where $\{(B_{v(A1)})^{(CC)F1}\} > \{(B_{v(A2)})^{(CC)F2}\}$ so that Actor I's balance could overwhelm Actor II's, provided that the givens and surrounding factors of the crisis' equilibrium remained unchanged.

3.1.1.2. The (DHMIC) and Application: Hypergame-Analysis of a Russian-Ukrainian War Possibility; a Possibly Actual State of the Defected-(Conditional Cooperation) Case

In this part, we apply our "Deception Hypergame Model of Interstate Conflict" to another similar case where an escalatory level of interstate conflict exists, based on deception, misperception, or/and uncertainty conditions. Considering an assumption that Russia has the preference of "Invasion/Expansion in Eastern Europe" under whatever context and that this is going to occur inside European territories targeting an entire sovereign state such as Ukraine, the (DHMIC) is employed as follows:

3.1.1.2.1. First

A deception hypergame played by (P-I) cannot be oriented towards a (Compromise Equilibrium) resulting from using the (Conditional Cooperation, Conditional Cooperation) strategies, or the (Disguised Compromise) outcome if the (P-II) preferred to (Cooperate Only), by Russia (i.e., first player/ P-I) and the European Union or the concerned European nation-state (i.e., second player/ P-II), respectively. Under that case, the first player realizes that a choice of (Conditional Cooperation "CC") would rationally be met by (P-II)'s defecting action.

3.1.1.2.2. Second

The (Defect) choice of (P-I), initiating a second play, became the rational track for this player, within our model's confines, consequently. Here, the second player had

cooperated first, incorrectly perceiving that it was a (Tit-for-Tat) strategy's game. Thence, (P-II) would/did move to re-play, picking the (Defect) choice in the first play after its cooperation was met by maintenance or defecting preference by the opponent, in a (Demand + Tat-for-Tit) deceiving strategy-based hypergame, allowing the first player to win, however temporarily.

3.1.1.2.3. Third

Reasonably, the first player's (Defect) choice in a sub-hypergame it initiates can achieve its war gains better than moving to the (CC) course alternatively. Sequentially, either the (Conflict Outcome) occurs when both defects where (P-I) well prepared for this war, or that the second player chooses to begin a sub-hypergame or move to the (Cooperate) action allowing for the outcome "(P-I) Wins" to be in play as equilibrium, avoiding the credible war outcome.

3.1.1.2.4. Fourth

Given that the (Conflict Outcome), if occurred, would take place not on the invader's lands _ as to counter-inflicting it from many possible sides once the war arises, but on the invaded (i.e., possible European territory) lands, thus smashing these battle zones territorially if not harshly economically and politically by (P-I)'s war preparations under its Play II, the payoffs will be (2, 1).

3.1.1.2.5. Fifth

The solution point, according to the (DHMIC) will be ascertained through starting a sub-hypergame by the reactor (i.e., "P-II"), relying on a strategic surprise to the actor-aggressor or the invader, responding in kind, and seeking the "Constrained Limited Response Equilibrium; (P-I) Deterred" outcome in collective security-initiated-(military) actions _ as illustrated within the model's relevant strategic choices-trajectory. The "(P-II)'s Preventive War" is the highest-probable possibility if (P-I) escalated first. However, the capable and credible *threat(s)* existing, which ought to be directed against the opponent, is significantly a condition for deterrence success among the system's powers in such interstate conflicts, avoiding the all-out conflict output occurrence from the core. That associates with joint equilibria reached and balance of power maintained, under

certainty or uncertainty conditions, that we explain in the next chapter under a developed (Deterrence Entanglement Law).

3.1.1.2.6. Sixth

If the second player reasons that it moves to “(P-I) Deterred” equilibrium, initiating its deception-based sub-hypergame, however declaring the possible strategic surprise to the first player, that equilibrium does not occur. The deception basis for (P-II)’s sub-hypergame was that: surprising its opponent strategically. Once an alarm is sent to the opponent, at this stage of Play II, revealing what would be a strategic surprise, the (P-II)’s action is being transformed into (Defect) second after the first player (Defected) first in its initiated sub-hypergame. That is to say, if (P-I) is well-prepared to the war in “Play II,” (Defecting) first, and expecting the war gains/spoils when the payoffs become: (2, 1), an alarm-declaration tactic, if followed by (P-II), would further empower (P-I) in its war preparations in a defecting play it started. That is, since the “deception basis” under a “strategic surprise” by (Defying/Response-in-Kind) *unexpectedly*, as the rational choice track in a possible third play initiated by (P-II), has been exposed even before starting. So, (P-I)’s reinforcements empowering, or (P-II)’s failed deception of the would-be third play, occurs because of such a “*step-back tactic*” of warning-declaration directed toward (P-I) and made by (P-II) itself, under this possibility. In sum, it is the war outcome that takes place within the same “Play II” by both defecting, not the possible “Limited Conflict; (P-I) Deterred” equilibrium of “Play III,” where (P-I) gets more, (2, 1), thanks to the strategically weak, (P-II), who becomes even worse off.

3.1.2. Part II: The (Deterrence Entanglement Law/DEL) Applying Cases; the (DEL)’s Theoretical Application and Five Descriptive-Prescriptive Conflict Cases

Before starting to apply this research’s developed-Deterrence Entanglement Law in a (Threat-for-Deterrence) modeling for conflict or war impediment purpose addressing conflicts among powers/actors (i.e., states) in the international system and deterrence relations, we must ask first: i. What is the (Matter) for one power/actor that is an (Anti-matter) for another? And ii. what is the (Anti-matter) for one power/actor that is a (Matter) for the other?. Such interactions occur under entanglement relations that lead to achieving the balance within, where we confirm these assumptions: a. The (Matter and Anti-matter)

are the (same Matter or Threat Object) at the (same Move and Countermove), where one (Matter/Threat Object) for a power/actor is an (Anti-matter/Anti-Threat Object) for the other, and vice versa. b. The (Matter and Anti-matter) are (different Matters and Anti-matters) at (different Moves and Countermoves) so that a movement of one actor implies two (Threat Objects) in opposite ways, and an opposite movement in the same direction of the other actor includes these two but reversely. Also, the two (Threat Objects) are capable and credible. c. The first (Matter and Anti-matter) as well as the second, which are two (Threat Objects) in opposite ways of the same direction, must be equivalently equal in “*level*” or/and “*scale*.” Based on that, a *deterrence sufficiency* condition in line with the (Threat Objects)’s *capability and credibility* criteria provision becomes (partially/completely) fulfilled for reaching a state of balance of the (Initial Stability in the System Powers’ Conflict and Deterrence Relation “ISPCDR”). d. The {(Tn), (UT), (NT), (Td)} are the abbreviations to the {(Threaten); (Unthreatened); (Not Threaten); (Threatened)} moves/countermoves, respectively.

Lastly, what if there is only one (Matter) for one actor, and no (Anti-matter) exists (strongly) against the same actor? Here, this actor’s (Anti-matter) must be created by the other actor/opponent if the theoretical analysis proves that one of three balance cases is achieved through such a “*created (Anti-matter)*,” should the war seem to be avoided/avoidable at its emerging expense. Within the analysis cases, we point out where an “optimal point of balance” takes place, either of “Relative, Outright, or Incomplete Balance Rule” under the “Deterrence Entanglement Law,” which we mark as a **(Conflict/War Impediment Point)** for the given crisis, conflict, or war case, and name it as a *solution point*. It is worth noticing that if the all-out conflict or war outcome arises despite one or more explanations we introduce on a balance-state of a prescriptive conflict case, it does not mean that the (DEL) fails, which can never occur. However, it means that the human interactions in managing and governing a particular conflict situation using the reached law fail to fulfill this law’s rules’ conditions, and therefore political, military, diplomatic, economic, and public interrelated strategies are needed after the outbreak of war or all-out conflict (not a targeted, planned limited conflict for deterrence’s sake). Still, the (DEL) is one of the best *dynamic-and applicable theoretical* methodologies employed for stabilizing the international system, concerning the powers’ conflict and deterrence relation, for a conflict or war impediment’s sustainable outputs in

the future once a misguided attempt of this law's application is being surmounted and re-drawn.

3.1.2.1. The First Theoretical Application of the Deterrence Entanglement Law: The Cuban Missile Crisis

3.1.2.1.1. Case Assumptions Brief

a. Actor I is the Soviet Union, and Actor II is the United States; b. Actor I's (Matter) is "Cuba," and (Anti-matter) is "Turkey;" c. Actor II's (Matter) is "Turkey," and (Anti-matter) is "Cuba." d. The theoretical application addresses the crisis under the factors that manifested by the 1960s, such as existing the "communist revolutionary anti-America Cuba; USSR or the Soviet Union under Russia's leadership; and nuclearized Westernized-liberalist Turkey."

3.1.2.1.2. Balance States

3.1.2.1.2.1. The Relative Balance Rule; When $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$

First, if $\{(E_{va})^{\pm 1}\} > \{(E_{vb})^{\pm 1}\}$: This case is shaped by a. Actor I's movement of (Tn; UT) or (Uncontained Pro-Cuba; Contained Anti-Turkey) moves, and b. Actor II's opposite movement, in the same direction, of (Td; NT) or (Uncontained Anti-Cuba; Contained Pro-Turkey) countermoves; or vice versa²⁰⁸. Such a case was actually achieved through the brokered agreement of 1962, which ended the Cuban Missile Crisis. However, it occurred under deception conditions, as illustrated previously, so that the resulted equilibrium was unstable, referring to this by: $\{(E_{va})^{-1}\} > \{(E_{vb})^{-1}\}$. The last meant that the deceived actor would be incentivized to change a misperceived equilibrium coinciding with revealing deception or intentional misperception factors.

Second, if $\{(E_{va})^{+1}\} < \{(E_{vb})^{+1}\}$: Assuming that the US invaded Cuba or liberalized it before the 1962 Cuban Missile Crisis while the Soviet Union was approving, then the balance would have been reversed where the interactions were to be crystallized by: a. Actor II's movement of (Tn; UT) or (Uncontained Pro-Turkey; Contained Anti-Cuba)

²⁰⁸ When we mention "vice versa" in a particular theoretical application, it refers to that either Actor I or Actor II can make the movement or opposite movement using the same mentioned moves/countermoves of any, since the modeling deals with *mutually* moves and countermoves at the same movement and opposite movement in the same direction.

moves, and b. Actor I's opposite movement, in the same direction, of (Td; NT) or (Uncontained Anti-Turkey; Contained Pro-Cuba) countermoves; or vice versa.

Apparently, if Actor II had moved to a balance-state when $\{(E_{va})^{+1}\} < \{(E_{vb})^{+1}\}$ before 1962, the crisis and conflict possibility would have been avoided preemptively. Furthermore, under perception and certainty conditions, a resulting equilibrium of "Opponent Victory" with these gains: (S2, S4) would have been stable under Actor II's pro-Relative Balance instead of the reached "Disguised Opponent-Victory Equilibrium" of (S4, S2) utility, explained before. On the other hand, if one actor had sought a conflict, it would have arisen over other matters or threat objects, where the possibility of conflict regarding the core issue here (i.e., Cuban missiles) is eliminated, and the opponent is deterred from proceeding forward or further expansion in this geopolitical region. That is at least in the realm of the two actors/powers' mutual deterrence relation _ where one balance system was to prove superiority or being more deterring, which is the would-be (Actor II)'s.

3.1.2.1.2.2. The Outright Balance Rule; When $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$

Under this case, Actor I's movement is: (NT; UT) or (Contained Pro-Cuba, Contained anti-Turkey), while Actor II's opposite movement, in the same direction, is: (UN; NT) or (Contained Anti-Cuba; Contained Pro-Turkey), and vice versa. That case would have occurred if the brokered agreement included accepting removing the US-controlled missiles from the Soviets' neighboring Turkey in exchange for removing the Soviet Union-deployed missiles from the US's neighboring Cuba, but not accepting the provision of not invading/attacking the Communist and Soviet Union-backed Cuba. The balance would have been outright as well as the equilibrium, which is stable under perception or deception conditions and of equivalently equal values for both. The (Outright Balance Rule) is the **(Conflict Impediment Point)** for the Cuban Missile Crisis, which is a "Mutual-Securitization Launch Button" solution point.

3.1.2.1.2.3. The Incomplete Balance Rule; When $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$

Within this case, Actor I's movement is determined by the (Tn; Td) or (Uncontained Pro-Cuba; Uncontained Anti-Turkey) moves, and Actor II's opposite movement, in the same

direction, is shaped by the (Td; Tn) countermoves of the (Uncontained Anti-Cuba; Uncontained Pro-Turkey), and vice versa. This case was to occur if the brokered agreement included the term of not invading/attacking the Soviet Union-backed-Communist Cuba as public assurances by the US in exchange for removing the Soviet-deployed missiles from this US's neighboring land but *not* accepting the provision of removing the US-installed missiles from the Soviets' neighboring Turkey. If that balance had occurred, which is incomplete, its relevant equilibrium would have been *unstable*, under either certainty or uncertainty circumstances; where one party's equilibrium value might be bigger than or equal to, or less than or equal to the other's. Apparently, any side would have had the incentive to deviate from a status quo position "*again*," particularly the conflict-causing party (i.e., the Soviet Union) that deviated from the *same* position creating the crisis. Still, such an Incomplete Balance with a *temporarily*-stable Status Quo Equilibrium proves to be a significant Conflict/War Impediment Point in extremely complicated war cases, as come later.

3.1.2.2. The Second Theoretical Application of the Deterrence Entanglement Law: A Possible Russian Invasion of Ukraine and War Ensuing²⁰⁹ & The Russia- EU Conflict Possibility

3.1.2.2.1. Case Assumptions Brief

First: Actor I is Russia, and Actor II is the European Union (EU), where the war is avoidable or maneuverable under one of the law rules. Second: Militarizing the Ukraine army, para-military, or irregular combat forces to fight against the Russian mobilized army at the Ukrainian borders, in a *preparatory* stage of the invasion occurrence, serves Actor I's strategic objectives, if they are: 1. testing new developed and advanced weapons and actively using them on the battleground, 2. expanding gradually in the European continent, restoring the collapsed Soviet Union's zone of influence, 3. managing major oil routes across the European continent and therefore controlling the main oil supply in the region, 4. stabilizing the Russian Federation political regime (i.e., Putin's Regime) by a constant state of public distraction led in a significant part by the pretext of defending the homeland under a continuous state of national war against enemies for restoring

²⁰⁹ This case's probability was theoretically analyzed before the Russian invasion of Ukraine possibility came to be a credible move by February 24, 2022.

Russia's old reign before 1991. Thence, the mobilization and militarization of Ukraine's army or insurgency seem to be not a threat in so far as it is Russia's willingness;²¹⁰ in a preparatory stage of the war only, such a militarization tears the territories up in favor of external expansion inside Ukraine, not deterring and impeding that.

Third: Attempting to avoid an all-out war possibility in Ukraine and from Ukraine to other neighboring nations on the European continent, we need to move back under our explained "Backward Induction Mechanism." Namely, through this application, we seek a Status Quo Equilibrium since its occurrence prevents the possibility of war regarding this complicated conflict case, as long as the status quo position is maintained unchanged and may lead to another Outright Balance state in the future. Fourth: Considering that the success of the "Deterrence Entanglement Law" rules necessitates that the threat objects are all capable and credible, and both threat objects are equivalently equal in level or/and scale, then the (Matters and Anti-matters) are as follows: i. Actor I's (Matter) is "Invading Ukraine," which is the (Threat Object I), and the (Anti-matter) is "Actor I's Created Internal Enemy (X) and External Enemy (Y)," abbreviated as (AC-XY). This (Anti-matter) may represent created internal enemy of guerilla warfare or insurgency combatants in Crimea or symmetrically any Russia-invaded (internal) land and an external enemy by shifting a vital neighboring ally/alliance against Actor I. ii. Actor II's (Matter) is "Actor I's Created Internal Enemy (X) and External Enemy (Y)/ (AC-XY)," which is the (Threat Object II), and the (Anti-matter) is "Invading Ukraine." Here, Actor I's (Matter) is the first Threat Object (where the invasion of Ukraine did not occur yet but credible and capable after a highly-war possibility) that became the (Anti-matter) to Actor II, and Actor II's (Matter) is the second Threat Object that became an (Anti-matter) to Actor I.

Obviously, the (Internal Enemy (X) and External Enemy (Y)) is a "*created Anti-matter*" by Actor II against Actor I that did not confront any threat equal in level or scale to the threat it poses by invading Ukraine and, therefore no balance would be maintained. In a sequence, Actor II became prone to the war possibility for not having the countermove or

²¹⁰ After the invasion, this application case's balance states are no longer valid in practice, but in theory, since the deterrence scale and level employed through concerned fighting a preventive, intended, limited conflict to avoid the probability of major war and, thus, hindering the expansion possibility. So, our mentioned configurations cannot apply after Russian expansion deeply occurred inside Ukrainian territories in an all-out war and has been followed by conquering these lands since late February 2022.

counter-threat of (invading Ukraine) Threat Object; so that, the created Anti-matter by Actor II versus Actor I is now a defensive weapon for the first to avoid the war it did not seek but imposed upon it by the aggressive Actor I.

Accordingly, Actor II is now a *credible and capable* threat applying party by **firstly**; (militarizing Internal Enemy (X)) for Actor I inside this actor-previously invaded territories. It means moving against the benefit and geopolitical interests of Actor I, rather than being forced to militarize many internal fronts within Ukraine, transforming it into a civil war or internal chaos arena, helping and justifying Actor I's existence, and supporting and *legitimizing* its future invasion. Simultaneously, Actor II is supposed to fight “*indirectly*” within Actor I-invaded lands near *Actor I's borders* versus Actor I itself in guerilla warfare it backs or an agency-led intra-conflict. **Secondly**, the *credible and capable* threat creation is made externally by utilizing a vital foreign ally to Actor I, such as 2021 Turkey, or building a “defensive and security alliance” between the EU and Eurasia countries (i.e., Georgia, Azerbaijan, and Armenia), versus Actor I. That besieges, in part, Actor I geopolitically by Actor II.

Based on Actor II's first and second lines of the counter-Threat Object, the *deterrence sufficiency* condition for bringing a balance-state is assumed to be fulfilled partially or completely depending on the “level and scale equality” of the two opposite-Threat Objects used in each movement. Suppose the all-out war arises while this prescriptive theoretical analysis is not being applied. In that case, it refers to that the deterrence by fighting a limited conflict to prevent a major war possibility, which is this application's key objective, is not achieved, and that war strategies must be set instead for stabilizing inflamed war situation, restoring conditions of applying the (DEL) for once more impeding the conflict or war possibility in future, as explained later.

3.1.2.2.2. The Balance Cases

3.1.2.2.2.1. The Relative Balance Rule; When $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$

According to the current situation in 2021, it is the case of $\{(E_{va})^{-1}\} > \{(E_{vb})^{-1}\}$ under the Relative Balance Rule that can describe a (probable Russian invasion of Ukraine and war possibility) issue in early 2022; where: i. Actor I's movement is determined by: (Tn; UT) moves or (Invading Anti-Ukraine/ “Actor II's Uncontained Matter (Threat Object I);” No

(AC-XY) Anti-State/ “Actor I’s Contained Anti-matter (Threat Object II)”). ii. Actor II’s opposite movement, in the same direction, is shaped by (Td; NT) countermoves or (Invading Pro-Ukraine/ “Actor II’s Uncontained Anti-matter (Threat Object I);” No (AC-XY) Pro-State/ “Actor I’s Contained Matter (Threat Object II)”). This case was in play, assuming that Russia invaded the Crimea peninsula, which is a part of Ukraine’s territories, first in 2014 and annexed it to the Russian Federation while the EU misperceives or is deceived that an expansion chain was to continue so that this equilibrium is only *temporally* stable, and permanently *not* stable under such uncertainty or deception conditions.

3.1.2.2.2. The Incomplete Balance Rule: The Case of $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$, and the Backward Induction Mechanism

Under this case: a. Actor I’s movement is (Tn; Td) or (Invading Anti-Ukraine/ “Actor II’s Uncontained Matter (Threat Object I);” (AC-XY) Anti-State/ “Actor I’s Uncontained Anti-matter (Threat Object II)”) moves; and b. Actor II’s opposite movement, in the same direction, is (Td; Tn) of (Invading Pro-Ukraine/ “Actor II’s Uncontained Anti-matter (Threat Object I);” (AC-XY) Pro-State/ “Actor I’s Uncontained Matter (Threat Object II)”) countermoves; or vice versa.

Within the Incomplete Balance Rule, Actor II’s solution point takes place by moving back to threaten Actor I, destabilizing a “Disguised Opponent Victory” equilibrium first of the Relative Balance Rule’s deception case and reaching a status quo second, under the previously defined Backward Induction Mechanism. It is now a “*Mutually Detering Threat-Objects*” solution point within the Incomplete Balance Rule, where the **(Conflict/War Impediment Point)** for the concerned conflict occurs. Thus, considerably, preventing a *great war* in Europe comes at the expense of fighting, *indirectly*, *preemptive*-guerrilla warfare or intra-conflict by agency first near the opponent’s borders and on formerly occupied lands by this opponent. Since no great power other than the invader is a direct part of such guerrilla warfare or internal conflict, the last is contained and maintained limited for the deterrence purpose, avoiding a *spiral of conflict* possibility that is more likely to occur if the Ukraine invasion comes true (not being only a Threat Object) with no specific tactics followed to minimize its scale and level. Once the Status Quo Equilibrium is reached, which is temporarily *stable*, although

permanently *unstable*, the way becomes paved to step forward in a future deviation by any to the “Outright Balance Rule” case of this Russian-EU conflict, as long as both Threat Objects prove to be capable and credible, and equivalently equal in level or/and scale.

3.1.2.2.2.3. The Outright Balance Rule; When $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$

Regardless of being rational, irrational, deceiver, or deceived, both actors have the incentive to deviate from capable and credible threat positions, the threats that are approximately equal in level or/and scale while being directed versus each other. Under this case: i. Actor I’s movement is (NT; UT) of (Not Invading Anti-Ukraine/ “Actor II’s Contained Matter (Threat Object I);” No (AC-XY) Anti-State/ “Actor I’s Contained Anti-matter (Threat Object II)”) moves; and, ii. Actor II’s opposite movement, in the same direction, is (UT; NT) of (Not Invading Pro-Ukraine/ “Actor II’s Contained Anti-matter (Threat Object I);” No (AC-XY) Pro-State/ “Actor I’s Contained Matter (Threat Object II)”) countermoves; or vice versa.

If taken place, this Outright Balance Rule equilibrium (i.e., the “*Compromise*”) is *stable* under perception or deception conditions, where both actors’ utility (i.e., “S3, S3”) is the most optimal for entailing permanent stability and being the highest for all, together, rather than that of the Status Quo Equilibrium (i.e., “S2, S2”) or the “Disguised Opponent-Victory” one (i.e., “S4, S2”).

3.1.2.3. The Third Theoretical Application of the Deterrence Entanglement Law: The US-China Taiwan War Possibility

3.1.2.3.1. Case Assumptions Brief

First: The United States (US) is Actor I, and the People’s Republic of China (PRC/China) is Actor II. Second: Actor I’s (Matter) is “Taiwan and US Dominion in the Pacific Region,” which is the (Threat Object I), and the (Anti-matter) is “Invading Taiwan and China’s Dominion in the Pacific Region.” Third: Actor II’s (Matter) is “Invading Taiwan and China’s Dominion in the Pacific Region,” which is the (Threat Object II), and the (Anti-matter) is “Taiwan and US Dominion in the Pacific Region.” Fourth: Actor I’s (Matter) is the (first Threat Object) that is an (Anti-matter) for Actor II, and Actor II’s (Matter) is the (second Threat Object) that is an (Anti-matter) for Actor I.

Fifth: Taiwan, or the Republic of China (ROC), is an island located in the East Asia Pacific region, which is considered the US's puppet/client state. The (ROC) fought against the Chinese Communist Party (CCP) after World War II from 1945 to 1949, in a second phase of the Chinese Civil War that first took place from (August 1927 till December 1936), and was defeated when the US did not interfere in that war, defending the (ROC)'s cause _ where the government was forced to retreat to the Taiwan Island and the (CCP) established the People's Republic of China (PRC). Eventually, on October 25, 1971, Taiwan lost its UN representation after members voted to recognize the (PRC) instead, as the sole legitimate representative of China, so that the (PRC) seized the (ROC)'s seat in the Security Council as the China-permanent member.

3.1.2.3.2. The Balance Cases

3.1.2.3.2.1. The Relative Balance Rule: The Case of $\{(E_{va})^{+1}\} > \{(E_{vb})^{+1}\}$ and the Cold War Era

In this case, the US was dominating the Pacific region jointly with the Soviet Union after the Korean War (1950-1953), where the balance of power system in the Pacific region occurred. Each block, either the Western under the US leadership or the Eastern under the Soviet Union command, was building its alliance system integrating states from the Asian continent into their domains of influence through some signed alliance and security agreements. Assuming that the US dominion in the Pacific region during the Cold War era came in part at the expense of the (PRC)'s anti-expansion policies, we apply the (Relative Balance Rule) to the US-China Taiwan War possibility by moving to the conflict initiation roots as follows: i. Actor I's movement was determined by the $\{(T_n); (U_T)\}$ moves that are (Pro-Taiwan and US Dominion in the Pacific Region/ "Actor II's Uncontained Matter;" Not Invading Pro-Taiwan and No China's Dominion in the Pacific Region"/ "Actor I's Contained Anti-matter"). ii. Actor II's opposite movement, in the same direction, was shaped through the $\{(T_d); (N_T)\}$ countermoves or the (Anti-Taiwan and US Dominion in the Pacific Region/ "Actor II's Uncontained Anti-matter;" Not Invading Anti-Taiwan and No China's Dominion in the Pacific Region"/ "Actor I's Contained Matter"); or vice versa. Given that the "Opponent Victory Equilibrium" had occurred under certain certainty and perception conditions, where $\{(E_{va})^{+1}\} > \{(E_{vb})^{+1}\}$, it remained *stable* as long as the conflict's main factors were unchanged. These factors:

“the Soviet Union integration and its joint influence in the Pacific region with the US; and the contained China as regional power not rising-China as a competing global superpower.”

3.1.2.3.2.2. The Incomplete Balance Rule: The Case of $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$ After the Cold War Era

The (Incomplete Balance Rule) of the given conflict was in play since the end of the Cold War between the US and the Soviet Union (1947-1991) and coinciding with the (People's Republic of China) rising in the early 2000s as a global superpower economically first, and technologically and militarily second. The (Status Quo Equilibrium) did occur with both actors competing for dominion over the Pacific region. However, Actor I was still superior more than Actor II under this expected utility: (S3, S2) in terms of having a number of client states besides China's threatening enemy (i.e., Taiwan). The following explanation, therefore, shows why the war may ensue over Taiwan between both powers, while the next one illustrates the exit of war possibility. Under the Incomplete Balance Rule: i. Actor I's movement is determined by the $\{(T_n); (T_d)\}$ moves or the (Pro-Taiwan and US Dominion in the Pacific Region/ “Actor II's Uncontained Matter;” Invading Pro-Taiwan and China's Dominion in the Pacific Region”/ “Actor I's Uncontained Anti-matter”). ii. Actor II's opposite movement, in the same direction, is reflected in the $\{(T_d); (T_n)\}$ countermoves or the (Anti-Taiwan and US Dominion in the Pacific Region/ “Actor II's Uncontained Anti-matter;” Invading Anti-Taiwan and China's Dominion in the Pacific Region”/ “Actor I's Uncontained Matter”); or vice versa.

3.1.2.3.2.3. The Outright Balance Rule: The case of $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$ and the (All-Out Conflict/War Impediment Point)

Under the Outright Balance Rule, the absolute state of balance to avoid the Taiwan War possibility occurs through: i. Actor I's movement of $\{(N_T); (U_T)\}$ moves of the (No Pro-Taiwan and US Dominion in the Pacific Region/ “Actor II's Contained Matter;” Not Invading Pro-Taiwan and No China's Dominion in the Pacific Region”/ “Actor I's Contained Anti-matter”). ii. Actor II's opposite movement, in the same direction, of the $\{(U_T); (N_T)\}$ countermoves or the (No Anti-Taiwan and US Dominion in the Pacific

Region/ “Actor II’s Contained Anti-matter;” Not Invading Anti-Taiwan and No China’s Dominion in the Pacific Region”/ “Actor I’s Contained Matter”); or vice versa.

The (Compromise Equilibrium) of approximately equal utility for both powers seems *inapplicable* at first glance. However, this explanation makes it clear:

If the US and China currently go to war over Taiwan and both are superpowers, what would be the best outcome of this war? Primarily, it is dividing Taiwan following Korea’s diplomatic division after World War II in 1945 by the US and Soviet Union, agreeing on the 38th Parallel to separate North Korea from South Korea; where the Republic of Korea (South Korea) was established in August 1948, and the Soviet Union agreed to establish a communist government led by Kim II-Sung in North Korea at the same year. The other possibility is that one actor, either the US or China, will eliminate the other, or both may be eliminated altogether since they are semi-equal in power.

So, the (Divided Taiwan Diplomatically and the US-China Joint Dominion in the Pacific Region) or an (Artificial Limited Conflict for Dividing Taiwan Diplomatically and the US-China Joint Dominion) solution point is the **(All-Out Conflict/War Impediment Point)** for the concerned case, under the (Outright Balance Rule). That is conditioning that the key conflict factors remain unchanged, such as; “rising China as a superpower; Russian non-intervention in the US-China conflict; the US and China’s current (2021’s) positions of the influence zones in the Pacific region.” One factor’s changeability means that a new state of balance is to be set.

Therefore, the (Threat Object I), directed versus China, of (Anti-Taiwan and US Dominion in the Pacific Region) is *contained* when (No Anti-Taiwan and US Dominion in the Pacific Region) exists instead. Likewise, the (Threat Object II), directed versus the US, of (Invading Pro-Taiwan and China’s Dominion in the Pacific Region) is *contained* when (Not Invading Pro-Taiwan and No China’s Dominion in the Pacific Region) manifests as an alternate. In other words, there would be a. partially “Pro-Taiwan” versus the old entirely “Anti-Taiwan” for China, and b. partially “Anti-Taiwan” versus the previous completely “Pro-Taiwan” for the US, through c. a divided Taiwan where a *joint sphere of dominion peacefully* exists versus the other *relative dominion* at each other’s expense. The most important feature of this Outright Balance Rule’s equilibrium is that it is not only stable under perception and certainty or deception and uncertainty

conditions. Further, it is the most permanent and optimal point reached willingly by both, where no superpower may have the incentive to deviate from a future state of peace and stability generated after an *artificial*, limited conflict. Here, each is *superior* and *victor*, provided that the relevant conflict factors are static.

3.1.2.4. The Fourth Theoretical Application of the Deterrence Entanglement Law: Iran's Possession of Nuclear-Weapons²¹¹ and the US-Iran War Possibility

3.1.2.4.1. Case Assumptions Brief

First: The United States is Actor I, and Iran (under the Shia religious regime that came to power through the Iranian Islamic Revolution in 1979) is Actor II. Second: Actor I's (Matter) is the (The US's Acquisition of Nuclear Power), that is, the (Threat Object I), and the (Anti-matter) is the (The Opponent Iran's Acquisition of Nuclear Power). Third: Actor II's (Matter) is (Iran's Acquisition of Nuclear Power), which is the (Threat Object II), and the (Anti-matter) is the (The Opponent US's Acquisition of Nuclear Power). Fourth: Iran was an ally to the US before the 1979 Islamic Revolution in accordance with the US countenance to the Shah of Iran, Mohammed Reza Pahlevi, as one of its strong allies in the region; simultaneously, a *state of peace* between the two powers prevailed. After World War II, the mentioned American support took many ways; the most famous was the 1953 Coup d'état organized by the British and American intelligence agencies to oust Iran's Prime Minister Mohammad Mossadeq, reinstalling the Shah who ruled from 1941 till being overthrown in 1979. Fifth: Under the religious regime, Iran became an enemy to the US in the aftermath of the Iranian Hostage Crisis (November 1979-January 1981) when Iranian protestors seized the US embassy in Tehran, and American hostages were held inside until freeing them; also, after the American warship USS Vincennes shot down an Iranian passenger airplane in the Gulf in 1988 that was on its way to Saudi Arabia.

²¹¹ In 2002, the US received information that Iran was developing nuclear facilities under a covered nuclear weapons program, while Iran's Islamist regime denied it. For one decade and up to 2015, the UN, the US, and the EU were imposing a number of sanctions on Iran's religious regime. The recent agreement was the (P5+1) (i.e., the US, Russia, the United Kingdom, France, China, and Germany)-Iran nuclear deal 2015. With Iran's agreeing to limit its sensitive nuclear activities and allow international inspectors to watch its program, the other party provided it with compensation by lifting some sanctions. Nevertheless, by May 2018, when the US abandoned the nuclear deal under President Donald Trump's administration, with the latter imposing severe economic sanctions on Iran for another year to come, Iran began to deviate from implementing some agreed-on commitments by July 2019 regarding the limitation of its nuclear program.

3.1.2.4.2. The Balance Cases

3.1.2.4.2.1. The Relative Balance Rule: The Case of $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$ Where the $\{(E_{va})^{\pm 1}\} > \{(E_{vb})^{\pm 1}\}$; the Iranian Islamic Revolution 1979 and the Cold War Impact

Within this phase, a. Actor I's movement has been determined by the $\{(T_n); (UT)\}$ moves or the (The US's Acquisition of Nuclear Power/ Actor II's Uncontained Matter; The Opponent Iran's Non-Acquisition of Nuclear Power/ Actor I's Contained Anti-matter). b. Actor II's opposite movement, in the same direction, was shaped by the $\{(T_d); (NT)\}$ countermoves, which are the (The Opponent US's Acquisition of Nuclear Power/ Actor II's Uncontained Anti-matter; Iran's Non-Acquisition of Nuclear Power/ Actor I's Contained Matter); or vice versa.

The equilibrium reached during that phase (1979-2000) of the US-Iranian conflict was stable as long as a balance of power system existed, distinguishing the world politics of the day. In other words, with the collapse of the Soviet Union in 1991 and the sequential separation of many countries from the Eastern block to the Western one gradually, most prominently, Eastern Europe states, Iran's enemy (i.e., the US) was growing in power as the world's sole leader. Simultaneously, there was no longer symmetrical power to deter Iran's enemy if this enemy challenged others or power to be the counter-power or the refuge to other revisionist states in the international system like Iran under the new regime.

More obviously, changing the factors within which the (Opponent Victory Equilibrium) of the Relative Balance Rule occurred under perception and certainty conditions during the US-Iranian conflict's first trajectory seemed to be the motive for the Iranian regime in the early 2000s to seek an alternative refuge against its enemy, which had to be capable and credible. In sum, should the Eastern bloc under the Soviet Union's leadership have remained intact, challenging the US increasing power and securing the Asian continent from possible American unipolar dominion, Iran would not have had the pressing incentive to move to our current Status Quo Equilibrium by the early 21st century. Also, if the US did not show enmity towards the Iranian new regime by 1979 and beyond, the state of clash/conflict would have been eliminated from the beginning – that we try to explain further below. Lastly, since the *surrounding factors* that caused stability of the

Relative Balance Rule's equilibrium, or any other balance case's, changed, the given equilibrium is no longer in play, according to the Deterrence Entanglement Law.

3.1.2.4.2.2. The Incomplete Balance Rule: The Case of $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$; Iran's Nuclear Program (2002-Now/2022)

Within this case: a. Actor I's movement became shaped by the $\{(T_n); (T_d)\}$ moves or the (The US's Acquisition of Nuclear Power/ Actor II's Uncontained Matter; The Opponent Iran's Acquisition of Nuclear Power/ Actor I's Uncontained Anti-matter). b. Actor II's opposite movement, in the same direction, is defined by the $\{(T_d); (T_n)\}$ countermoves or the (The Opponent US's Acquisition of Nuclear Power/ Actor II's Uncontained Anti-matter; Iran's Acquisition of Nuclear Power/ Actor I's Uncontained Matter); or vice versa. That case explains the Status Quo Equilibrium of "*Mutually Detering-Threat Objects*" under the Incomplete Balance Rule. Nevertheless, this balance point is temporary, which is the possible cause of why the war may ensue between the US and Iran in the future if the US deviates from this position, which is temporarily stable only, back to the Relative Balance one.

3.1.2.4.2.3. The Outright Balance Rule: The Case of $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$ and the (Conflict/War Impediment Point)

In this Outright Balance Rule's case: a. Actor I's movement is shaped through the $\{(NT); (UT)\}$ moves or the (The US's Non-Acquisition of Nuclear Power/ Actor II's Contained Matter; The Opponent Iran's Non-Acquisition of Nuclear Power/ Actor I's Contained Anti-matter). b. Actor II's opposite movement, in the same direction, is defined by the $\{(UT); (NT)\}$ countermoves or the (The Opponent US's Non-Acquisition of Nuclear Power/ Actor II's Contained Anti-matter; Iran's Non-Acquisition of Nuclear Power/ Actor I's Contained Matter); or vice versa. That state of $\{(NT; UT), (UT; NT)\}$ movement by any, and opposite movement in the same direction by the other, respectively, explains a "*Mutually Nuclear Demilitarization*" solution point, which seems "*ironic*" given the 21st century's clashing factors among the international system's powers.

Accordingly, for achieving a *symmetrically*-Outright Balance state where the $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$, there are two passages avoiding the war possibility between the US and Iran in

the future where each passage is based _ however, in a different trajectory from the other _ on this same question: *what if the two (Anti-matters) are not (Anti-matters)?*

Passage I is the “*A Backward Movement for the Opponent Containment*” solution point, which is the **(Conflict/War Impediment Point I)** for the concerned case within an Outright Balance Rule. That is to say, this is the solution of constructing what we might call a “Nuclear-Security Cooperation Alliance” between the US and Iran so that Iran does no longer possess the (Threat Object II) against the US, and the US is no longer a threat for Iran once the (Threat Object I) is being neutralized and shifted to be in the interest of both, as well as the (Threat Object II). Given that it is in favor of Iran to be contained peacefully by the US and the Western Block, reinforcing its suppression regime’s pillars through such an alliance _ that may transform Iran from a middle power to a great one, in the future, such as “*India*” that is accepted by the US to be transformed into such a position in the international system _ this solution point is workable and applicable relying on the US-“*reliability*” level towards Iran (i.e., to what degree or extent the US may consider or “*test*” that Iran can be a *reliable* ally). The same solution point is based on accepting that Iran remains ruled by the Shia Islamic religious regime. Thence, the two (Anti-matters) will *no longer* be (Anti-matters) because the state of *continuous clash/conflict* is substituted by another of *durable peace*. The (A Backward Movement for the Opponent Containment) solution point is the *first* active translation of the Outright Balance Rule for the given conflict.

Passage II is the opposite track of Passage I, although it aims at reaching the same goal. Passage II reflects the “*Iran’s Regime Change*” solution point, which is the **(Conflict/War Impediment Point II)** under the Outright Balance Rule. More obviously, an equation in which the “suppression-religious regime of Iran” is being replaced by a “Liberalist pro-West regime” is most likely to result in productive outcomes _ since Iran’s Shah regime had built the roots over decades for such a liberalist orientation. Following the same reasoning used in Passage I, it can be said that a “Pro-US Iranian Regime Versus Anti-US Iranian One” binary opposition proves that there will *no longer* be (Anti-matters) because the *state of continuous clash/conflict* is substituted by another of *durable peace* _ conditioning the success of the regime’s transformation by rolling it back and keeping this regime’s all subjects undivided and non-conflicting for preventing the civil war

possibility in future. At last, the “Iran’s Regime Change” solution point is the *second* active translation of the Outright Balance Rule for the concerned-conflict case under the given context.

3.1.2.5. The Fifth Theoretical Application of the Deterrence Entanglement Law: The Israeli-Palestinian Conflict²¹²

²¹² The Israeli-Palestinian conflict dates back to 1917 after the British government’s foreign secretary Arthur James Balfour promised the leader of the British Jewish community, Lord Rothschild, in an official public statement, the establishment in Palestine of a national home for the Jewish people in the famous Balfour Declaration. This letter was the catalyst of an inflamed domestic and regional conflict between Jewish and Arab factions, as follows:

a. Stage I (1918-1948): Within this conflict phase, the Jewish immigration waves had increasingly continued to Palestine, which was under a British mandate (that lasted from 1920 till 1948 partition of Palestine), in the aftermath of World War I (1914-1918), and the dissolution of Ottoman Empire territories. This stage is well-known to be the reflection of internal clash and conflict between the Jewish communities and the Palestinian ones, where the Jewish people were attempting to establish their homeland by reversing the status quo.

b. Stage II (1948-1990): The United Nations, newly established in 1945 after World War II (1939-1945) as an amendment to the ineffective and failed League of Nations (1920-1939), issued the partition plan of Mandatory Palestine by the end of the British Mandate for Palestine (no later than August 1, 1948), adopting the United Nations General Assembly Resolution 181 (II) on November 29, 1947. Based on the UN’s resolution, the Jewish communities in Palestine declared the establishment of the State of Israel in 1948. Stage II was the bloodiest phase of the conflict, where many wars had been waged: 1. The 1948 War: a coalition of Arab States had fought against Israel after the Palestinian people opposed the partition plan and therefore did not declare the establishment of a Palestinian State following suit; the Arab Coalition was defeated in this war. 2. The 1956 Tripartite Aggression, which had been carried out by Britain, France, and Israel against Egypt, while the first two attempted to restore their domains of influence in the Middle East region in accordance with the emergence of independence movements during the 1950s and 1960s against colonialism by the end of the World War II. 3. The 1967 Six-Day War: Israel fought against Egypt, Syria, and Jordan, where Israel defeated all. 4. The 1973 Yom Kippur War: It was fought between Israel on one side and Egypt primarily and Syria with support from other Arab nations on the other side. The halt of military confrontations between both sides in this 1973 war occurred in the same year under an agreement on moving to diplomacy for ending the war with the signing of the Camp David Accords in 1978, leading up to the Egypt-Israel Peace Treaty 1979, which terminated the state of war between Egypt and Israel permanently _ where US President Jimmy Carter and his Secretary of State Henry Kissinger conducted the mediation and negotiation efforts. Within Stage II, the Palestinian people were trying to reverse the status quo while the intra-conflict became an inter-state regional one.

c. Stage III (1990-now): The most significant features of this stage are: 1. Signing the Oslo I Accord in 1993, coinciding with the US President Bill Clinton’s mediation efforts, and the Oslo II Accord in 1995 _ crystallizing the two-state solution _ between representatives of the Palestinian people and Israel. Under the signed accords, the Palestinian Liberation Organization (PLO), known as Fatah movement, agreed on the recognition of the State of Israel with Israel’s recognition of the (PLO). The Oslo Accords resulted in creating the Palestinian National Authority or Fatah-controlled government body to represent self-governance over Palestinian territories (parts of West Bank and Gaza Strip), among other terms. Sequentially, it has officially been established the Palestine Authority under the Fatah movement leadership. 2. The internal conflict between the Fatah movement and Hamas Jihadist movement, which held firm to fighting against Israel as a religious duty for protecting the Muslims’ holy shrines in Jerusalem, arose in 2006, following Hamas’s victory in the legislative elections. This intrinsic conflict ended with the Hamas takeover of the Gaza Strip in June 2007, dividing the Palestinian Authority (with one exception during the Palestinian Unity Government of June 2014, which was dissolved in June 2015, until the establishment of October 2016 Hamas new (third) de facto government in Gaza) into: 1. Ramallah’s Authority, as legitimized internationally under Fatah movement leadership and the sole representative of

3.1.2.5.1. Case Assumptions

First: Actor I is Israel, which is a nation-state having both full-political authority and complete legitimacy and international recognition as a member-state in the UN's General Assembly. Second: Actor II is the Palestinian Authority: A representative of the State of Palestine, which is internationally recognized and a non-member observer state in the UN's General Assembly, acquiring *incomplete* political authority and legitimacy. Dismissing the division of the Palestinian Authority, one of Ramallah and the other of Gaze Strip, we deal with the Palestinian Authority in this applying case as one integrant party representing the State of Palestine as a still not yet member-state in the UN. Given that the war in a chain of Israeli-Palestinian conflict frequently arises by the early 21st century between Israel and the Gaze Strip's non-legitimized authority of the Hamas (the military movement that was established in the last century to fight against Israel state's existence) de facto government, the focus is on the conflict facts as (Matters) and (Anti-matters). In other words, we put the mentioned division aside while considering the second conflicting party a single one for effective outcomes since Hamas goes to war against Israel on behalf of a united Palestine state and Palestine people. Based on that, the subsequent assumptions are:

Third: Actors I and II are in a constant state of conflict/war over disputed territories. Fourth: Actor I's (Matter) is the "The Destruction of Gaza (under Hamas leadership)," which is the (Threat Object I), and the (Anti-matter) is the "The Destruction of Israel (by Hamas movement)." Fifth: Actor II's (Matter) is the "The Destruction of Israel (by Hamas movement)," which is the (Threat Object II), and the (Anti-matter) is the "The Destruction of Gaza (under Hamas leadership)."

Applying the Deterrence Entanglement Law, we seek to prove which solution for the Israeli-Palestinian Conflict is more solid, coherent, stable, and sustainable in the future if

the Palestinian people, referred to by Ramallah's Palestinian Authority; 2. Gaza Strip's Palestinian government under the Hamas administration, which is non-legitimized internationally. In Stage III, it can be said that the Israeli-Palestinian Conflict is an intra-state one when violence arises between Israelis and Palestinians in Israel-controlled/occupied territories in the West Bank and Jerusalem, which we do not address here. However, it is an inter-state dispute (with no longer being a regional conflict) when the war takes place between Israel and Gaza Strip's de facto Palestinian government, as a split part of the Palestinian Authority, that we focus on solving and impeding _ since the second's resolution and impediment hinder the first's ensuing.

a balance of such conflictual relations is needed and should future wars necessitate being avoided.

3.1.2.5.2. The Balance Cases

3.1.2.5.2.1. The Incomplete Balance Rule: The Case of $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$; the (Conflict/War Impediment Point I)

Under this case, Actor I's movement is shaped through the $\{(T_n); (T_d)\}$ moves or the (The Destruction of Anti-Gaza/ Actor II's Uncontained Matter; The Destruction of Pro-Israel/ Actor I's Uncontained Anti-matter); and Actor II's opposite-movement in the same direction is defined by the $\{(T_d); (T_n)\}$ countermoves or the (The Destruction of Pro-Gaza/ Actor II's Uncontained Anti-matter; The Destruction of Anti-Israel/ Actor I's Uncontained Matter); or vice versa. There are two possibilities of the Incomplete Balance here:

First Possibility: The present's Status Quo Equilibrium. It describes 2021's current state of the Israeli-Palestinian conflict, since one actor or both might deviate from the status quo balance, which dominated for years (since Hamas's 2007 takeover of Gaza and till after the 2014 Gaza War initiated by Israel on July 8 to August 26 of the same year), by activating their (Threat Objects), either the Threat Object I, II, or both, in actual circumstances. Such a deviation manifested during the May 2021 Gaza limited war that ensued after Hamas stroke Israel with rocket attacks, and Israel responded by massive airstrikes in Gaza, lasting from May 10 till May 21.

Apparently, that state of *Incomplete Balance* adopted by both actors is temporarily stable only, wherein Actor I's equilibrium value may exceed or be equal to Actor II's and vice versa. It is the current, temporal solution point of the conflict perceived and considered by all, and it is the present-time "**Conflict/War Impediment Point**," upon which the two are deterred by each other's (Threat Objects) from commencing an ongoing or large-scale war; however, waging a possibly deterring limited-conflict or war. In other words, each threatens the other capably and credibly, and on an equivalently equal scale, if not level, given that Israel is a nuclear power and Gaza can destroy its neighboring Israel with its primitive rockets and manually-manufactured bombs. In short, both are threatened and

deterred from (*protractedly*) continuing the war should it arise, and therefore from initiating it but only on a “limited” scale if _ for deterrence _ decided.

Second Possibility: A future possible Status Quo Equilibrium. Within this one, the future may speak out about the so-called *one-state solution*. The applied Deterrence Entanglement Law reveals that: First, how might this case occur? Suppose that Israel seeks to alter the Present’s Status Quo Equilibrium deviating to an (incorrectly) perceived Relative Balance Equilibrium under certainty and perception conditions, implementing a formula of (War for Land) reversely from the previously dominated-(Land for Peace) one. Consequently, Actor I prefers to fight not a deterring, limited conflict or war as it was a possible case along with the present’s status quo balance, but a prolonged, large-scale war against Palestinian militaries or major war with the (probably sudden) intervention of pro-Palestine Muslim states/peoples.

Second, through applying the (DEL) to the assumed “one-state solution” under the illustrated perspective, the resulting de facto outcome is not going to be the misperceived (Opponent Victory Equilibrium) of the (Relative Balance Rule) with Actor I winning the war, because both (Threat Objects) will still be active and enabled. In contrast, the generated outcome is what we call here a “future possible Status Quo Equilibrium,” as follows: If Actor I (i.e., Israel) succeeds in establishing one state for both the Israeli people and the Palestinian one, it will be the case of the (Incomplete Balance Rule) that be in play after accomplishing this (*flawed*) strategic objective, not before. Despite being an equilibrium (however, temporarily stable) prescribing the status quo of still mutually (Threat Objects), this newly installed status quo is not the Conflict/War Impediment Point or the solution point for the Israeli-Palestinian Conflict. Namely, the oppressed and suppressed nationality whose adherents will be deprived of their right of self-determination will incentivize committing *permanently* internal terrorism acts, even more severely, which will be: a. legitimized by surrounding regional Muslim countries or/and peoples; b. admitted by generations of the local Palestinian inhabitants; c. paving the way for a constant state of civil war or intra-state conflict in that would-be one state established. It is fair to acknowledge that this second Incomplete Balance state of uncertainty future would prevail only following the above described large-scale or major war. Nevertheless, we moved up to this yet unformulated future to show that even if a

hyper-causalities-based-predominating victor peace occurred, it would not be the permanent stability case and the action would not be correctly picked.

In the aftermath, and under a one-state solution, the Incomplete Balance Rule will be the judgment of the day, considering that each party's equilibrium value may exceed or be equal to the other. Theorizing a state of continuous chaos, the Incomplete Balance Rule in this given context will be the state from which one actor or both have the incentive to *deviate* to either: a. Relative Balance's negative state under *deception or/and uncertainty* conditions should the most powerful (i.e., Israel) overwhelmingly cease the weak (i.e., Palestinian communities) to exist, justifying a great holy war of "Jewish peoples versus Muslim ones." b. Incomplete Balance state under the mentioned 2021's (past) Status Quo Equilibrium, where the "Backward Induction Mechanism" is being used for a converting movement from one more destructing status quo (i.e., this future's status quo under the one-state solution where Palestine does no longer exist as an incomplete legitimacy nation-state but an entirely occupied political entity) to another less destructing. The latter mirrors the past's status quo of our contemporary time (2021-2022) of existing the State of Israel and the Palestinian Authority in parts of the West Bank and the Gaza Strip, with the State of Palestine being internationally recognized and a non-member observer state in the UN represented by the Ramallah's Authority. c. Alternatively, the Outright Balance state, which we explain below, next to the positive state of the Relative Balance Rule.

3.1.2.5.2.2. The Relative Balance Rule: The Case of $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$ Where the $\{(E_{va})^{+1}\} > \{(E_{vb})^{+1}\}$; the (Conflict/War Impediment Point II)

Given that Actor I is the most powerful side in the conflict, we address the highest probability, which is the $\{(E_{va})^{+1}\} > \{(E_{vb})^{+1}\}$ possibility, not the reversed case that seems theoretically non-reasonable if we consider the 2021 conflict factors and developments dismissing the 20th century's ones that no longer exist. Under the $\{(E_{va})^{+1}\} > \{(E_{vb})^{+1}\}$ case: a. Actor I's movement is determined by the $\{(T_n); (UT)\}$ moves that are (The Destruction of Anti-Gaza/ Actor II's Uncontained Matter; The Non-Destruction of Pro-Israel/ Actor I's Contained Anti-matter). b. Actor II's opposite movement, in the same direction, is shaped through the $\{(T_d); (NT)\}$ countermoves that are (The Destruction of Pro-Gaza/ Actor II's Uncontained Anti-matter; The Non-Destruction of Anti-Israel/ Actor I's Contained Matter); or vice versa.

The $\{(E_{va})^{+1}\} > \{(E_{vb})^{+1}\}$ case becomes in play under “A Demilitarization of the Gaza Strip” solution point, through which the **(Conflict/War Impediment Point II)** occurs of high-level stability. That is, if it mirrors “A Peacefully Demilitarization of the Gaza Strip” solution point under *perception and certainty* conditions within the positive state of the (Relative Balance Rule), for stabilizing the conflict state and simultaneously impeding the war possibility in the future via this (Opponent Victory Equilibrium). In this context, there are three tracks of the solution point or the positive/perception state of the Relative Balance Equilibrium, where the first track eliminates the solution while the other two lead directly to it, as follows: The first track is the violently-demilitarization of the Gaza Strip, which is another facet reached via large-scale or major war with the sequential (future possible Status Quo Equilibrium) mentioned above achieved. This track counts for nothing but a covered position of invasion and consequent internal conflict and violence. This possibility is not considered.

The second track is the “A Peacefully Demilitarization of the Gaza Strip” solution point’s Passage I, which occurs diplomatically. Simply, it is the state of signing an internationalized agreement with third parties guarantees, stating the mentioned solution between Israel and the Palestinian Authority of Ramallah first and Gaza second. Given that no party is better off by trusting the other after a prolonged conflict that lasted for almost more than a century, a **“trust bridge”** is needed to be constructed first to achieve that solution point. That is why we move to Passage II.

Comparingly, the third track is the “A Peacefully Demilitarization of the Gaza Strip” solution point’s Passage II, which is achieved through what we call a **“Diplomatic Maneuver.”** Reasonably, under a “Great Union of the Middle East’s Countries” notion, where the Arab states are the constituent part of this union, in addition to Israel and Ramallah’s Authority _ with the United States supervision, or better to be *observer membership* for containing possible deviations and strengthening the union base _ this **Triangle-of-Coalition Initiative** shall ensure that: a. no member state might attack the other, and b. if a non-member state/entity attacks a member state, it is seen as an attack against all.

Three conditional factors are required in the given context: a. A long-term publicized sustainability of a pacific state of relations among the union members (i.e., Arab states, Israel, and Ramallah’s Authority), which represents the **“Pacific State I”** condition.

Source: Prepared by the author.

That might necessitate more than ten years to be fulfilled where no wars should ensue in the Israeli-Palestinian zone and around it. b. Similarly, a long-term publicized sustainability of a pacific state among the Israeli people and the Middle East's peoples. That must be proved *practically* and via all media outlets, which is the "*Pacific State II*" condition. c. Once both sustainability angles are accomplished, the third condition becomes formulated through inviting "publicly" Gaza Strip's Authority (i.e., Hamas), with the tripartite union being established primarily, to be an observer member in the coalition for bringing the "*pacifism doctrine*" back to the region. If Gaza's non-legitimized authority does not accept such a membership, which is more likely, it is not only "deterred" and "contained" in the future; further, the probable aggression domain that would possibly result from a would-be coalition's opposition is contained before it begins. By doing so, the "A Peacefully Demilitarization of the Gaza Strip" solution point will be reached initially through such a (*Peace-Based-Orientations to the Gaza Strip's Governance and Publics*) stratagem, simultaneously with the coalition strengthening over time.

Based on that, systemically, the "Peacefully Demilitarization of the Gaza Strip" solution point occurs for a comprehensively conflict/war impediment's purpose in the future, moving from the positive/perception state of the Relative Balance Rule, in one or more of these three ways: a. The collectively extended or immediate deterrence impact generated by the established union. b. Possible union membership of Gaza's Authority in the future if the trust and reliability between enemies proved to be credible, and the conflict roots were overcome with this branch of the Palestinian Authority, as was the case with Ramallah's through Oslo Accords in the 1990s. c. Possible institutional non-military decision by the union regarding the demilitarization of Gaza, which, even if not implemented, peacefully hinders the war possibility from the core, coinciding with the effect of reinforcing the alliance basics (i.e., any attack against one is an attack against all) _ provided that the *Pacific State I* and *Pacific State II* conditions are maintained. Thus, the three possibilities become the active translation of the peacefully demilitarization-solution point that we further model below. Ultimately, the third-track explanation reflects the *Diplomatic Maneuver* principle suggested for impeding the conflict or war under perception and certainty conditions of the Relative Balance Rule, if not the Outright Balance one.

3.1.2.5.2.3. The Outright Balance Rule: The Case of $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$; the (Conflict/War Impediment Point III)

Under this case: a. Actor I's movement is shaped through the $\{(NT); (UT)\}$ moves or the (The Non-Destruction of Anti-Gaza/ Actor II's Contained Matter; The Non-Destruction of Pro-Israel/ Actor I's Contained Anti-matter); b. Actor II's opposite movement, in the same direction, is determined by the $\{(UT); (NT)\}$ countermoves that are (The Non-Destruction of Pro-Gaza/ Actor II's Contained Anti-matter; The Non-Destruction of Anti-Israel/ Actor I's Contained Matter); or vice versa. That is the "*Two-Sovereign State Solution*" solution point, which is the **(Conflict/War Impediment Point III)**, occurring under the *(Outright Balance Rule)*. The equilibrium that results, in this case, represents the most optimal position of a balance in such a prolonged and challenging conflict and deterrence relation _ where no actor may have the incentive to deviate. Within the generated "Compromise Equilibrium," both actors' utility becomes *simultaneously* the best, highest, and most stable, along with the conflict course. Still, the pressing question is, why is the (Outright Balance Rule) preferred for the conflict/war impediment purpose in this concerned conflict case more than a positive/perception state of the (Relative Balance Rule), while the "Status Quo Equilibrium" of the (Incomplete Balance Rule) is to come third? It will be the answer that we attempt to model in the next part.

3.1.2.5.2.3.1. Modeling the Israeli-Palestinian Conflict's Conflict/War Impediment States from the Deterrence Entanglement Law's Perspective

Within the third-track explanation of applying the Relative Balance Rule under perception and certainty conditions, the "Peacefully Demilitarization of the Gaza Strip" solution point takes place for comprehensively conflict/war impediment's purpose in the future while considering the sustainability of the equilibrium occurring in the Israeli-Palestinian Conflict. Also, the "Two-Sovereign State Solution" solution point is in play for the same purpose under the Outright Balance Rule, whereas the Status Quo Equilibrium is a temporary solution point that any may deviate from within the Incomplete Balance Rule. Based on that, we model the Israeli-Palestinian Conflict's conflict/war impediment states from the Deterrence Entanglement Law's perspective, see Figure 11, by mentioning the assumptions first and the proof of these states second.

The modeling assumptions are: 1- There is “*A Triangle Pro-Alliance (TP-A)*” composed of “Israel, Arab States, and Ramallah’s Authority” as three angles of the triangle: At the (TP-A)’s angle (a), it is the “Institutional Decision & Alliance Effect” Possibility I; at the (TP-A)’s angle (b), it is the “Collectively Immediate & Extended Deterrence” Possibility II; at the (TP-A)’s angle (c), it is the “Gaza’s Authority-Union Membership” Possibility III. 2. The “Pro-Alliance Core” represents the “*Stabilization-Power Membership*,” or the United States’ membership; accompanying the “Pro-Alliance Core” is “*The (TP-A)’s Conditional Sphere: Pacific State I and Pacific State II*” conditions. 3- The (A) sphere is the “Effect of (a + b) Causes,” where (N₁) is the (Influence I) of (A); the (B) sphere is the “Effect of (b + c) Causes,” where (N₂) is the (Influence II) of (B). 4- There is a “Transformation Line” between “*A Reversed Triangle-Anti-Alliance (TA-A)*” and the “*A Triangle Pro-Alliance (TP-A)*,” where both triangles are the opposite of each other. 5- The (TA-A) represents the “2021’s Status Quo Equilibrium” under the Incomplete Balance Rule; at the same time, the (TP-A) reflects a future possible Relative Balance Equilibrium under perception and certainty conditions of “Peacefully Demilitarization of the Gaza Strip,” and the Outright Balance Equilibrium of the “Two-Sovereign State Solution.” 6- At the (TA-A)’s angle (– a), it is the “Non-Institutional Decision & Non-Alliance Effect” Anti-Possibility I, or the (Non-a); at the (TA-A)’s angle (– b), it is the “Non-Collectively Immediate & Extended Deterrence” Anti-Possibility II, or the (Non-b); at the (TA-A)’s angle (– c), it is the “Non-Gaza’s Authority-Union Membership” Anti-Possibility III, or the (Non-c). 7- The (–A) sphere is the “Effect of {(– a) + (– b)} Causes,” where (N₃) is the (Anti-Influence I) of (–A) and (–A) is the opposite of (A); the (–B) sphere is the “Effect of {(– b) + (– c)} Causes,” where (N₄) is the (Anti-Influence II) of (–B) and (–B) is the opposite of (B);

3.1.2.5.2.3.2. The Proof of Conflict/War Impediment States for the Israeli-Palestinian Conflict under the Deterrence Entanglement Law

First: Preliminary. i. The Value (V) of {(A/N₁); (B/N₂); (– A/N₃); (– B/N₄)} averages between (0 < V < 1), since the {(A/N₁); or (B/N₂)} occurs under the Relative Balance Rule, and the {(– A/N₃); or (– B/N₄)} takes place under the Incomplete Balance Rule. ii. The {(A/N₁) ≥ (B/N₂)}; and {(– A/N₃) ≥ (– B/N₄)}.

Second: The proof of conflict/war impediment states under a diplomatic maneuver and positively Relative Balance Rule. Based on the given that (TA-A) is the opposite of the (TP-A) in real-world circumstances, we assume that the Effects (A) and (B) of the (TP-A)'s $\{(a + b) \text{ and } (b + c)\}$ angles' causes/possibilities, when manifesting altogether, respectively, are equal to (1), as follows:

$$\{TP-A (A) + TP-A (B) = 1\}$$

The assumptions here are: 1. (A) refers to the (Value "V" of A/N_1), and (B) indicates the (Value "V" of B/N_2); 2. The two inputs are manifested in the equation where the "A Triangle Pro-Alliance" exists so that the outcome equals (1).

If the $((a + b) \text{ angles' causes/possibilities})$ are the "only" ones provided within the (TP-A), then their Effect (A) is the "only input" of the equation, and the result becomes:

$$\{TP-A (A) = 1 - (TP-A (B)) = (+ X)\}, \text{ and then,}$$

$$\{TP-A (N_1) = 1 - (TP-A (N_2)) = (+ X)\}$$

Assumptions: $(0 < V < 1)$ for (A/N_1) and (B/N_2) under a perception/positive state of Relative Balance Equilibrium, considering that $\{(A/N_1) \geq (B/N_2)\}$, where the equation outcome is "*positive*" statically, $(+ X)$, whenever the causes-effect of the " $(a + b)$ angles" exists as the equation's sole input within a condition of continuous "A Triangle Pro-Alliance" or the constant state of peace/anti-conflict and war.

Likewise, if the $((b + c) \text{ angles' causes/possibilities})$ are the "only" ones provided within the (TP-A), then their Effect (B) is the "only" input in the equation, and the result becomes:

$$\{TP-A (B) = 1 - (TP-A (A)) = (+Y)\}, \text{ and then,}$$

$$\{TP-A (N_2) = 1 - (TP-A (N_1)) = (+Y)\}$$

Assumptions: 1. $(0 < V < 1)$ for (A/N_1) and (B/N_2) where $\{(A/N_1) \geq (B/N_2)\}$; and the equation outcome is "*positive*" statically, $(+ Y)$, whenever the causes-effect of the " $(b + c)$ angles" exists as the equation's sole input, under a condition of continuous "A Triangle Pro-Alliance" or the constant state of peace/anti-conflict and war. 2. $\{(+X) \geq (+Y)\}$ since $\{(A/N_1) \geq (B/N_2)\}$.

Third: The proof of conflict/war impediment states under the Status Quo Equilibrium and Incomplete Balance Rule. It is the proof of why the Status Quo Equilibrium leads to the war possibility based on the “A Triangle Pro-Alliance (TP-A)” givens, so that the perception/positive state of the Relative Balance Rule when the $\{(E_{va})^{+1}\} > \{(E_{vb})^{+1}\}$ and the Outright Balance Rule’s Equilibrium are the best positions as the *War/Conflict Impediment Points* for the Israeli-Palestinian Conflict case.

Assuming that the war outcome is the “*absolute*” grand-possibility when the (TA-A)’s $\{((-a) + (-b))$ and $((-b) + (-c))\}$ angles’ causes/possibilities manifest altogether, where the (TA-A) is the opposite of the (TP-A), thence their Effects $(-A)$ and $(-B)$, consecutively, become the inputs of zero equation, if the actual conflict/war outcome is a zero-state for all conflicting sides, as follows:

$$\{TA-A (-A) + TA-A (-B) = Zero\}$$

The assumptions here are: 1. $(-A)$ refers to the (Value “V” of $(-A/N_3)$), and $(-B)$ indicates the (Value “V” of $(-B/N_4)$); and 2. the two inputs exist in the equation where the “A Reversed Triangle-Anti-Alliance” takes place within a constant state of conflict/war so that the outcome equals (Zero).

If the $((-a) + (-b))$ angles’ causes/possibilities are provided within the “A Reversed Triangle-Anti-Alliance” in a constant state of conflict/war, their Effect $(-A)$ becomes the input of the zero equation:

$$\{TA-A (-A) = Zero - (TA-A (-B)) = (-X)\}, \text{ and then}$$

$$\{TA-A (N_3) = Zero - (TA-A (N_4)) = (-X)\}$$

Assumptions: 1. $(0 < V < 1)$ for $(-A/N_3)$ and $(-B/N_4)$ under the Status Quo Equilibrium of Incomplete Balance Rule, considering that $\{(-A/N_3) \geq (-B/N_4)\}$. 2. The given $(-A/N_3)$ obtains a changed (V) under the actual conflict/war outcome, depending on that the absent provided- $(-B/N_4)$ ’s (V) is counted through its Status Quo Equilibrium’s one (i.e., $(0 < V < 1)$). 3. The equation outcome, therefore, is “*negative*” statically, $(-X)$, whenever the causes-effect of the “ $((-a) + (-b))$ angles” exists as the zero equation’s sole input within a condition of continuous “A Reversed Triangle-Anti-Alliance” under a constant state of conflict/war.

Similarly, if the $((-b) + (-c))$ angles' causes/possibilities are provided within the "A Reversed Triangle-Anti-Alliance" in a constant state of conflict/war, their Effect $(-B)$ becomes the input of the zero equation, as the following:

$\{TA-A (-B) = Zero - (TA-A (-A)) = (-Y)\}$, and then

$\{TA-A (N_4) = Zero - (TA-A (N_3)) = (-Y)\}$

Assumptions: 1. $(0 < V < 1)$ for $(-A/N_3)$ and $(-B/N_4)$ under the Status Quo Equilibrium of Incomplete Balance Rule, where $\{(-A/N_3) \geq (-B/N_4)\}$. 2. The given $(-B/N_4)$ obtains a changed (V) under the actual conflict/war outcome, depending on that the absent provided- $(-A/N_3)$'s (V) is counted through its Status Quo Equilibrium's one (i.e., $(0 < V < 1)$). 3. The equation outcome, therefore, is "negative" statically, $(-Y)$, whenever the causes-effect of the $((-b) + (-c))$ angles" exists as the zero equation's sole input within a condition of continuous "A Reversed Triangle-Anti-Alliance" under a constant state of conflict/war. 4. $\{(-X) \geq (-Y)\}$ since $\{(-A/N_3) \geq (-B/N_4)\}$.

Fourth: The proof of conflict/war impediment states under the (Two-Sovereign State Solution) Equilibrium and the Outright Balance Rule. This conflict/war impediment state is the most optimal and direct position for the Israeli-Palestinian Conflict. Under the Outright Balance Equilibrium of Two-Sovereign State Solution:

The $\{(A) \text{ of the } (a + b) \text{ angles' causes}\} = \{(B) \text{ of the } (b + c) \text{ angles' causes}\} = \{(1)\}$, with the $\{(TA-A)^Z\}$ or the zero-conditionality of the $(TA-A)$.

Thence, $\{(N_1) = (N_2) = (1)\}$, where $\{V = 1\}$ for (A/N_1) or (B/N_2) within a "constant state of peace," under which the (A Reversed Triangle-Anti-Alliance $(TA-A)$) ceases permanently to exist _ that we denoted as $\{(TA-A)^Z\}$ _ given that its related value (V) is totally zero (Z) . Also, the $(TA-A)$'s probability (p) becomes: $(p = 0)$, while $(p = 1)$ for the (A Triangle Pro-Alliance $(TP-A)$). Thus, at the base of the $(TP-A)$, the (Outright Balance Line) exists; see Figure 11.

3.2. A Restoration of the Developed-Deterrence Entanglement Law (DEL) Rules Within an Actual State of All-Out War: Mutual-Grand Strategy Modeling of the Russia-Ukraine War 2022²¹³ and Balancing the Unbalanced

3.2.1. Introduction

Since the Russian-Ukrainian War possibility became a fact by February 24, 2022, when Russia initiated its invasion of Ukraine, this part of the theoretical analysis deals with war strategies under a grand strategy of both parties; (Russia) as a (Wave Player “WP”), and (Ukraine and NATO under the US leadership) as a (Counter-Wave Player “CWP”). This theoretical strategizing of the war aims to introduce a prediction of every side’s game or hypergame but by describing all sides’ strategies made in interaction with each other, considering that they are all rational players seeking to maximize their utility in the war at one another’s expense. Therefore, what might be an uncertainty becomes almost certainty through this modeling of the mutual-grand strategy, and no equilibria thus are referred to in general; however, particularly by shedding light on the (DEL)’s relevant equilibria cases, where we address the (Attack) and (Defense) strategies for both first in an attempt to contain the scale and level of war at each wave’s end.

By strategizing four waves of the Russo-Ukrainian War 2022, this modeling anticipates what might occur in this war in assumingly its first, second, third, and fourth stages, answering: a. What strategies should every player use as a rational actor at every War Wave? b. What are the counter-strategies that the other should use in response? c. At every wave’s end, how a diplomatic exit can be traced for ending the war? d. If the war escalates to be a major one, how will this occur, and simultaneously how will such a possibility be eliminated or contained in scale and level?

²¹³ We built this modeling by early April 2022, when the latest updates of the Russia-Ukraine War 2022 were represented in “Ukrainian forces have regained control of large areas around the capital Kyiv as Russian forces withdraw and refocus their efforts on operations in the east of the country,” where the latest developments on day 40 of the invasion that began by February 24, 2022, were: “Russian forces abandon efforts to take the capital Kyiv; Russia is now believed to be refocusing on the Donbas region; Ukraine accuses Russian troops of massacring civilians in the town of Bucha; Fighting continues in the (mostly occupied) port city of Mariupol” (David Brown, Bella Hurrell, Dominic Bailey, Mike Hills, Lucy Rodgers, Paul Sargeant, Mark Bryson, Zoe Bartholomew, Sean Willmott, Sana Dionysiou, Joy Roxas, Gerry Fletcher, Jana Tauschinsk, Debie Loizou and Prina Shah, “Ukraine War in Maps: Tracking the Russian Invasion,” BBC News, April 4, 2022. <https://www.bbc.com/news/world-europe-60506682>. “Access Date 06/15/2022”).

Depending on a game and hypergame-theoretical analysis, we developed this modeling, focusing on revealing the weakness' points in the second actor's interactions by providing a (Counter-Wave) in each War Wave besides the (Wave) of the first actor. If this modeling is not ideal enough, it is applicable and prescribing matters as how they ought to be, after describing how they are, for containing the war while deterring the opponent (i.e., the Wave-Player) sufficiently as possible as we could deduce. When concluding this work, which we called the "Mutual-Grand Strategy Modeling of the Russia-Ukraine War," we assume that the Deterrence Entanglement Law (DEL) can be restored and maintained to precluding this war re-initiation possibility in the future under an (Outright Balance Rule).

3.2.1.1. Theoretical Assumptions and Configurations

-For a (Future Advance Towards Victory, "FA-V")'s Distance, we consider that $\{(-6 \text{ DU})_v > (-5 \text{ DU})_v > (-4 \text{ DU})_v > (-3 \text{ DU})_v > (-2 \text{ DU})_v > (-1 \text{ DU})_v > (0 \text{ DU})_v > (1 \text{ DU})_v > (2 \text{ DU})_v > (3 \text{ DU})_v > (4 \text{ DU})_v > (5 \text{ DU})_v > (6 \text{ DU})_v\}$, where (DU) is the (Distance Unit), and (v) is the (Value) of (DU). Where the (Distance Unit "DU") is a mathematical tool that we set to use in referring to the distance that exits for a player (x) or (y) from/to their (Future Advance Towards Victory/(FA-V).

-Also, we assume that there is an Infinite Distance Unit ($\infty \text{ DU}$) resembling the less value (v) ever of any $\{\text{DU (FA-V)}\}$, and $(-\infty \text{ DU})$ that is the highest value ever of $\{\text{DU (FA-V)}\}$. Thence, the less the Distance Unit number is, the higher value it reflects for the (Wave Player, "WP") or (Counter-Wave Player, "CWP").

-Most importantly, according to this modeling configurations, we assume that: The "War Length (WL)" factor for the (WP) or (CWP), if added to the "Stabilization of War Objectives (SWO)" factor for the same player, both result in giving an indication to the "Distance Unit (DU)" of the player from its "Future Advance Towards Victory (FA-V)" factor. We denote this relationship in symbols within this equation:

$$\{ (\text{WL}) + (\text{SWO})_{(\text{WP/CWP})} \simeq \text{DU (FA-V)}_{(\text{WP/CWP})} \}$$

Based on this relationship, we could calculate the level of moving toward (Victory) or (Defeat) at the end of every wave for a player. Adding to that that we consider other variables and assumptions in such calculation, as to follow.

-Defining who is the (Attacker) and who is the (Attacked or Defender) in the given War Wave, where the (Attack-Defense) Key Wave Strategy means that a player is the (Attacker) using the (Attack) strategy primarily, and (Defense) is merely a counter-strategy. Likewise, the (Defense-Attack) Key Wave Strategy refers to that a player is the (Attacked/Defender) using the (Defense) strategy principally, and (Attack) is merely a counter-strategy.

-What level of strategies is relied on by the (Attacker) in a War Wave, where there is either (Attacker and Defender) or (Defender and Attacker) mainly in each wave? Given that any become in play under (Attack-Defense) Key Wave Strategy, (Level I Strategies “LIs”) mean that a player is using *less intensified* strategic tactics in both (scale, level, and effect). Comparingly, (Level II Strategies “LIIs”) refer to the dependence of an (Attacker) in a wave on *more intensified* strategic tactics in the (scale, level, and effect) than those of (Level I Strategies). So, (Level III Strategies “LIIs”) are the *highest and most intensified* strategic tactics ever in the (scale, level, and effect) used in our (Mutual-Grand Strategy Modeling of the Russia-Ukraine War).

-There is an ***inverse relationship*** that we defined and re-used in our calculation of the (Victory-Defeat) relationship by each wave’s end, between a (Distance Unit) for a Player x “(Px)” from its (Future Advance Towards Victory) and the (Distance Unit) for the other, Player y “(Py),” from its (Future Advance Towards Victory). Namely, the closer the {DU (FA-V)} for (Px) is, where the less (DU)’s number indicates a higher value it yields, the farther the {DU (FA-V)} for (Py) is in the same level and scale. For example, if the {DU (FA-V)_{Px}} is (-3), it means not only that (Px) is closer to its (FA-V) but also that (Py) is farther from its (FA-V) in exactly (3 DU). Specifically, we assumed that in a ***war-zero-sum game***, a ***victory*** for one conflicting party reverses the ***defeat*** for the other (i.e., the enemy), and vice versa, as follows:

$$\begin{array}{ccc} \{- \text{DU (FA-V)}_{Px}\} & \longleftrightarrow & \{+ \text{DU (FA-V)}_{Py}\} \\ \text{(Victory for One/Per Wave)} & & \text{(Defeat for the Other/Per Wave)} \end{array}$$

-We assume that the (Distance Unit “DU”) between the (Wave “W”) and (Counter-Wave “CW”) in any War Wave is equal to the {DU (FA-V)} of the (Attacked), either (WP) or (CWP), achieved by a previous wave’s end. In other words, the more defeated the (Attacked) is regarding its {DU (FA-V)} by a wave’s end, the farther the distance must

be between the (W) and (CW) in a new War Wave in real-world circumstances. Alternatively, the (DU) between the (W) and (CW) in a War Wave is equal to the {DU (FA-V)} of both players if this {DU (FA-V)} for the (WP) and (CWP) are equal (i.e., this case is to occur in the First War-Wave only when the two players begin the war from a status quo's (DU)-estimates, the “5 DU”).

-The (Level I Strategies) causes a less deviation in (DU) for a player than (Level II Strategies) than (Level III Strategies); namely, {(DU) LI_S > (DU) LII_S > (DU) LIII_S} for the (Attacker) player, where the more intensified strategies used by this (Attacker), the closer it becomes to its (FA-V) and the less its relevant (DU) is. That is, the less (DU) number, the higher value it gives, and vice versa. So, we can argue that the (+ ∞ DU) of (FA-V) reflects the least value ever with the (Distance) is infinite; otherwise, the (− ∞ DU) represents the highest value ever for a (Distance Unit) to (Future Advance Towards Victory) for a (Wave Player) or (Counter-Wave Player) where the (Distance) to (FA-V) ceases to exist.

-Contextually, in this modeling, a. the (WP) in (W₁), who is the (Attacker), using the (LI_S) could transform its (FA-V) position in this wave of war from {(5DU) to (-3 DU)}, in decline in (Distance) estimated by totally (8 DU); b. the (CWP) in (W₂), who is the (Attacker), using the (LII_S) could transform its (FA-V) position in the wave from {(3 DU) to (-6 DU)}, in decline in (Distance) estimated by (9 DU) in total; c. the (WP) in (W₃), the (Attacker), using the (LII_S) could transform its (FA-V) position from {(6 DU) to (-3 DU)}, in decline in (Distance) estimated by (9 DU) in total; d. the (CWP) in (W₄), who is the (Attacker), using the (LIII_S) could shift its (FA-V) position from {(3 DU) to (− ∞ DU)}, in decline in (Distance) estimated by an (Infinite DU).

-The (Stabilization of War Objectives “SWO”) indicators over time are in a **direct relationship** with these of the {DU (FA-V)}, given that the less (DU) number means its higher value and that a player is closer to its (FA-V), and vice versa. Likewise, on the ordinal numbers line, the higher number of the (SWO) indicator, in relation to the “War Length (WL)” index, refers to the less value for a player, and the lower (SWO)-indicator number reflects the higher value for the same player. Here, we prepared a short classification of six categories of the (WL) indexes, as follows: a. with the first four months of the war passing, when the war takes place in this time period, we refer to that

by (-1); b. with the second four months of the war passing, we refer to that by (-2); c. with the third four months of the war passing, we refer to that by (-3); now, it is the first year of the war. Sequentially, in the second year of the war: a. with the first four months passing, it is (-4); b. with the second four months passing, it is (-5); c. with the third four months passing, it is (-6). We provide below two examples of that:

The first example, what are the (SWO)-indicator values over two years of the war, if the {DU (FA-V)} value for the player (x) “(Px)” is (-3), and the {DU (FA-V)} value for the player (y) “(Py)” is (3), given that both (DU) are calculated through knowing the (Strategies Level) used by the (Attacker “(Px)”) against the (Attacked “(Py)”)?

Based on having both players’ {DU (FA-V)} as a **static given** along with two war-years not an (actually) variable one, and considering that $\{ (WL) + (SWO)_{(WP/CWP)} \simeq DU (FA-V)_{(WP/CWP)} \}$, we can introduce these six results of the (SWO)-indicator values for the (Px) where its {DU (FA-V)} value is (-3): a. If the (WL)-index value is (-1) where the war is passing its first four months of the first year, then the (SWO)-indicator value is (-2); b. if the (WL)-index values consecutively are {(-2); (-3); (-4); (-5); (-6)} for the remaining (WL)-index’s categories, then the (SWO)-indicator values respectively are {(-1); (0); (1); (2); (3)}.

Where $\{(12v) < (11v) < (10v) < (9v) < (8v) < (7v) < (6v) < (5v) < (4v) < (3v) < (2v) < (1v) < (0v) < (-1v) < (-2v) < (-3v) < (-4v) < (-5v) < (-6v) < (-7v) < (-8v) < (-9v) < (-10v) < (-11v) < (-12v)\}$ for the (SWO) indicator, since the {DU (FA-V)} is estimated by considering the least number as the highest value (v) in a given context.

Similarly, these are the six (SWO)-indicator’s values for the (Py) where its {DU (FA-V)} value is (3): a. If the (WL)-index value is (-1) where the war is passing its first four months of the first year, then the (SWO)-indicator value is (4); b. if the (WL)-index values consecutively are {(-2); (-3); (-4); (-5); (-6)} for the other (WL)-index’s categories, then the (SWO)-indicator values respectively are {(5); (6); (7); (8); (9)}.

The second example, what are the (SWO)-indicator values over two years of the war, if the {DU (FA-V)} value for the player (x) “(Px)” is (-6), and the {DU (FA-V)} value for the player (y) “(Py)” is (6), given that the (DU) is calculated through knowing the (Strategies Level) used by the (Attacker “(Px)”) against the (Attacked “(Py)”)?

Based on having the $\{DU (FA-V)\}$ as a static given during two years of the war, not an (actually) variable one, and considering that $\{ (WL) + (SWO)_{(WP/CWP)} \simeq DU (FA-V)_{(WP/CWP)} \}$, these are the six resulting values of the (SWO)-indicator for the (Px) where its $\{DU (FA-V)\}$ value is (-6): a. If the (WL)-index value is (-1) where the war is passing its first four months of the first year, then the (SWO)-indicator value is (-5); b. if the (WL)-index values consecutively are $\{(-2); (-3); (-4); (-5); (-6)\}$ for the rest of the (WL)-index's categories, then the (SWO)-indicator values respectively are $\{(-4); (-3); (-2); (-1); (0)\}$.

Likewise, these are the six (SWO)-indicator's values for the (Py) where its $\{DU (FA-V)\}$ value is (6): a. If the (WL)-index value is (-1) where the war is passing its first four months of the first year, then the (SWO)-indicator value is (7); b. if the (WL)-index values consecutively are $\{(-2); (-3); (-4); (-5); (-6)\}$ for the remaining (WL)-index's categories, then the (SWO)-indicator values respectively are $\{(8); (9); (10); (11); (12)\}$.

3.2.1.2. Strategic Explanation

First: Based on the above-mentioned configurations, it is concluded that: a. The *same* $\{DU (FA-V)\}$ is associated with an (SWO)-indicator value decreasing gradually over time, coinciding with the (WL)-index extension with the war range increases to be more extended or protracted. More obviously, whenever the (WL) stretches to be longer, whenever the (SWO)-indicator value becomes reduced over time, at the same $\{DU (FA-V)\}$ for a player, where the less (DU) number means the higher value of a player's (FA-V). b. The higher the value of the $\{DU (FA-V)\}$ for a player is, the higher the (SWO)-indicator value is, correspondently, over a specific period of time. This relationship is denoted in this formula: $\{(6 \text{ DU})_v < (3 \text{ DU})_v < (-3 \text{ DU})_v < (-6 \text{ DU})_v\}$ where, symmetrically, $\{(7_v) < (4_v) < (-2_v) < (-5_v) \text{ of the (SWO)-indicator}\}$ for $\{(Py); (Py); (Px); (Px)\}$ respectively, given that the (WL)-index lies in the first category of (-1) value with the war taking place in the first four months of the first year in these cases.

Second: On the strategic modeling of a mutual-grand strategy of the war. The (W_1) of the Russia-Ukraine War is the most direct one, where the (Attacker) or (*Wave Player "WP"*) formerly concluded all possible taken moves by the (*Counter-Wave Player "CWP"*) and therefore what the last (i.e., the Attacked) might consider as its (Attack) strategy is originally a (Defense) one. By explaining famous repeated strategies made by (CWP) in

(W₁), we build on that to move into (W₂) when we correct the counter-strategies as they must be, not as they are, facilitating this player's way towards victory by either method mentioned at any War Wave to follow. So, it is modeling prescribing the most optimal decision-making process to be made during the war by both sides, helping the (CWP) counter the invasion in the perfect way ever where the scale and level of the war are maintained contained along with the war's diverse trajectories. That is to say, the (WP) can move forward and defeat the (CWP) fiercely in the present and future if, and only if, the last did *not* make those most rational actions (i.e., decisions) that are introduced in our modeling, leaving the war shift from a stage to another based upon the way the (WP) shapes. Here, we depend, in this game-and-hypergame strategic theoretic modeling and analysis, on explaining each wave of the war by focusing on three *interrelated elements*: a. the War Objectives and the War Wave's Dominant Strategies Played Over Interactively; b. the (WP)'s Major Strategies in Interaction with the (CWP)'s or vice versa; c. the Wave's Outputs and the Diplomatic Exit Possibility.

3.2.2. The First War-Wave “(W₁)”

3.2.2.1. War Objectives and the War Wave's Dominant Strategies Played Over Interactively

The (WP)'s Key Strategic Objective in (W₁) is the (Territory Invasion) of Ukraine, where it uses the (Attack-Defense “A-D”) Key Wave-Strategy, deriving from this one other five major strategies. The (A-D) means that the (WP) uses the (Attack) strategy mainly by initiating the invasion primarily, while the (Defense) is a counter-strategy versus the (CWP)'s (Counter-Attacks). Contradictorily, the (CWP)'s Key Strategic Objective in (W₁) is the (Territorial Sovereignty) of Ukraine, where it uses the (Defense-Attack “D-A”) Key Wave-Strategy, deriving from this one other five major strategies. The (D-A) means that the (CWP) uses the (Defense) strategy principally in response to the (WP)'s initiated invasion (i.e., the “Attack” strategy), while the (CWP)'s (Attack) is merely a counter-strategy.

The (W₁)'s Dominant Strategies Played Over Interactively are: Economic Sanctions; Alliance Building; Media and Propaganda; Collective Security; Military Preeminence, with the (Diplomacy and Negotiation) possible exit; see Figure 12.

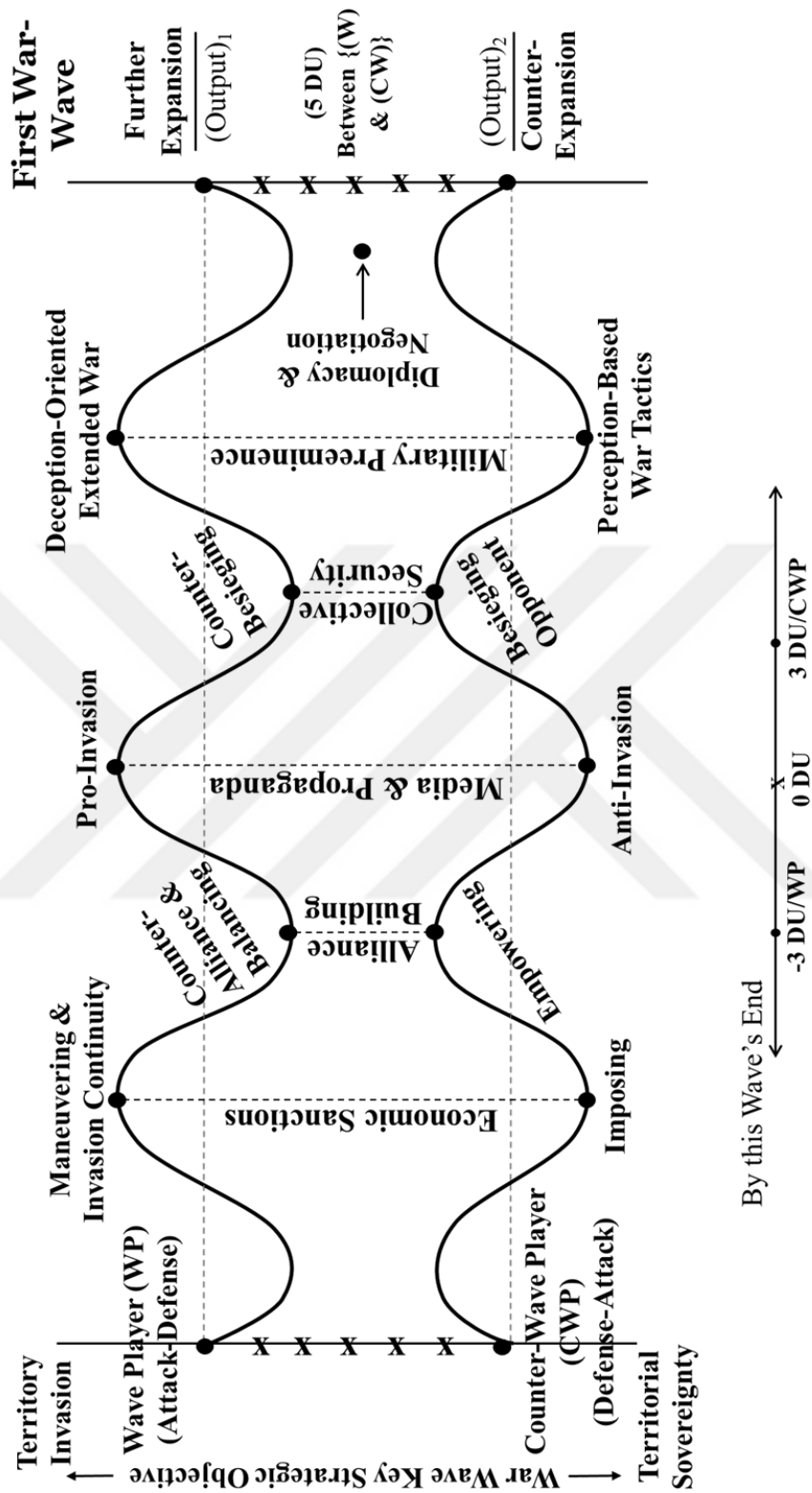


Figure 12: The Russia-Ukraine War's First War-Wave (W_1)

Source: Prepared by the author.

3.2.2.2. The (WP)'s Major Strategies in Interaction with the (CWP)'s

As mentioned above, this wave's strategies are so repeated in relation to the (WP) and (CWP)'s used strategies in our real-world circumstances; still, it is necessary to define better counter-strategies for the (CWP).

First, while (CWP) pushes for the expected (Imposing Economic Sanctions) on (WP) major strategy, the last could use (Maneuvering) over that where the (Invasion Continuity) takes place.

Second, with (CWP) moving to the (Empowering Alliance Building) major strategy, the (Attacker) or invader (WP) moves, even earlier, to the (Counter-Alliance and Balancing Power) one, utilizing the leverage it enjoys over many former Soviet Republics and Eastern bloc states.

Third, the (WP) depends on the media as a (Pro-Invasion) *war* machine, whereas the (CWP) attempts to rely on it as an (Anti-Invasion) *peace* machine.

Fourth, the (CWP) prefers the (Collective Security) strategy choice, perceiving that it is (Besieging the Opponent) mainly by i. its imposed sanctions that are *not* de facto binding to all states where none is forced to be subjugated to their implementation mechanisms, particularly, those of the former Eastern bloc and Russia's client states, and also, by ii. causing casualties on the enemy's side who, the (WP), depends on the following: a. *Outnumbering* its enemy, the Ukrainian army, in battle zones and using more advanced war weaponry while being strategically strong and highly organized; b. using *mercenaries*, thus decreasing its casualties to a minimum level to the extent that the (WP)'s own people can *hardly* notice that there is a war and invasion relevant-human cost; c. the *fear* it did/does create inside the European peoples' minds and hearts from a major war, thus pushing them out of the battle perpetually, easily "*hunting*" the Ukrainians, and gradually causing severe casualties on their side. That is credible by targeting not mercenaries but ordinary soldiers in actual human losses deeply inside the Ukrainian society, killing civilians on the road and harshly defeating this lonely army more (i.e., Ukraine's).

Therefore, it is directly to conclude that the (WP) uses the (Collective Security) Dominant Strategy for a (Counter-Besieging) strategic purpose versus the (CWP), relying on: a.

causing terrible human losses on the Ukrainian side; b. creating an unprecedented immigration crisis in Europe by pushing millions outside Ukraine to other European states, hindering their economic expansion and achievements by causing economic crises and recession over time; c. controlling the oil and food supplies from Ukraine to Europe and other places in the world. Here, it seems that in the future, the (WP) is going to counter-deterrence even more heavily, coinciding with each inch it achieves regarding the territorial advance in Ukraine, as explained later. d. If we add to that that the (WP) capability to manage the Ukrainian ports in the Black Sea, and therefore, the oil tunnels and ships' navigation over this strategic area on behalf of "Liberated" (Russian-backed-Ukrainian separatists), it is a matter of time, with NATO leaving the Ukraine army facing this enemy alone, till the (WP) gains the momentum, advancing strongly in the Black Sea region, and the invasion is to be a multi-invasion. However, through the next waves, we prevent the (WP)'s possible territorial advance by prescribing more balanced-strategic interactions, relying on the rationality argument of both.

Fifth: On the (Military Preeminence) Dominant Strategy of (W_1), it appears that the (WP) depends on (Deception-Oriented-Extended War) tactics and stratagems, while the "tolerant" (CWP) uses (Perception-Based War Tactics).

3.2.2.3. The Wave's Outputs and the Diplomatic Exit Possibility

3.2.2.3.1. The First War-Wave's Outputs

For the (WP) using only, the (Level I Strategies), which are the less intensified ones on level, scale, and effect, in attacking Ukraine as a protégé to NATO, Europe, and the US, the (Output)₁, for the (WP) or the (Attacker), is (Further Expansion), while the (Output)₂, for the (CWP) or the (Attacked), is (Counter-Expansion). Whereas both actors began the war where we assume that each one is far from its Key Strategic Objective of the war or (Future Advance Towards Victory "FA-V") in about (5 DU), the military preeminence with other major strategies played by the (WP), helped this actor get closer to its (FA-V) where the relevant (DU) became (-3). This (temporal) victory of (WP), the {-3 DU (FA-V)}, marks in an opposite relationship a (temporal) defeat on the other side of the (CWP), which is reversely equal in level and scale to the (WP)'s victory, where the (CWP)'s (DU) from its (FA-V) becomes (3), by the (W_1) end.

Although the (CWP)'s { DU (FA-V) } decreased from (5 DU) of the status quo to (3 DU) according to the (WP)'s opposite indicator, this refers to that: the major strategies played out by (CWP) had a role in getting it a little closer, however, still far, from its (FA-V). Since (W₁) began from a status quo's equal (DU) for both actors regarding their (FA-V), where it similarly defined the (DU) between the (Wave) and (Counter-Wave) of this First War-Wave, the (CWP/ Attacked)'s {DU (FA-V)} at the (W₁)'s end, draws the distance now between the (W) and (CW) in (W₂), (3 DU), if a diplomatic exit is not sought or succeeded.

That is to say; whenever the (WP) obtains high (DU)_v of fewer numbers, it shapes the gap between the (W) and (CW) by the (CWP)'s less (DU)_v of high numbers; so that, a final victory it might achieve, outside this modeling confines, means that the (Attacked/CWP) is getting the opposite estimate on the same *level* and *scale* in high (DU) numbers. Thence, instead of an (Infinite Distance for a Created Outright Balance) that we seek here, it would be the (Infinite Distance) between Waves and Counter-Waves of a singularity point of (WP)'s *created global hegemony reign*, the thing that we work on avoiding through this strategic analysis.

We can denote the “(W₁)'s Victory-Defeat Relationship” in this formula:

If { (WL) + (SWO)_(WP/CWP) $\simeq$ DU (FA-V)_(WP/CWP) }, and that,

{ (WL) + (SWO)_(WP/A-D) $\simeq$ -3 DU (FA-V)_(WP/A-D) }, where

$$\begin{array}{ccc} \{ + \text{DU (FA-V)}_{Py} \} & \longleftrightarrow & \{ - \text{DU (FA-V)}_{Px} \} \\ \text{(Defeat)} & & \text{(Victory)} \end{array}$$

Then, { (WL) + (SWO)_(CWP/D-A) $\simeq$ 3 DU (FA-V)_(CWP/D-A) }

According to this relationship, any repelling efforts of the (WP) attacks and confrontation by counter-offensives mean no (actual) victory to the (CWP) as long as the (WP) gets closer in the distance to its (FA-V) while it maintains an (SWO) over a period of time that might be estimated by nearly (3-5) months if it continues its “*hunting*” of the less-numbered, less-strategically organized, and less-advanced weaponry Ukrainian army and Ukrainian people in the same level it achieved from February 24 to April 4, 2022, for example. The period of time that enabled Russia to de facto seize Eastern Ukraine's major territories and advance towards the country's heart.

3.2.2.3.2. The Diplomatic Exit Possibility

Based upon what was mentioned above, the total outcome of the First War-Wave is (*Intentional Stalemate*) made by the (WP) versus (CWP), which paves the way to having the ((WP)'s Fertile Ground to Future Military Superiority). So, agreeing on the (Diplomacy and Negotiation) exit means that the (WP) must compensate its war spoils by diplomacy through stating a term in any reached peace treaty on "maintaining territories it de facto captured in the (W_1).” If (CWP) accepts, the war ends by this stage; however, the (WP) could gain an unexpected future opportunity to advance deeply inside Ukraine on any occasion since it did not achieve its complete Key Strategic Objective of the (Territory Invasion) of Ukraine and not merely territorial parts. Adding to that, establishing a Soviet/Russian Ukraine in Eastern Ukraine grants the (WP) the leverage it exactly needs to conquer former Soviet/Communist Republics once the Russian-backed separatists in these states realize and witness that “Mother Russia” is a credible “Mom”! The probability (p) of the diplomatic exit possibility by the (W_1)’s end is ($0.5 \leq p \leq 1$) under uncertainty, deception, and (intentional) misperception conditions, while it is ($0 \leq p < 1$) under certainty and correct perception circumstances.

3.2.3. The Second War-Wave (W_2)

3.2.3.1. War Objectives and the War Wave’s Dominant Strategies Played Over Interactively

The (WP)’s Key Strategic Objective in (W_2) is still the (Territory Invasion) of Ukraine; however, it uses the (Defense-Attack “D-A”) Key Wave-Strategy instead, while relying on this key one in playing other five major strategies. The (D-A) refers to that (WP) uses the (Defense) strategy principally in confronting the (CWP)’s (Attacks) in a second wave, where the (WP)’s (Attack) strategy is only a counter-one versus (CWP). On the other hand, the (CWP)’s Key Strategic Objective in (W_2) shifted to be the (International Security), activating the (Attack-Defense “A-D”) Key Wave-Strategy, deriving from this one other five major strategies. The (A-D) means that (CWP) uses the (Attack) strategy mainly against (WP), while the (Defense) is a merely counter-strategy versus (WP)’s (Counter-Attacks).

The (W_2)’s Dominant Strategies Played Over Interactively are: Preventive Threats;

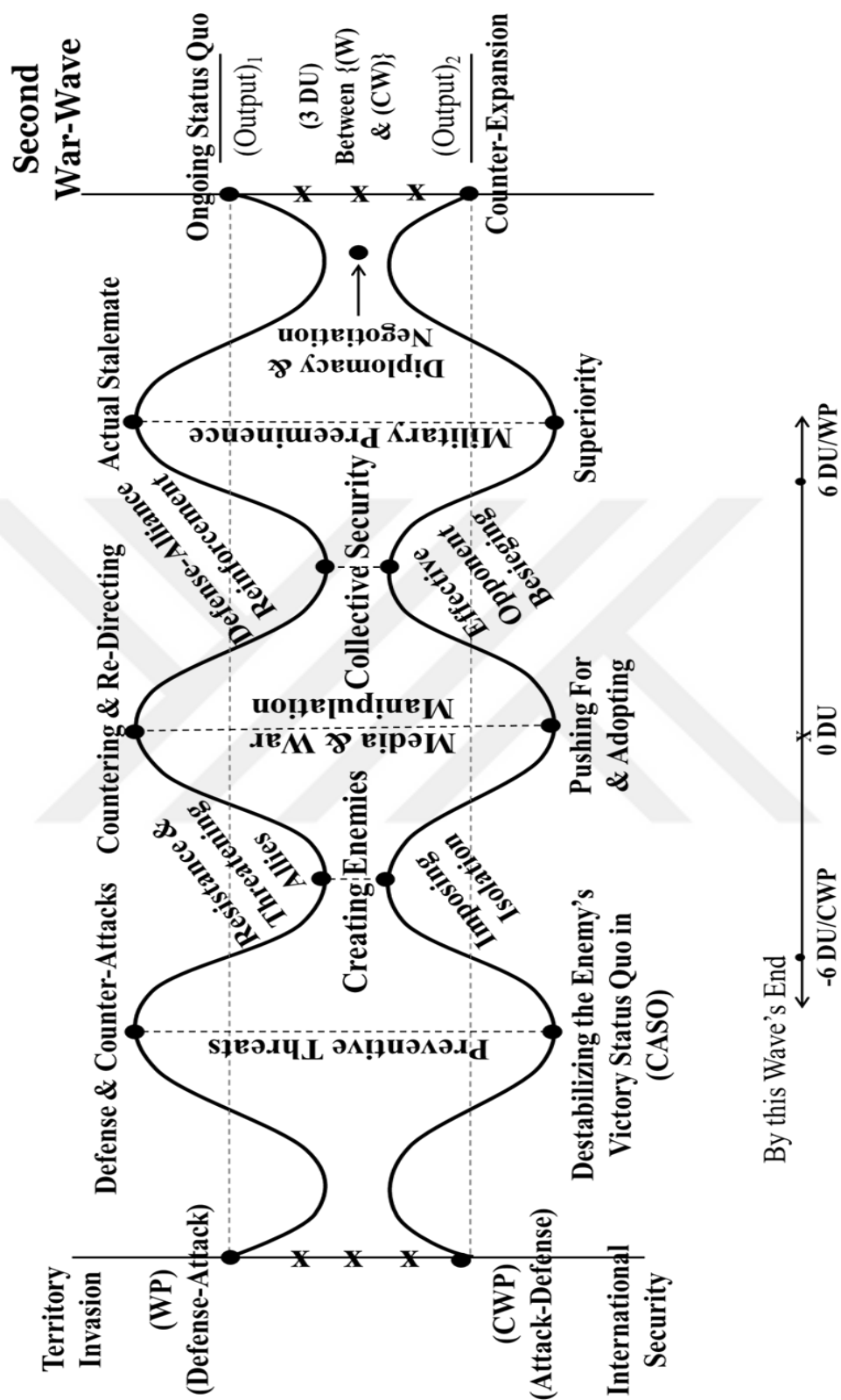


Figure 13: The Russia-Ukraine War's Second War-Wave (W₂)

Source: Prepared by the author.

Creating Enemies; Media & War Manipulation; Collective Security; Military Preeminence, whereas the (Diplomacy and Negotiation) is a possible diplomatic exit by the wave's end; see Figure 13.

3.2.3.2. The (CWP)'s Major Strategies in Interaction with the (WP)'s

In (W₁), (NATO and the US) have left (Ukraine) alone in the battle zones to face an enemy that overwhelms it strategically, in numbers, and in weaponry. However, in (W₂), the (CWP) in its dual part (i.e., the NATO under the US leadership and Ukraine) collide against (WP) in a “*Chain of Deterrence-via-War*” active (Attack-Defense) Key Wave-Strategy, that might end the war by this wave, or in a Fourth War-Wave to follow.

First: Under (Preventive Threats) (W₂)'s Dominant Strategy, the (CWP) becomes better off by preparing a *strategic surprise* by (Destabilizing the Enemy's “*Victory*” Status Quo in (CASO)). (CASO) is an abbreviation referring to that (CWP) should open four fronts of fighting against (WP), still indirectly, though, to avoid the major war possibility (at least, if it is to be a major war in the Third War-Wave at the (WP)'s hands, then through this made action, it will be limited in scale and level as explained in the Fourth War-Wave if a diplomatic exit does not succeed by the (W₂) and (W₃)'s end).

We can explain the (CASO) four military fronts that the (CWP) opens to weaken the (WP) from the heart as follows: Firstly, what are the (CASO) fronts, and how will they “De-stabilize (WP)'s “*Victory*” Status Quo”?

-(C) is (Crimea), that (WP) occupied by 2014, which is part of Ukraine. Apparently, from (Crimea), the (CWP) forces can get the “capability and credibility tools” to advance toward the Eastern Ukraine invaded territories, breaking the Russian Military fortresses, distracting and inflicting their occupying forces deeply inside, causing harsh military losses, and thwarting their high-level military organization regardless of the (WP)'s attempts to re-organize its forces thereafter. That is while considering that the (CWP)'s (Attacks) in there and all the (CASO) fronts must take a “*Repetitive Nature*” along with the “Russia-Ukraine War” at whatever cost. Strikingly, each front is a “*victory key*” either in (W₂) or (W₄) and permanently in the future. The question is, how the war on this front is to be fought effectively to achieve military advance for (CWP) on the whole systemic battle, even if a victory in Crimea is not gained (it is not the aim here), in terms of building

this front's combat as a decisive sub-strategy of this player (Attack-Defense) Key Wave-Strategy to end the war by this stage, or to pave the way to a huge victory for the (CWP) in (W₄)? We answer that below.

-(A) is (Abkhazia) and (S) is (South Ossetia) in Georgia; both are territories that Russia invaded in 2008, depending on: i. creating the fear inside Europe from a major war and thus hunting the Georgians and occupying their sovereign territories and recognizing them as de facto Russian lands, ii. weaponize more than 70 thousand soldiers from Russia, Abkhazia, and South Ossetia, to fight against 10 thousand Georgian soldiers, forcing the Georgian Army's retreat and surrender over its central lands, iii. managing the Black Sea from occupied Abkhazia, and encircling any Georgian ship attempts to re-seize Abkhazia through the sea, or penetrating Russian occupying forces lines or the Russian-backed-separatists, using Georgian Navy Forces.

Apparently, Russia or (WP) are repeating almost the same tactics in Ukraine, and if (CWP) does not (Attack) in (Abkhazia) and (South Ossetia) fronts, not to achieve victory at all but to de-stabilizing the opponent's victory, Russia will have a determined victory in future, inside Ukraine. Again, we explain below how a significant victory for (CWP) is to be gained against (WP) in (W₂) or finally in (W₄) through the (CASO) enemy-weakening fronts' combat.

-(O) of (CASO) is (Odesa), which is the fourth of weakening-the-enemy fronts. Odesa is a strategic city in South-Eastern Ukraine; until now, it is not yet occupied, but there is a distinct possibility that it will if Russian troops continue their territorial advance on the same (February 24 to April 3, 2022) level, from the (captured-Kherson to Mykolaiv, and from the last to Odesa). This possibility of victory status quo is to be precluded by the (CWP)'s (Attack-Defense) in (W₂).

Odesa is not only strategic because it hinders Russia from repeating its madness journey that it did by using Abkhazia's advantage on the Black Sea to encircle and attack any Georgian ship that tries to advance forward to Russian and separatists' lines in Abkhazia through the sea to end the invasion, as mentioned above. Further, besides allowing a free navigation passage to Ukrainian and NATO ships on any present or future occasion for penetrating invading Russian forces in Eastern Ukraine, the same Ukrainian and NATO

forces have the privilege to use Odesa as a capable and credible “*Strategic Fortress*” to achieve two strategic advantages towards victory; these are:

The first, to Crimea and from Odesa, the supplies of soldiers, foods, and weapons are facilitated through a possible “*water-bridge*” or safer to say “*water-land bridge*,” which is highly advantageous for the troops-deployment purpose coinciding with air forces interference; that is, from Odesa to Crimea through the Black Sea and from Crimea to all surrounding occupied Ukrainian lands. Thence, from Crimea, a continuous counter-combat deeply within it and other occupied lands in Eastern Ukraine can take place, “beating and biting” the enemy invasion lines from the heart, impeding further expansion, and halting its battles in future steps, as to come.

The second, from Odesa, military forces, meeting military reinforcements from Northern, Western, and Southern Ukraine, must be the case for achieving advance towards the country’s center whenever Russian forces on the Eastern front attempt to move again to the capital Kyiv, as they tried to utilize their distinguished position in East to conquer the center and declare from the capital that the invasion is complete and accomplished based on a *de fact* occupation’s imposed-status quo. In other words, if Russian troops tried to capture the Eastern Ukraine region constituting a half-circle to completely encircle any advancing Ukrainian troops moving towards them from any side (not all sides coherently) in future occupation of the capital, the other parts remained unoccupied of Ukraine compose the other bigger half-circle of the country to defeat these forces from all sides collectively and counter-encircling them, if more organized and intelligent strategic tactics are set and followed.

Shorty, if Russia succeeds in invading Odesa, it a. blocks any NATO attempt in the future to help the Ukrainian army through the Black Sea, b. any attempt to fail the Russian victory status quo in Crimea would be contained by sending reinforcements from the surrounding cities of Crimea themselves empowering the last more, noticing that majority of all Russian supplies to invade Eastern Ukraine are delivered and directed from Crimea basically. It means c. no reaching a *foot position* (all what (CWP)-forces need to “Destabilize the Victory Status Quo of the Enemy”) for (CWP)-groups for fighting in Crimea. The last reflects, a. no ability to hindering or intercepting Russian supplies that help continue the military advance or break the enemy’s Eastern fronts, b. no possible water-

land bridge to assist (CWP)'s present or future navy forces in encircling Russian troops at the Black Sea-Ukrainian occupied cities, and thus c. preventing the possibility of surrounding the enemy from the “*North, central lands, South-East, and the Black Sea*” altogether to restore these territories through *credible coercion* with diplomacy in (W₂), or by a *de factor* victory in (W₄).

Secondly, how the “De-stabilizing the Enemy’s Victory Status Quo” four combat-fronts are to be fought successfully to achieve their productive results and avoid a major war at the same time? Realizing the weakness points at the (CWP) side means that we substitute them with strength- points, as follows:

-Using the Knife That the Enemy Uses Against You Against Him! Since the Russian troops depended on minimizing their casualties by using “mercenaries” through some private military companies, and therefore, making the whole European continent forced to kneel on their feet, asking for their mercy as to not “butcher” the Ukrainians in “Bucha” town, for example, it is ironic to see NATO alliance sacrifices the Ukrainian army and people while it is capable of recruiting mercenaries likewise to eliminate the “butcher” Russian troops. This is not only a mechanism of war tactics but also the first complementary “victory key” to those ones of the (CASO)’s (De-stabilizing the Enemy’s Victory Status Quo) four combat fronts. This first supplementary key concerns tackling the enemy’s outnumbering and its minimum casualties versus maximum Ukrainian casualties’ dilemma.

-To succeed in the (CASO)’s weakening-the-enemy four fronts, only “*Guerrilla Warfare and Insurgencies*” can help accomplish this purpose, since the war actually escalated in level and scale, however, at the weak expense (i.e., the Ukrainians). Most noticeably, nearly all Russian troops’ advance in Ukraine relied on Russian-backed-separatists combat, penetrating the Ukrainian army fronts massively in Eastern Ukraine, at least from (February 24 to April 4, 2022). It is theoretically and practically proved, then, that “Guerrilla Warfare and Insurgencies” combating forces can achieve through their clandestine tactics the defeat of the strongest armies ever in the world, as was witnessed in former Yugoslavia and Italy when defeating the Germans’ giant war machine during World War II.

-It is ironic that after the Russian advance fiercely inside Ukraine by early April 2022, NATO still did not move towards recruiting mercenaries to help achieve a quick and decisive military advance for Ukraine's army. It is also still not going to organize a "Guerrilla Warfare and Insurgencies" depending on opening the (CASO) four fronts of the (Preventive Threats) to vigorously cause the opponent's permanent military losses, territorial de-stabilization in its occupying lands, and deep penetration inside Russian troops lines from all sides in Ukraine (North, West, South, South-East, center, and the Black Sea's besieging to occur gradually). It is further unbelievable and surprising that NATO really left the Ukrainian Army to fight alone in a "suicide mission," as if NATO was asking Russia for, and facilitating to it, having a *prompt* victory in the battle zones of Ukraine. Accordingly, the third method is the provision of "*Para-Military Forces*" to fight side by side with the Ukrainian army. If Russian forces now are, say, 30 thousand, the Ukrainian forces must be 60 thousand to disperse and shatter the advancing Russian troops, not step by step (!) as we witness currently, no, but **thoroughly** from all fronts as if they are all "only one coherent war front." It would and will mean that it is, by this moment, the Ukrainian army with its para-military and mercenaries wings that becomes the "Butcher Army," however, against the enemy's military and mercenaries, not the Russian "Butcher Army" against "Civilians (!)."

Second: After the (CWP), according to its (Attack-Defense) Key Wave-Strategy, uses the (De-stabilizing the Enemy's Victory Status Quo in (CASO)) major strategy, the (WP) resorts to the (Defense in Confronting Internal Chaos and Fronts Weakness) major strategy where it depends on (Counter-Attacks) in support of its defensives. Under the second Dominant Strategy of (W₂), (Creating Enemies), the (CWP) or the wave's (Attacker) moves to (Imposing Isolation) on the (WP). A (Conciliation with, Appeasement, and Attraction of (WP)'s Allies) action made by (CWP) lies in the realm of that major strategy.

On the other hand, the (WP) becomes better off by using the (Resistance and Threatening Allies of both the (WP) and (CWP)) major strategy to coerce all to *not* stand or re-ally with the (CWP). One example of that is when Russia attempts to break a ceasefire treaty signed with Turkey by attacking civilians in Turkey-neighboring Syrian Idleb, compelling Turkey to not *effectively* support NATO's efforts toward Ukraine by threatening to create a renewed wave of massive immigration crisis to both Turkey and

Europe _ if the Syrian regime more fiercely carries out the Russian-backed-missile strikes on this area. While seeing itself in an actual stalemate by the (W₂)'s end, the (WP) will *vigorously* move to this choice in (W₃) as an (Attack) not (Defense) strategy if a diplomatic exit fails at this moment of (W₂).

Third: Under the (W₂)'s third Dominant Strategy, (Media and War Manipulation), the (Attacker/CWP) develops its media strategy by (Pushing For and Adopting) the (Manipulation of War via Media) as a major strategy. Here, the (CWP) utilizes the (WP)'s war atrocities and aggression to activate an (Anti-Opponent Public Discontent Creation in the Opponent's Lands) stratagem. Such a productive tactic must be well-organized through non-conventional media outlets where it is of medium-and long-term effects. It also paves the way towards a final victory for (CWP) in (W₄), coinciding with other media and diplomatic tactics followed if a diplomatic exit does not succeed in (W₂ and W₃). Clearly, the (Anti-Opponent Public Discontent Creation) stratagem does not refer to merely some *random* broadcast publicized, from time to another, on Russian war atrocities and violations. Rather, it does mean resorting to a high-level organization of "*black propaganda*" campaigns against the Russian administration inside Russia by Russians themselves so that the media is no longer a peace machine for ending the war *naively*, showing the Russian atrocities in begging for peoples' mercy, but a war-machine used to "*enforce and coerce*" ending the war by provoking actively public revolting against the war by influential people, at either (W₂, W₃, or W₄).

Confronting that, the (WP) becomes in the best position by (Countering and Re-Directing) its media outlets to work as counter-war manipulation of (CWP) if it reveals that the last is behind that, which must not occur, or by suppressing its own people if not revealing that. In either case, as long as the black propaganda campaigns continue, the (CWP) will still have the leverage to end the war easily the way it wants in this modeling when manipulating the Clausewitz trinity's "public" element to be used in this player's favor at present or, if needed, in future. Moreover, with the war scale and level increase in possible (W₃), the (CWP) is going to alter its media strategy in accordance with its way drawn towards victory. Given that, in (W₄), the (CWP) will be immensely the (Attacker), this player will need global public support more than Russian national one, while the last is still effective for obligating the government to make concessions for *irreversibly* ending

a bloodshed war coinciding with (CWP)'s active "chain of deterrence via war," as explained later.

The question now is: how the (CWP) can alter the Clausewitz trinity's "public" element of the enemy to work for its own interest? We can answer that by formulating these six connected "media, war, and public" strategies as a sub-grand strategy of "black propaganda campaign versus the opponent:"

The First Element: The (War Persuasive Message) strategy, an effective "What." Given that the Russian administration works on propagating for a "liberation war" of ethnic Russians, it does mean that any sufficiently influential counter-campaign must move from counter-persuasion tactics that are equivalently equal to the official narrative. We argue that such a strategy can succeed by shaping the "*War of Tyrant against His Slavic Ethnicity*" as a label and slogan, putting current Russian President Vladimir Putin in comparison with Adolf Hitler in his deadly action by killing and displacing the Polish in World War II for being Slavic. The same that Putin does by displacing and killing the Slavic ethnic civilians with his cold hands. It is also a "Labeling and Shaming of War Leader" tactic. We must notice that every element serves the other, and none can ever work separately for a sound impact in the medium and long-term.

The Second Element: The (Live Interaction with Peoples from Both Sides for Activating a two-steps flow of communication). It is the "How" strategy.

Here, the best method for a successful black propaganda campaign in the opponent's land is the dependence on digital media tools. The social media pages, sponsored advertisements, programs, and paid short videos on the war are highly effective for getting broad classes of Russian audiences in serving the (*allegiance to Ukraine*) purpose, considering the (*efficiency, efficacy, and reliability*) principles of these media contents; it is the *first target*.

The *second target* concerns the modality of bridging influential peoples from both sides to share first the atrocities of war and its relevant military, political, economic, and human mutual damage. And then, each influential public opinion leader in his/her small societal group in Russia can convince the others who constantly listen to him, particularly in the crises times when the dependence on (reliable) news resources increases significantly by the mass publics. Many utilized the war in Russia to beg for money, stealing others from

the whole world, but still, we did not see those who could open the bridge between Ukrainians and Russians to build peace and end the war through “*bottom-top mechanisms*.” Clearly, the more the public leaders from both sides succeed in convincing each other about the inevitability of ending the war, the more that all will witness ordinary Russians walking in the streets pressurizing Putin to end this war. Through this element in support of the other ones, we create “*anti-war pressure groups*” to face fanatic ones that countenance continuous Russian aggression over time.

The Third Element: The (Comparison by Example in the Same Sample) strategy, the “Which” tactic. This element is so direct, however, influential in integration with other elements. If we consider that tyranny can only be overthrown by another tyranny similar in power and leverage, then when a black propaganda campaign tries to highlight Putin’s aggression, it needs more an example of the same sample to convince audiences that a “Liberation is Invasion,” especially, for the sleepy and inactive masses of the twenty-first century. A (Liberation is Invasion) slogan can find its way easily into Russian society through social media ads, pages, active groups, live programs, etc.; also, relying on a mission of thousands of public opinion leaders who do not absorb information about the war from media, and then, delivering media messages to their public followers and social groups, as theory suggests. Rather, these public opinion leaders are to move to obtain breaking and live information about deadly airstrikes on civilians in Ukraine, for instance, from these civilians themselves and conveying and convincing the others around by it. Contextually, in the Third Element, activated politico-social comparisons between “*Peaceful Gorbachev*,” the last president of the former Soviet Union, and “*Bloody Putin*,” is one of the best ways to *restore pacific memories of the nations*, paving the way to accept “No Invasion is Liberation” slogan. From here, it is the need to answer “Who.”

The Fourth Element: “The More Influential the Sender, the More Influenced the Receiver” strategy. It is the effective “Who” tactic. In this element, we suggest societal parties in Russia for an influential counter-campaign to terminate the war; these are; a. public opinion leaders, as we mentioned above; b. opposition leaders; c. international figures who have the necessary influence in Russian society; d. peace and war universities’ departments and scientific institutions; e. civil society organizations; f. oil company managers to speak out the discourse as economic elites, “*complaining a grief*” of damage occurring due to the decline of Russian oil exports, the fall of currency because

of war and relevant economic crises, future recession possibility, and the sufferance of ordinary citizens in a sequence to political enmity-manufactured-economic setbacks made up by the political authority.

The Fifth Element: The (Direct Manipulating of the Enemy's Public) strategy, an effective "Why." It is now the timing to publicly answer the reason for ending the war; however, manipulating the audiences themselves to achieve this purpose. A successful black propaganda campaign to counter Russian propaganda for invading Eastern Europe must highlight (*Mass Initiatives of Human Relief and Assistance of Ukrainian Brother-People*). Such an effort must be a. repetitive, b. sympathetic, c. showing by example thousands of Russians who oppose the war to others, and d. crystalizing the Russian war atrocities against Ukrainians to Russia's people under a brotherhood frame of sharing the same ethnicity, religion, history, and language. These initiatives, if strategically (and well-planned) activated through all social media instruments and internet websites that the ordinary citizens daily use, along with the war trajectory, will help with the other elements in bringing Russians into the streets to **protest** against Putin's aggressive war first, and to **pressurize** him to end it second, at (W_2 , W_3 , or/and W_4). That depends mainly on the masses of rallies that such relief campaigns, in interaction with the other set strategies activation, can gather for this sake.

The Sixth Element: The (Idea Continuity) strategy; an effective "When." We suggest a chronology of the black propaganda campaign for ending the war, through this element, as follows: a. The *first stage* is the "seeded and fledgling idea" phase for gathering Russia's publics against the war; it is associated with governmental suppression. b. The *second stage* is identical to the "mature idea and continuance" goal; in both stages, the desired impact is still not yet achieved. c. After the continuation, despite possibly employing harsh and suppressive-state apparatuses against this campaign, the *third stage* resembles the "public sympathy with the campaign and continuousness" objective accomplishment. d. Following the cultivated *cognitive* and *emotional* components of formulated public attitudes and reshaping of the masses' values towards *otherness* of Ukrainians as a *brotherhood* with them, with the campaign significantly taking place, the *fourth stage* represents the "public protests and continuity," under completely shaped-behavioral attitudes, against the Russian government decision of war, coinciding with the planned campaign persistence. Those strategies are summarized in this typology:

The War of Tyrant against His Slavic Ethnicity Versus a Liberation War of Ethnic Russians → Digital Media, Live Interaction with Convincing Sympathy, Two-Steps Flow of Communication, and Anti-War Pressure Groups Creation → Comparison by Example in the Same Sample, Peaceful Gorbachev Versus Bloody Putin, and (No Invasion is Liberation) Slogan → Influential Sender Generates Influenced Receiver → Direct Manipulating of the Enemy's Publics: Mass Initiatives of Brotherhood → Seeded and Fledgling Idea, Mature Idea and Continuance, Public Sympathy with the Campaign, Formulated Attitudes and Public Protests and Continuity.

Fourth: Under the (W₂)'s fourth Dominant Strategy, (Collective Security), the (Attacker), (CWP), plays out the (Effective Opponent Besieging) major strategy, when it works on managing: a. harsh sanctions imposition and economic deterioration of (WP)'s lands, b. de-stabilizing (WP)'s victory in (CASO), c. (WP)'s weakening, enforced isolation, d. chaotic internal public-discontent creation versus (WP). Through (CWP)'s alliance coordination and collaboration, each ally's action must be in harmony with the other allies' actions under the same course of actions by NATO while serving each major strategy drawn in (W₂) as a comprehensive grand strategy for all actors as one coherent ally.

Namely, it is a harmony of interests among all allies together that can defeat a conflict of interests with the enemy. Of course, Russia's success in attracting Germany, France, or Turkey, for example, to its side by even *active/inactive neutrality* will affect (WP) positively in: a. initiating its (Attack-Defense) Key Wave Strategy of (W₃), b. not accepting an imposed diplomatic exit that we assume to be fair to all sides, among them Ukraine, by the (W₂)'s end, and surely, c. de-stabilizing the (CWP)'s victory output in (W₄) if needed. Under this modeling perspective, the penetration of one member in an alliance is considered a penetration of all. Put it simply; all alliance members are like soldiers of shields protecting one king, given that this king is the alliance itself, and one soldier's absence means that from its empty place, the arrow will be launched by an enemy to assassinate the king (i.e., the alliance) where there is no shield there to cover that gap, particularly, at times of war more than those of peace (when actions can be compensated in terms of the time manifestation as a strength-point, not a weakness one if not managed promptly as in the war's case).

Interestingly, the (CWP) harvests the crops, the utility of its (W_1) and (W_2) strategies collectively, however by making sure of its future continuity. Now, either the war ends by (W_2), or it will be other waves while confirming such a future continuity of gains for (CWP) based on a. how it acts and b. what it achieves in all waves connectedly. Facing (CWP), the (WP) relies on moving to a (Defense-Alliance Reinforcement) strategy, whereas (CWP) works strongly on de-stabilizing the (WP)'s utility of such strategic choice by imposing isolation even if through applying tactics of *dollar diplomacy* and *credible promises* to get (WP)'s allies into a desired disciplinary line.

Fifth: Within a (Military Preeminence) Dominant Strategy, the (CWP)'s major strategy is (Superiority) in a. army confrontations, b. opened fronts to weaken the enemy in (CASO), c. used mercenaries, guerrilla wars and insurgencies tactics, and para-military, and d. the effective besieging of (WP). Finally, the (WP) can not be in a better position than being under an (Actual Stalemate). It is the perfect timing for diplomacy to end the war before the (W_3)'s initiation.

3.2.3.3. The Second War-Wave's Outputs and the Diplomatic Exit Possibility

3.2.3.3.1. The Wave's Outputs

The (Second War-Wave) ends by the (Ongoing Status Quo) as the ($Output_1$) of (WP) and (Counter-Expansion) as the ($Output_2$) of (CWP). Given that the last is the (Attacker) who relied on Level II Strategies, which are more intense than (LIs) in scale, level, and effect, this player was able to shift the situation to its own interest by transforming the {3 DU (FA-V)} outcome, that it started the (W_2) with, to {- 6 DU (FA-V)} one by the same wave's end. Thus, if another wave is to begin, it will be initiated relying on these values. Comparingly, a victory achieved on the (CWP)'s part is translated into defeat at the same level and scale on the (WP)'s (i.e., the Attacked) side, where the latter's (DU)_v from its (FA-V) becomes (6), which is so far reduced in an estimated (9 DU) from that one it started the wave with, (-3 DU), thanks to the (CWP)'s (LIIs) while being the (Attacker). If a (W_3) takes place, the (DU) between the (W) and (CW) within will be (6) according to the defeated or the (Attacked)'s {DU (FA-V)} estimate that defines the gap existing between such a (W) and (CW). We can denote the “(W_2)'s Victory-Defeat Relationship” in this formula:

If $\{ (WL) + (SWO)_{(WP/CWP)} \simeq DU (FA-V)_{(WP/CWP)} \}$, and that,

$\{ (WL) + (SWO)_{(CWP/A-D)} \simeq -6 DU (FA-V)_{(CWP/A-D)} \}$, where

$$\{-DU (FA-V)_{Px}\} \longleftrightarrow \{+DU (FA-V)_{Py}\}$$

(Victory for One)

(Defeat for the Other)

Then, $\{ (WL) + (SWO)_{(WP/D-A)} \simeq 6 DU (FA-V)_{(WP/D-A)} \}$

3.2.3.3.2. The Diplomatic Exit Possibility

Apparently, the (WP) under a gloomy situation and uncertainty, is better off by keeping all its military advances and territorial acquisition intact. The most rational choice for the (WP) now is to a. stabilize the situation by accepting a moderate, *not humiliating*, diplomacy outcome and trading over the stability of (Crimea) plus getting a foot position in Eastern Ukraine, or b. to send the red alarm for retaliation, seeking glory by winning a decisive war of restoring the old Soviet reign.

Based on third-parties intervention, each side, the (WP) and (CWP), is better off by making these demands: a. for the (WP), offering the “military expansion’s halt” in exchange for “stabilizing Crimea” and agreeing on “maintaining the possession of territorial lands bordering Russia” that the (WP) *de facto* declared its occupation in advance. b. For the (CWP): offering a “complete withdrawal from all invaded Ukrainian territories back to the status quo before February 24, 2022,” in exchange for i. halting the military confrontations, ii. promising that Ukraine will not be a NATO or EU member-state on any possible occasion at present or future, and iii. a *regranting* of Crimea (instead of trading on Eastern Ukraine occupied lands) by promising the stabilization of Crimea and halting the counter-combats of “Ukrainians’ (who are predominantly paramilitary by agency and mercenaries) insurgency” in this concerned territory.

The (CWP)’s offer is the best choice for ending the war at this wave, with this probability ($0.5 \leq p < 1$). Nevertheless, the probability that (WP) is going to accept this diplomatic outcome for buying some time, re-organizing its military lines, eliminating the penetration gaps for not being re-targeted by the opponent, and empowering the weakness in fronts or its occupation lands of (Crimea, Abkhazia, and South Ossetia) to retaliate in the future is ($0 < p < 1$). In the latter case, the (WP) becomes better off by re-allying and

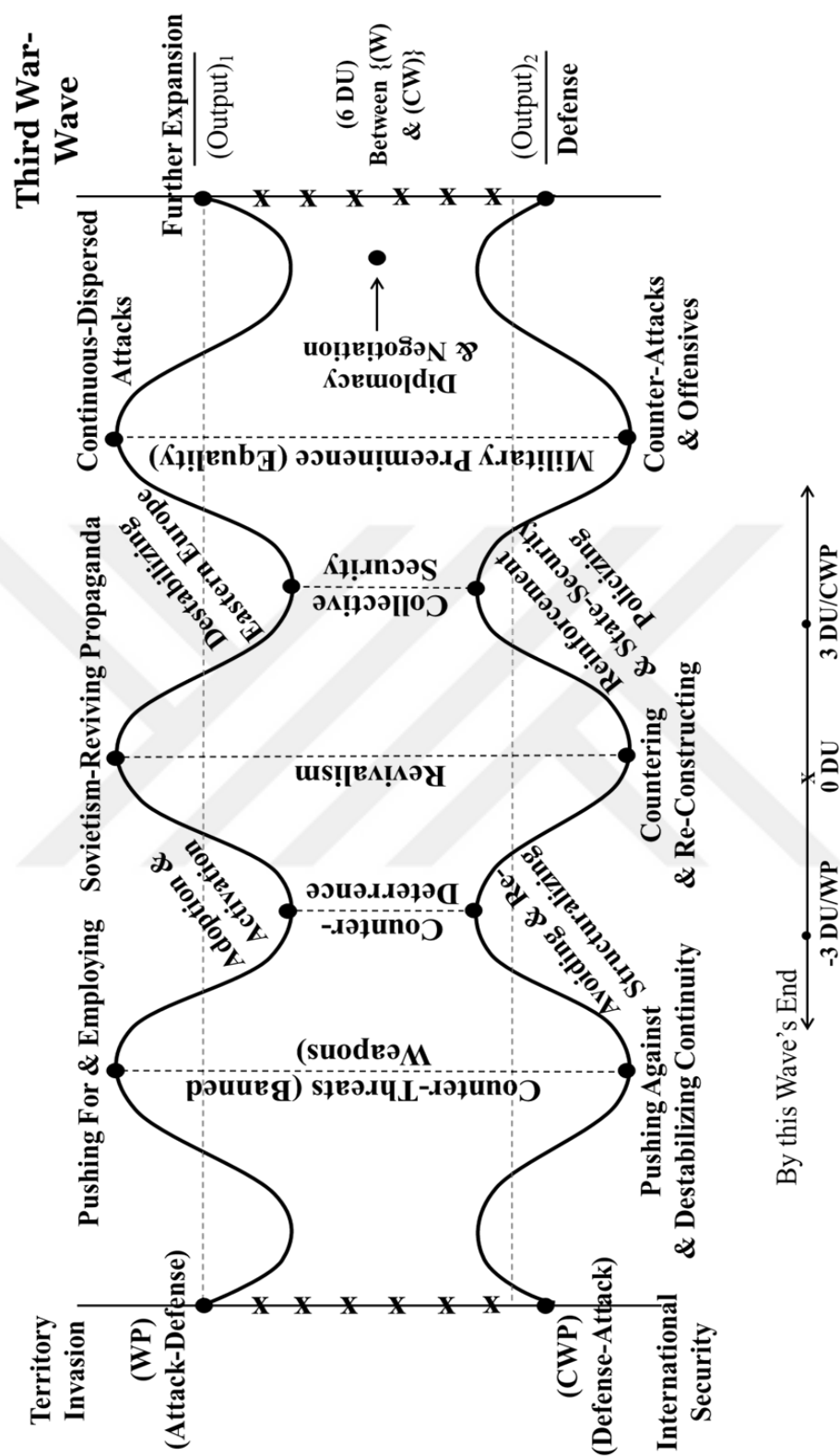


Figure 14: The Russia-Ukraine War's Third War-Wave (W_3)

Source: Prepared by the author.

re-attacking fiercely where almost all strategic flaws that this player's enemy, the (CWP), can utilize to worsen its position in any possible war cease to exist unless it shifts to be a *large-scale*, major war that the (WP) is quite sure that the (CWP) is going to avoid at whatever cost.

3.2.4. The Third War-Wave (W₃)

In (W₃), the (WP) resorts to brutality war tactics as possible as it can in an attempt to alter the (W₂) end's (DU) estimates _ if a diplomatic exit did not succeed _ since the (CWP) caused the (WP)'s temporal defeat when being the victor yielding the closer distance (i.e., "-6 DU") that any could achieve ever, till now, along with the War Waves, regarding the (FA-V). Seeing that (CWP) used (Level II Strategies) to gain its wave's victory, the (WP) has now the incentive to apply its already prepared deadly tactics of the war, *incorrectly* perceiving that they are (Level III Strategies) that will end the war in its own favor promptly and immensely (as it might occur in other wars it fights against weaker parties).

Differently, (W₄) must follow here as a *remedy* because any diplomatic exit sought by the (W₃)'s end should admit the (WP)'s victory, as explained later, with a future deterrence and conflict stability achieved permanently under the (Opponent Victory Equilibrium) or temporarily under the (Disguised Opponent-Victory Equilibrium), of this study's developed (Deterrence Entanglement Law "DEL")'s (Relative Balance Rule). The matter that differs from those diplomatic outputs of (W₂)'s end, which paves the way towards the stability of deterrence and conflict in the future, precluding the war, reflecting a (Status Quo Equilibrium) under the (Incomplete Balance Rule) of the (DEL). The last is the first preferred balance outcome for ending the war in the future, still not permanently, to avoid the escalation of (W₃) and (W₄). At the same time, the second preferred balance case is that of (W₄)'s end, which is to be the (Compromise Equilibrium) under the (DEL)'s (Absolute Balance Rule), that we fear to come at the expense of previously more casualties paid by both sides, but its relevant balance in future is the most stable one ever where no such a war is to re-occur once the (Absolute Balance) takes place.

One may ask, should the (CWP) not use the (LIIs) initiating the (W₂), would that mean that no brutal (Attack) strategy was to be used by the (WP) in (W₃)? The answer is, this would mean that the (WP) would win the war by (W₁)'s end gaining a decisive victory, as long as the continuity of its (W₁)'s (Attacks) gets this player theoretically and

practically closer to its (FA-V), particularly, in the first months of the war. Also, it would mean that the (CWP) is willing to grant the (WP) the honor of the victory in Eastern Europe in the present and future.

A second issue is that what if a diplomatic victory outcome was to be achieved for the (CWP) by the (W₂)'s end through a future (Incomplete Balance Rule) of (DEL) under a (Status Quo Equilibrium)? Yet, it can never be the case after the (W₁)'s *severe state of war* if it were not for the (CWP) to halt the (WP)'s (Further Expansion) output of the (W₁)'s end, confronting the (WP) by the (Attack-Defense) Key Wave-Strategy as a *strategic surprise* in (W₂) to enforce a “*discipline of war*” that creates a “*discipline of peace*” on the other hand.

3.2.4.1. War Objectives, Key Wave-Strategies, and the Third War-Wave's Dominant Strategies Played Over Interactively

The (WP)'s Key Strategic Objective in (W₃) is still the (Territory Invasion) of Ukraine. In the (W₃), it re-uses the (Attack-Defense “A-D”) as a Key Wave-Strategy, relying on it in playing other five major strategies. The (A-D) means that (WP) uses the (Attack) strategy mainly against (CWP) in a third wave, whereas the (WP)'s (Defense) strategy is only a counter-one versus (CWP)'s (Counter-Attacks). In comparison, the (CWP)'s Key Strategic Objective in (W₃) is maintained to be the (International Security); however, playing the (Defense-Attack “D-A”) as a Key Wave-Strategy, depending on it when using its five major strategies of (W₃). The (D-A) specifies that (CWP) uses the (Defense) strategy primarily facing the (WP)'s (Attacks), while the first's (Attack) is merely a counter-strategy.

The (W₃)'s Dominant Strategies Played Over Interactively are: Counter-Threats (Banned Weapons); Counter-Deterrence; Revivalism; Collective Security; Military Preeminence (Equality). Again, the (Diplomacy and Negotiation) is a possible diplomatic exit by the wave's end; see Figure 14.

3.2.4.2. The (WP)'s Major Strategies in Interaction with the (CWP)'s

First: As we showed above that, the (WP) in (W₃) considers military and political brutality as a method for restoring its military advance and eliminating the state of temporal victory achieved to the (CWP) by the (W₂)'s end and the beginning of (W₃).

Under (Counter-Threats (Banned Weapons)) Dominant Strategy of the wave, the (WP) re-activating its (Attack-Defense) Key Wave-Strategy uses the (Pushing For and Employing) strategic choice as its first major strategy interacting with the (CWP)'s one. In this context, (WP) is better off playing over the (Counter-Threats) Dominant Strategy by using (Banned Chemical Weapons) against civilians in Ukrainian cities after seeing that (CWP) succeeded in halting its expansion and advances further in these territories. Now, and only now, along with the war's trajectory, the (WP) perceives that it has the justification to use such a type of weapons to: a. Impose a tremendous human displacement and forced immigration from Ukraine, emptying the Eastern, North-Eastern, and South-Eastern Ukraine for a stable invasion's sake, and facilitating the advance toward the center when the capital will easily be seized, where the invasion-completeness declaration is being made. b. Where the (WP) understands that it will achieve an *unmatched victory* by fiercely dropping chemical weapons in *battle* and *civilian* zones in Ukraine, not the ballistic missiles _ given that this player is well-aware that in a nuclear missiles' launch case, a possible retaliatory strike would follow from other places of the world through intercontinental submarines-carried-ballistic missiles against its homeland territories according to the (Mutually Assured Destruction) strategy. The last is not the same as the case of deploying chemical weapons by air jets, then naively "*denying*" that they have been used (!).

It is going to be an unexpected victory because the (WP) will rely on the usage of such weapons to halt the military advance of the (CWP)'s army, guerilla, and insurgency groups from the bottom by targeting these fronts, divisions, and corps themselves inside the civilian cities where they settle. Put it simply, from the (WP)'s viewpoint, emptying the cities to conquer will achieve merely fear by killing civilians only, granting the fighting armies and groups the motive and incentive to vigorously commit fierce killings of the (WP)'s soldiers in the positions and fronts that they penetrated in (W₂). Simultaneously, dropping these chemical weapons in battle zones against the enemy's (i.e., the CWP) military and paramilitary troops is seen to achieve a permanent victory, and an unmatched fear in the hearts of the remained fighting armies and groups as to escape the battleground leaving the sphere purified to concluding the invasion promptly and immensely by the (WP). Such a brutal war-tactic, when used here, leads us more to

explain how the (WP) will depend highly effectively on adopting a (Counter-Deterrence) strategy in the next step.

We must admit that the (CWP) is better off now by playing a (Watch and Assess) strategy; why? So simply, if the (CWP) arrogantly moves in a rush to retaliate in (W_3), then it is what the (WP) was waiting for, “I drop chemical weapons in Ukraine, and you do likewise against my troops in “Ukraine;” thence, thank you (CWP), you helped me advance further to conquer Ukraine rapidly and utilize the momentum to ally with my “baby” client-state “Belarus” to re-seize:” a. weak Lithuania, Latvia, and Estonia Baltic Sea states first, b. Moldova and Slovakia, second, and c. over time, it is Poland, Hungary, and Romania Ukraine’s neighboring states that are to be encircled and penetrated, restoring the (Iron Curtail) Soviet sphere of influence in Eastern Europe under a newly re-established Soviet Union. At the same time, the majority of Asia’s former Soviet states still already grant the (WP) the allegiance as puppet states of Russia in a decentralized way, and after all, the (WP) becomes in its way to restoring Black Sea ports previously claimed by the Soviet Union following the World War II, that the US protected for Turkey to be Turkish possessions over history. Not surprisingly, one wrong action or strategy choice made by the (CWP) would mean the loss of the geo-political map of the world; it will not be only the old reign of the Soviet Union that rises, but the empowered Soviet Union that this world never witnessed its revival before.

Accordingly, we assumed that the (Watch and Assess) is the best strategy of (CWP) so as to not deprive itself of the (W_4)’s endless victory by “*finding the justification*” for re-allying with global, regional hegemons in the international system and re-gathering global rallies and masses at the same moment for ending the (WP)’s aggression once and forever, as explained later. In other words, the (CWP) is highly better off by (Pushing Against) a used (Banned Chemical Weapons) strategy through the (Watch and Assess) one relying on a tactic of “*verbal deterrence only*,” for now, and continuing to fiercely impose the (Destabilization of the Opponent Victory Status Quo and Continuity) strategy using the harsh methods ever that it can apply for accomplishing this strategic objective because this is a huge “victory key” for the (CWP)’s final and infinite victory in (W_4). Nevertheless, it is extremely important to confirm that the (Watch and Assess) strategy must never be the case in confronting the (WP)’s (Adoption of Counter-Deterrence) and (Destabilizing Eastern Europe Region) strategies, but “preventive and preemptive”

strategies must be taken significantly by the (CWP) before even the (WP) picks these moves. Otherwise, the (CWP) would lose tremendously in (W_3), and its assumed-decisive victory that we draw through (W_4) is going to be compromised (!) by the (WP). The thing that is not acceptable where no mistakes should be made; if it is a war, then it must be the war to end all wars, not the war of gaps that stretch the length of conflict in the future separately for decades to come. Apparently, one strategic flaw of the (CWP) may set the whole European continent's life at stake, Eurasia region and North-Western Asia continent's life second, and third, it is going to be the "*global final-prize*," our homeland, the broader Middle East region in North Africa and Western and South-Western Asia.

Second: Under the (Counter-Deterrence) Dominant strategy of (W_3), and after the (WP) utilizes its first major strategy to a. target essential agrarian lands and international oil-supplies positions in Ukraine, and to b. manage and control these positions under its own (provisional) military administration; the time comes now for this player to move to the (Adoption and Activation of Counter-Deterrence) strategy.

The first element, it will not be the EU and US that impose sanctions on Russian oil exports; it is Russia now that will own the capability and credibility to leave the whole world in a critical need of oil by imposing an (*Oil Embargo*) on the European countries concerning any oil exports of Ukraine plus Russia, not the last only. Such a strategy choice is aimed to cause an unexpected, sudden increase in oil prices worldwide, generating industrial production setbacks and gradually accumulating (with the deprivation of Ukrainian and Russian international grain exports second element) in creating *intentionally* a "global economic recession" that the world may suffer from for years along with the war's course and beyond. At this moment, the (WP) perceives that it succeeds in compelling the European states to beg for the war's end, relying further on the (WP)'s conditional approval from the last's own perspective.

The second element, the famous "Russian and Ukrainian grain and Ukraine's exporting agricultural products," are the next weapon of the (WP)'s second major strategy of (W_3). Rationally, the (WP) is better off by adopting and activating a "*Food Embargo and Starvation*" strategy. For the oil, which is a permanent (but unrenewed) natural resource, imposing its embargo does not mean a remarkable deal regarding any future economic loss for Russia but huge political, territorial, and military benefits if a (CWP)'s (Avoiding

and Re-Structuralizing) strategy is not used in advance. Symmetrically, preserving the Russian and Ukrainian grain for a few months relying on high technological techniques of food conservation, reflects geo-politico-military gains for Russia, bringing major parts of the world to their knees before the Russian military in Ukraine. Suppose the (WP) resorts only to raising the Ukrainian and Russian grain prices to double. In that case, this actor creates economic crises elsewhere in the world, noticing that Russia used a similar tactic during President Richard Nixon's era (1969-1974) in the late 1960s and early 1970s when utilizing the Secretary of State and National Security Advisor Henry Kissinger's détente policy for buying the grain product from the US markets causing a severe American grain crisis by that time. Thence, what about Russia's war utility from leaving the world under a food (i.e., grain) deprivation crisis for just one or two months? The (WP) does not lose here; it wins at the expense of the others.

If the (CWP) is to succeed in achieving a final victory in (W₄), it must prove the *incredibility and non-capability* of the (WP)'s (Adoption and Activation of Counter-Deterrence) strategy by resorting to the (Avoiding and Re-Structuralizing) major strategy, before the (WP) attempts to act the way we explained. It is the (CWP)'s "First Preventive and Preemptive Strategy" in the (W₃). Strikingly, should the (CWP) see that it is willing to stretch the war length to (W₄) not (W₂)'s end only, thence, it must avoid the (WP)'s embargos strategy of (W₃), during the First War-Wave (W₁) itself, if, and only if, the (CWP) seeks the victory of (W₄). Now, (*finding the alternatives*) is the *first preferred strategy choice* for (CWP) in (W₁), by: a. cultivating reserve lands of grain in other areas of the world, Africa is the best choice because of the adequate climate there, b. establishing or reinforcing friendly relationships with some oil-producing Latin America's states and Arab ones to help during any possible oil crisis along with the war by showing some tolerance in prices, plus, c. securing some oil positions in the Middle East, in Libya, Iraq, and Syria, at low prices preemptively for the highly needy industrial countries that are in direct exposure to the war in Ukraine and its repercussions before a probable damaging oil crisis and embargoes erupt in (W₃) at the (WP)'s hands. d. Also, following an "*Austerity policy*" seems helpful for the (CWP) if it decides the war's continuity till (W₄), not only (W₃), since once (W₃) is initiated by the (WP)'s (Attacks), the (W₄) must sequentially be in play to bring the war to an end permanently with the (CWP)'s decisive victory not the (WP)'s one, as we explain later.

Third: Over (Revivalism)'s Dominant Strategy, the (WP) becomes in the best position by moving to the (Sovietism-Reviving Propaganda), shifting all ideological imaginary and suppressive state-apparatuses to work on its (W₃)'s Key Strategic Objective, the (Territory Invasion of Ukraine), not as a (liberation operation of ethnic Russians (i.e., separatists)) now as it did in (W₁) and (W₂). Rather, it better happens to be as a (restoration war of Soviet glory) in (W₃) given the actual stalemate that the (CWP) left the (WP) in by the (W₂)'s end with no successful diplomatic exit to terminate the war. Namely, the (WP) perceives that the (W₃) is its "last resort," where it must buy the victory at whatever cost.

So, Sovietizing the Russian society sufficiently and with a red-alarm efficiency appears to be the best "societal preparation" for the (WP)'s nation to accept and tolerate any expected escalation of war level, consequences, and losses, if the war's goal is framed to serve the glory of old empire than to seek liberation of some separatists. It is a *direct war-relationship*; that is, whenever the *publics'* economic, human, political, and military war losses get higher and more costly, whenever the "war's cause and justification" should be re-manufactured to jump outside the curve by the *rationality of government's reasons* to further motivate an *army of griefs*, in a modified trinity of war. Under such a war stage, the black propaganda campaign designed in (W₂) to end the war must be posited in its third phase with Russia's masses already starting to the (Sympathy with the Campaign and Continuousness). It means that, at this point of (W₃), the (WP) is going to apply all suppressive state-apparatuses to repress the campaign.

Based on that, the (CWP) moves to its (Countering of Soviet Revivalism and Re-Constructing) major strategy. International human rights organizations deployed to watch, or harshly and soundly report globally about, the probable-human rights violations in Russia's society seem to be an exit for the campaign continuity purpose, the *foreign surveillance eye*. Adding to that that the almost "virtual nature" of our set anti-war black propaganda campaign is effectively creative in transforming the Russian human abuses, atrocities, and territorial violations in Ukraine committed during (W₃) only to rally more masses in Russia against a "Brotherhood's Bloody Aggression." The latter is a slogan of this developed stage of gathering vast amounts of ordinary citizens versus the government decision of war, coinciding with reaching the third phase of the campaign chronology first.

Clearly, as extended Russian aggression is to serve the (CWP) to achieve victory in (W₄), it must be utilized nationwide in a “Re-Construction of Public Enmity Against Political Leaders” strategy in (W₃), *not* in favor of creating the other’s (i.e., “CWP”) hatred for the (WP)’s interests. The reason lies in providing the evidence of extraordinary aggression primarily, and that developments in “political hostility-manufactured-economic setbacks” made by the political authority during the war initiation prove to be more than concrete in Russian society simultaneously. The best persuasive messages ever can be reproduced now through feeding on Putin’s “Brotherhood’s Bloody Aggression” actions to reinforce and empower “anti-war pressure groups” in a “re-framed ***social struggle***” against the ruling class that suppresses the bourgeoisie and the proletariat alike. That constructs solid roots of making global audiences embrace and interact with their partners in Russia within (W₃), paving the way toward the activation of a whole universal public opposition of the Russian aggression in (W₄).

Fourth: Agreeing that it is the (WP)’s fierce wave ever in the war, this player, organizing its all war tactics and strategies to work harmoniously supporting one another, and under the (Collective Security) Dominant Strategy, moves to (Destabilizing Eastern Europe Region) major strategy. Since it is its *last resort’s War-Wave*, through this strategy, and incentivized by the (CWP)’s (CASO) open fronts to weaken its side, the (WP) becomes better off by “***financing and weaponizing***” separatists or/and ethnic Russians in Eastern Europe states who back up Russian and Soviet revivalism objectives, or by using mercenaries there to support separatist movements or basically, for achieving Ukraine’s rapid invasion and desired victory results.

In (W₃), it is the (WP)’s turn to open fronts to weaken the (CWP) and destabilize its victory status quo that it could achieve by the (W₂)’s end. As we said before, it works better for the (WP) if it re-controls first the weak Baltic Sea states of “Lithuania, Latvia, and Estonia” on any possible further expansion chance in Europe, noticing that Russia already installed its fleets in both Baltic Sea and the Black Sea even before days of the outbreak of war on February 24, 2022 (then, Moldova and Slovakia come second; and Poland, Hungary, and Rumania Ukraine’s neighboring states, third). Applying a (Destabilizing Eastern Europe Region) successful strategy as might be perceived by the (WP) means that the latter is better off by starting to (*create and support insurgencies or guerilla warfare*) within the largest countries in size and population first to leave an

immense echo in the whole European continent thereafter. So, (Poland, Hungary, and Romania) seem to be the best targets for the most beneficial results of the (WP)'s goal of destabilization that bring about a prompt Russian victory by *compellence*, not deterrence, in this stage.

One aim of this modeling is to activate some preemptive policies to be taken by the (CWP) instead of dismissing the right action at the right time in the right course. Here, the (CWP)'s best strategy choice in confronting the (WP)'s (Destabilizing Eastern Europe) major strategy is the (Reinforcement of Collective Security Measures and Eastern Europe States-Stabilization and Security Policizing by Force). The last is the (CWP)'s "Second Preventive and Preemptive Strategy" of the (W₃), which hinders the (successful) occurrence of (WP)'s (Destabilizing) strategy. Again, if (CWP) is determined to move ahead to (W₄) and not to terminate the war by the (W₂)'s end, it must seek the mentioned preventive strategy in advance, specifically by the beginning of the Second War-Wave (W₂) and in a prior time to opening the (CASO) fronts of weakening the opponent (WP).

In the same context, in accordance with the (CWP)'s playing of the (De-Stabilizing the Enemy's Victory Status Quo in "CASO") strategy in (W₂), the (WP) can always obtain the best utilities by preparing for a. "Defense and Counter-Attacks," as mentioned, and also, b. initiating a "*Cyber War for Recruiting New Citizen-Soldiers in Europe*" strategy, repeating similar tactics it used to build a shield of militarized, ordinary Ukrainian citizens for achieving its war's breakthroughs. In short, the (Reinforcement and State-Stabilization and Security Policizing by Force in Eastern Europe) strategy must be conducted before the (W₂)'s beginning, as follows: a. through using the suppressive state-apparatuses like police and army, and the employment of high-tech, continuous, overt and covert surveillance systems, and b. in the *cyber-space* by recruiting thousands of official guardians who watch and analyze probably-targeted citizens' activities online to deter and repel all *incoming cyber-attacks* on Eastern Europe states' security by disguised Russia.

Fifth: What about the (Military Preeminence) fifth Dominant Strategy? Clearly, the (WP) re-activating the (Attack-Defense) Key Wave-Strategy is up to broaden the level and scale of war, using the (Continuous-Dispersed Attacks) major strategy for: a. Targeting other

states' borders, which are neighboring Ukraine, and once more create the fear of a major war in Europe, but now, using the well-known *brinkmanship* strategy of taking the enemy to the edge of risk and leaving it to perceive that the other is going to commit harsh harm or dangerous escalation while it is actually *not* going to do so (or at least by this stage of war where no final victory of the (WP) is obtained in Ukraine yet). That reflects a (WP)'s **deterrence policy via war**, not a compellence one. b. Besides the (WP)'s (Attacks) in Ukraine and dropping the (Chemical Weapons), this player becomes highly better off by fiercely (Attacking) in Syria to force the emergence of a massive refugee crisis in Europe with that one it works on maximizing by bombarding Ukraine vigorously during (W₃). From one side, the (WP) destabilizes the European economies by escalating the Ukrainian immigrants' dilemma in Europe, and from the other, it creates its climax by simultaneously multiplying the Syrian immigration crisis in the same continental area. It is a (WP)'s **compellence policy via war** to enforce ending the battles as it desires, not a deterrence policy. c. By seeing what it considers "national interests" at stake, the (WP) enjoy now the leverage of conducting naval attacks in the Black Sea region supported by air attacks on Ukrainian ships and positions there. The last's aim is to show military primacy and superior maneuvering capabilities with the ability to achieve victory at whatever consequence as to "**deter and compel via war**" the (CWP) to admit the (WP)'s territorial victory through a diplomatic exit or a *de facto* victory status quo in all Ukraine. By the end of this stage, it is not unbelievable that the (WP) might declare the completeness of the Russian Invasion of Ukraine from the capital Kyiv itself. In this regard, the (CWP) is better off by only choosing the (Counter-Attacks and Offensives) major strategy in front of the (WP)'s (Continuous-Dispersed Attacks). The reason is that in the (W₄), the (CWP)'s surprising (Attack-Defense) Key Wave-Strategy must be built upon "*immense aggressions, violations, and human rights abuses*" made by the (WP), to bring out a universal victory of the peace party (i.e., CWP) versus the war initiator, as to come later. By maintaining its (Counter-Attacks and Offensives) in both Ukraine's all combat fronts and the (CASO) ones as stable in causing diverse and tremendous losses at the (WP)'s side as possible as it must be, the (CWP) preserves an (Equality) criteria of the (Military Preeminence) for the two parties that assist it in acquiring a final military victory by the (W₄)'s end.

3.2.4.3. The Third War-Wave's Outputs and the Diplomatic Exit Possibility

3.2.4.3.1. The Wave's Outputs

This wave ends with the (WP)'s (Output₁) of (Further Expansion) and the (CWP)'s (Output₂) of (Defense), where the (WP) could shift the outcomes to be in its own war interests using (Level II Strategies). This player minimized the (DU) to its (FA-V) from (6) at the beginning of the wave to (-3) by the same wave's end, in an estimated decline of about (9 DU), getting closer to its (FA-V). Since the victory for one reflects the defeat for the other, the (CWP)'s (DU) from its (FA-V) is reduced from (-6 DU)_v to (3 DU)_v, reversely in an increase of distance estimated by (9 DU). It means that if a diplomatic exit fails in (W₃), the next War-Wave's (W) and (CW)'s (DU) is to be (3) according to the {DU (FA-V)} indicator of the (Attacked) or the defeated by this previous wave's end, which specifies the distance likewise between the (W) and (CW) in a new War-Wave. We can denote the “(W₃)'s Victory-Defeat Relationship” in this formula:

If { (WL) + (SWO)_(WP/CWP) $\simeq$ DU (FA-V)_(WP/CWP) }, and that,

{ (WL) + (SWO)_(WP/A-D) $\simeq$ - 3 DU (FA-V)_(WP/A-D) }, where

{ - DU (FA-V)_{Px} } $\longleftrightarrow$ { + DU (FA-V)_{Py} }

(Victory for One)

(Defeat for the Other)

Then, { (WL) + (SWO)_(CWP/D-A) $\simeq$ 3 DU (FA-V)_(CWP/D-A) }

3.2.4.3.2. The Diplomatic Exit Possibility:

At the end of (W₃), a dual “exotic” diplomatic exit is waiting for the (CWP). Firstly, based on all configurations mentioned in this War Wave, any diplomacy and negotiation strategy might bring both sides to admit the “Russian War Victory with Ukraine as a De Factor Russian State” total outcome. That is derived from the actual situation of Russian (Further Expansion) output. If accepted by both sides, this outcome is preliminary for future Russian expansion in Eastern Europe and the Black Sea region. However, the probability of this possibility is ($0 \leq p < 0.5$), with the (CWP) officially not recognizing that since this case does not apply to the international law legislation.

Secondly, it would be more than ironic in politics if mediators of the day attempted to compromise over a “*Partitioned Ukraine (!)*” agreement. Clearly, it is not Palestine that was the original homeland of Jewish people and ethnicity one day; it is a Ukrainian

sovereign state of a mere Soviet Union that ceased to exist, and it is the whole universe that is going to be destroyed after a probable chain of Russian invasions in Eastern Europe, Black Sea Region, and North-Western Asia proves to be successful over time. At last, the probability of this second possibility is ($0 \leq p < 1$), and if the stability of deterrence and conflict is achieved in the future, agreeing on a (Partitioned Ukraine) diplomacy outcome, it is going to be maintained under the (Opponent Victory Equilibrium), which is permanently stable under a perception and certainty state of the (Relative Balance Rule) within the (Deterrence Entanglement Law), conditioning that the (WP) becomes *legally* obligated to not re-invade any other territorial parts of Ukraine or Eastern Europe in future “credibly and reliably.” Rather, it is the (Relative Balance Rule)’s (Disguised Opponent-Victory Equilibrium), which is temporarily stable only, coinciding with being reached under deception, intentional misperception, and uncertainty conditions.

3.2.5. The Fourth War-Wave (W₄)

3.2.5.1. War Objectives, Key Wave-Strategies, and the War Wave’s Dominant Strategies Played Over Interactively

Given that (WP) achieved a temporal victory by the (W₃)’s end, possible declaration of Ukraine’s invasion completeness, and that no diplomatic exit has been reached by the (W₃)’s end to eliminate the state of severe war, the (WP)’s Key Strategic Objective in (W₄) developed to be a (Territory Invasion and Advance), stabilizing its positions that it conquered in Ukraine and seeking to capture more territorial possessions deeply and further with attempting to acquire international recognition in this regard. Nevertheless, in the (W₄), the (WP) finds itself forced to play the (Defense-Attack “D-A”) as a Key Wave-Strategy, relying on it in using its five major strategies of the wave. Through the (D-A), the only thing that (WP) can do in (W₄) is to play the (Defense) strategy principally in facing the (CWP)’s (Attacks), whereas its (Attack) strategy is a counter-one that reflects means of (Counter-Attacks) versus (CWP).

Comparingly, the (CWP)’s Key Strategic Objective in (W₄) changed to be (International Security and Prompt-Enemy Defeating), depending on playing the (Attack-Defense “A-D”) as a Key Wave-Strategy and, most importantly, *strategic surprise*, deriving from it the activation of its five major strategies of (W₄).

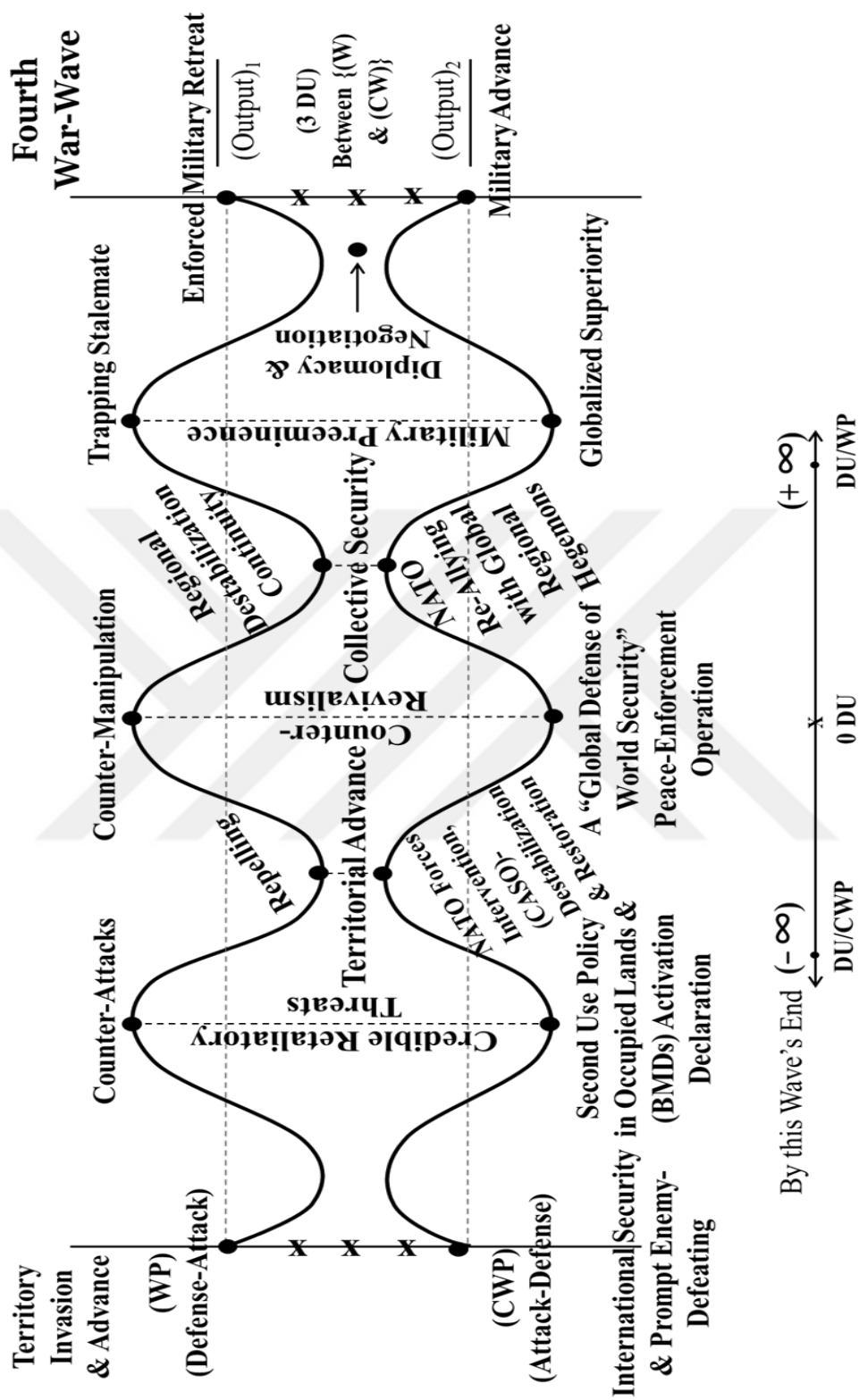


Figure 15: The Russia-Ukraine War's Fourth War-Wave (W₄)

Source: Prepared by the author.

The (A-D) refers to that (CWP) uses the (Attack) chiefly against (WP) while the (Defense) is a counter-strategy to confront the (WP)'s (Counter-Attacks).

Here, the (W₄)'s Dominant Strategies Played Over Interactively are: Credible Retaliatory Threats; Territorial Advance; Counter-Revivalism; Collective Security; Military Preeminence, while the (Diplomacy and Negotiation) strategy represents a possible diplomatic exit to eliminate the war by this wave's end, or that the war will cease to exist *forcibly* anyway; see Figure 15.

3.2.5.2. The (CWP)'s Major Strategies in Interaction with the (WP)'s

Playing interactively over the Dominant Strategies of (W₄), the (Attacker/CWP) has its best choice ever in exploiting the (WP)'s *tremendous aggressions and violations* along with (W₃) to rally against the latter more fiercely to bring a prompt and permanent end to such a war. It is safe to say that the (WP)'s granted a *golden chance* to the (CWP) to *globalize* the war in "effect" while *de-escalating* it in "level and scale." Yes! A legitimized justification is what (CWP) must have been searching for to deter the (WP) via collective-security efforts of war, with gathering other areas in the world to support globalized, not regionalized, *deterrence-via-war* efforts.

If NATO forces were to intervene in any former wave, its interference would be in vain because it would work on escalating the war, and that is what the (WP) was waiting for, among other choices, to stand in a position of a forcibly continuous state of war in front of its publics, claiming that it is the other who escalated first (!). For that reason, in no previous wave that we set a strategy of military intervention of NATO, but we paved a fertile ground for introducing this strategy in a final wave to fight a war that ends all wars in Eastern Europe thereafter. Through previous waves, we set stratagems that force the (WP) to use its strategies, which it would, maybe randomly, be made any time in any way, according to a ***course of rationality*** we intended to draw depending on (WP)'s perceptions and being as a rational actor. The aim was and is to leave *no rational choice* for (WP) to pick at a *determined wave* in a *specific way* except those ones and their modalities we posited in response to (i.e., Defense) or confronting (i.e., Attack) the strategies that the (CWP) use every wave. It is a work of strategically maneuvering to force the enemy to do what it would already do, but the way that serves the (CWP) to achieve a diplomatic victory by the (W₂)'s end or a decisive military victory by that end

of (W₄). We can call that “*strategic navigation*.” In this wave, the time has come to harvest a success we cultivated in former waves, relying on how the (CWP) acted every wave and what it achieved by each one’s end, namely, its {DU (FV-A)} per wave.

First: Under the (Credible Retaliatory Threats) Dominant Strategy, the (CWP) is better off by attacking the (WP), playing the (Second Use Policy of Dropping *Symmetrically* Banned-Chemical Weapons in Occupied Lands in Ukraine Against the Enemy’s Military, and the (BMDs) Activation Declaration) strategy. Now, the (CWP) ***deals with uncertainty*** as follows: a. If the (WP) was to use (Banned Chemical Weapons) tactic, perceiving that a free world is not going to act likewise, and therefore this player’s victory in Ukraine is guaranteed, then the (CWP) is to surprise the (WP) by a brutality method followed from the same level and scale targeting the (WP)’s military in this stage, not civilians. b. Counting on the (WP)’s perceptions of easily (Denying) the use of chemical weapons after employing them in battle and civilian zones in Ukraine, it is now the (CWP)’s turn to (Drop Banned Chemical Weapons and ***Deny***), provided that the (CWP) uses these weapons tracing the same type of the same level and effect of those used by the (WP) in the (W₃). If the (CWP) exceeds the level that the (WP) used first in dropping chemical weapons, it will provoke the (WP) to retaliate, escalating the battles to be even “nuclear” in Ukraine. Cautiousness is a victory key targeted here.

The ***aim*** of the (CWP)’s first major strategy is to: a. deter the (WP) and compel it not to use such banned weapons in the battleground again once these weapons prove over time their *uselessness* in bringing victory to the (WP) but massive human and military losses on this player’s side due to sequential credible retaliation, and thus, b. hindering the (WP)’s *incorrectly*-perceived prompt victory in Ukraine when the (WP) realizes that its aggressive and brutal war tactics will be met by others *symmetrical* in “level, scale, and effect,” that are also *credible and capable*.

The *third uncertainty* that the (CWP) must deal with is the nuclear miscalculations and risk-takers in Kremlin. Given that the (WP) is to see that it is going to be deterred and compelled to follow discipline in its war in Ukraine by the (CWP), the arrogance of war leaders can lead them to commit madness sometimes, as was the case of Adolf Hitler during World War II, particularly that all our set strategies of (W₄) to the (CWP) will unprecedently trap the (WP) militarily, diplomatically, and politically. So, the ((BMDs)

Activation Declaration) is a joint strategy that must be used beside the (Second Use Policy of *Symmetrically* Banned-Chemical Weapons in Occupied Lands in Ukraine Against the Enemy's Military). The (BMDs) means the (Ballistic Missile Defense Systems), that the (CWP), referring to NATO in this case as an alliance of coherent allies (not the US lonely or separately), must declare their activation versus any *possible* nuclear attack in Ukraine "*for protecting the regional common good of Europe.*" Now, the (CWP) precludes even the thought of using nuclear missiles in Ukrainian lands by the Russian administration. Accordingly, we completely agree with those theorists who first argued for the (US)'s adoption of the (BMDs), sacrificing the stability of (MAD) but ensuring, on the other hand, that *on no single occasion* the enemy would think that it might succeed in striking other nuclear lands by a nuclear strike.

As Russia is going to be informed through an **official** declaration of NATO that any possible nuclear strike in Ukraine will be intercepted through (BMDs) and **unofficially** that a "probable" retaliatory strike might follow against its army there, such a "*certainty of nuclear strike failure*" with a possible retaliatory threat in a response-in-kind against Russian forces in Ukraine (only), would prevent all possible nuclear miscalculations and risky escalation from the occurrence in battle zones by Russia. In a sequence, the (WP)'s (Counter-Attacks) major strategy would *at most* concern a re-dropping of (Banned Chemical Weapons) and denying _ in a limited time fearing remarkable human and military losses on its side caused by symmetrical retaliation _ motivated by proving an "invincibility" myth of Russian army publicized worldwide. Here, the other four major strategies of (CWP) must be entangled with its first one to enforce, not deter for or compel only, Russian military retreat back to the (WP)'s borders at the (W₄)'s end.

At last, it is fair to refer to **three main strategic points**: a. Firstly: The (CWP)'s side who is to apply the (Second Use Policy of *Symmetrically* Dropping Banned Chemical Weapons Against the Enemy's Military) under the (Credible Retaliatory Threats)'s Dominant Strategy is the fighting armies and paramilitaries in Ukraine who are supervised, supplied, and supported by NATO under the US leadership. In other words, *neither* NATO *nor* the US militarily intervenes in employing the (CWP)'s first major strategy; only, in the second major strategy, NATO-allied forces do interfere and thereafter along with (W₄). However, we set the stratagem of (Drop and Denying) to avoid global public discontent if these publics in a *distorted* way, see that the (CWP) acted

similarly as brutal as the (WP), while the first is to do so necessarily to respond in kind deterring the other, and sufficiently by not harming the (WP)'s civilians ever, only military.

If they are not NATO forces that activate the (Dropping) strategy, then the path is clear for the (CWP) toward getting global support for the NATO operation in the next step. Thence, the first major strategy is aimed to prove the (CWP)'s, represented in the Ukrainian fighting corps and divisions assisted by the NATO and the US in this stage without direct interference, credibility and capability of retaliatory threats to completely eliminate what the (WP) perceives as a key of prompt victory by using banned weapons in (W₃). Otherwise, it is going to be the (WP) who declares its long-lasting de facto victory as long as its killing machine proves superiority over the (CWP)'s.

Secondly: The (“BMDs” Activation Declaration) strategy is meant to manage any possible irrationality that the Russian administration might consider necessary, coinciding with being defeated at the hands of its “weak subjects” (i.e., the Ukrainians) who must successfully prove to the (WP) that *no use* of (Banned Chemical Weapons) strategy will set Putin the king of Ukraine as it placed him a king of Russian domain of influence in Syria at the Syrian regime-controlled-territories after 2013 revolution and civil war there. At the same time, the case of Ukraine is even worse by developing to be an actual, legitimized invasion and integration of occupied Ukraine into the Russian sovereign territories, serving Russian expansionism's sake in former Soviet or communist lands.

Thirdly: If Putin attempts to shame and label (CWP) for using (symmetrically) banned weapons, given the assumed preemptive action (explained below) of propagating for a (NATO Peace-Enforcement Operation) before the last is initiated and before the (CWP)'s first major strategy occurs at the Ukrainians hands in battle zones, this aggressive political leader becomes better off by **not** exposing credibly such a planned fierce defeat of its forces in Ukraine, and particularly, in a precedented phase of NATO intervention, or that his subjects of millions of masses might “revolt” against him and his administration. The reason is that it will be if occurred, the first time that the brutality's Russian war machine shows that the knife targets its bloody owner and that the mirror reflects the same image of Putin's inhumanity on this leader's guided-military troops themselves. Here, a skillful reader might notice that the (CWP) is to be highly better off now if Putin tries to overturn

the global public against the Ukrainian side while he mistakenly becomes a *loyal servant* to bring about a “revolt” against himself from the heart if these facts are to be employed to topple Putin’s “irrational” decisions of war in Eastern Europe under the black propaganda campaign that already reaches its (matureness level and Russian public sympathy with it) even before the (W₄) begins (!). Yes, the war is a merely “dirty trick,” it is *not* about “what happens,” it is about how the “what happens” is being used and exploited to create “another what happens” at the right and proper multi-dimensional timing of this “another what happens.” That is, in a prior time to any uncertain move to shame the (CWP) by the (WP) in (W₄), the (CWP) will be prepared by the public masses in Russian society to stand for its purposeful end to enforce terminating the war whereas carrying, on the other hand, millions of audiences internationally to countenance its first major strategy of (Second Use Policy of Credible Retaliatory Threats) against Russian military (only, not civilians) before even this strategy becomes in play. We can call the Fourth War-Wave’s (CWP)-strategies and stratagems coherently, based on this player’s formerly played ones, the *overwhelming bottom-up and top-down victory of the war*.

Second: Over the (Territorial Advance) Dominant Strategy of (W₄), the (Attacker/CWP) becomes better off by moving to its “last resort,” implementing a (NATO Peace-Enforcement Operation) in Ukraine under a (NATO Forces Intervention, (CASO)-Destabilization, and Restoration) major strategy. Playing this strategy at this wave of the war, and after leaving the sphere vacated to the (WP) in (W₃) to show the world “who the (WP) really is,” all calculations of the war’s military and territorial superiority are to be thoroughly altered now for the (CWP)’s favor. Such an intervention of NATO forces to combat in battle zones with legitimized peace-enforcement measures and tools is meant to operate side by side with local forces of Ukraine’s army and previously NATO-financed and supported guerilla and insurgency in the (CASO) fronts of weakening the (WP).

The NATO intervention mirrors a. overcoming the Russian military not only in numbers but in strategy, organization level, and active security alliance, b. using more advanced or symmetrically high technological weaponry, and c. focusing on carrying out air attacks and strikes against (WP)’s troops, more than using the artillery efforts that might become direct, hunted target by the (WP)’s air jets dropping banned weapons. Therefore, all military reinforcements that were to overturn the war outcome in favor of the (CWP)’s

interest must be provided by this moment with the NATO operation is welcomed through a global justification and legitimacy to repel a would-be undeterrable aggressor of a globalized violation against the whole international society. The military chance of (WP) that we granted in (W₃) is going to be withdrawn, in this wave, through these efforts: a. land encirclement of Russian forces on Ukraine's all sides by the foreign troops, cooperating and collaborating with domestic ones, b. organized NATO air attacks to be in line with land artillery's ones, and c. penetration from the Black Sea on the South-Eastern side of Ukraine, from Odesa's side, for example, relying on naval forces operations to deliver supplies, surround the enemy's fleets before it does first, and conduct attacks from the sea against this enemy in occupied lands of the Eastern front jointly with established-insurgency and guerilla's clandestine attack-arrangements.

With all (WP)'s efforts to (Repelling) now, a decisive territorial advance must be the outcome for the (CWP) based on the (De-stabilization of (CASO) Continuity) first, that could be maintained along with the previous waves, and (W₃)'s preventive and preemptive strategies followed, second. As long as the (CWP) troops, and before NATO intervention in (W₄), have been capable of standing in their positions in (CASO) and elsewhere, despite the (WP)'s attempts to finalize the invasion and declare it, the NATO mission in (W₄) is to be facilitated. The opposite is right, though. What if the (CWP)'s achievement in (W₃), for example, was not (Defense) as an output but a humiliating severe defeat and the displacement of troops and captivating them? It would mean that the (CWP) has committed strategic mistakes that trapped it in a stretched war and that its planned, crucial victory of (W₄) had been overpassed by an ongoing-war status quo.

The rule of (W₃) is clear; if the (WP) is to advance, it must come with (CWP)'s ((CASO)-Destabilizing Continuity; Preventive and Preemptive Policies; and Counter-Attacks and Offensives) strategies are taking place. Otherwise, it would be a decisive and final victory for the (WP) occurring in (W₃) due to political leaders' miscalculations; and by the end, why would there be a fourth wave of the war, or even a second one, if such a victory of this player was to be gained easily in (W₁) of the war? It is vital to notice that the (CWP)'s {DU (FA-V)} by the beginning of (W₁) was longer than that reached by the (W₃)'s end. So, the (5 DU) of (W₁)'s start that is less in value than the (3 DU) of (W₃)'s end means that the (CWP) would still have been closer to its (FA-V) more than that case of the war initiation's status quo.

Third: Under a (Counter-Revivalism) Dominant Strategy of the (W₄), the (CWP) is better off by intending to escalate its war propaganda to adopt a (“Global Defense of World Security” Peace-Enforcement Operation) media propagating strategy. As we mentioned before, with the NATO intervening in Ukraine militarily, global public support is needed to conduct the strategic objective of (W₄) effectively. Again, the Russian public countenance is as much needed as the global one, with more focusing on the last given the next (NATO Re-allying) strategy. Another imagination of Clausewitz’s trinity of war may reflect that: a. the **government** is *supranational* of NATO and its newly gained allies in the war, b. the **public** element must address *three branches*; the NATO states’ publics, the masses of their new war-allies, and the enemy’s mass audiences influenced by the designed black propaganda campaign to strike Russian administration from the heart by provoking active protests and opposition against the government decision of war, coinciding with witnessing high-level casualties due to political authority’s ambitions and expansionist goals, c. the **army** is *globalized* oriented by international governance’s rationality and reasons of war and supported by global publics opposing Russian unmatched aggression in Eastern Europe.

The (WP), perceiving the (CWP)’s media strategy as a “momentum’s exploitive” to constrain its expansionist objectives, which is fair to understand, moves to a (Counter-Manipulation) media strategy. Suppression of the implicitly (CWP)-directed anti-war propaganda in Russia to end the war by relying further on bottom-up tactics is the (WP)’s first aim here. Simultaneously, the (WP) becomes better off by turning to the international society to speak out the discourse on a (liberation of ethnic Russians and Russian national security), which is not going to be effective under these conditions: a. If the (CWP) succeeded effectively in (Imposing Isolation) on (WP) during (W₂) and after that. b. If a remarkable success of the designed black propaganda campaign in the enemy’s lands took place earlier, addressing its four stages *sufficiently*, to convince the global masses by providing the example of partner publics in Russia. c. If the (CWP) proves superiority in its media strategy of (Countering and Re-Constructing) against (Revivalism) in (W₃), both inside the enemy’s territory and in the global arena. d. Most importantly, if the (CWP) moves first in a preemptive action to propagate for a (“Global Defense of World Security” Peace-Enforcement Operation) precedentially to two necessary circumstances: before the NATO operation even takes place through the (CWP)’s second major strategy

of (W₄); before the (WP) possibly begins to shame and label (CWP) after the last applies the (Second Use Policy and (BMDs) Activation Declaration) strategy.

In other words, if Russia moves first to insult the (CWP) when acting likewise dropping banned weapons against its military, it means that the (CWP) loses, in a huge part, not only global public support and re-allying objectives but also Russian public backing and gradually it wrongly “*isolates itself*” and “*encircles it in a prolonged war,*” serving the (WP)’s war tactics over time, if a correction course is not made. That is the reason why we set the (*Watch and Asses*) strategy using only the (*Verbal Deterrence*) tactic in (W₃) versus (WP)’s (Employing of Banned Chemical Weapons) strategy. To reply in a rush, responding-in-kind, the (CWP) loses a decisive victory of (W₄); however, to wait and prepare the trap, this player wins, as illustrated in the three strategic points above. Still, no strategic mistakes must be made concerning the media propaganda of (W₄) since it is one basic ground of a “*globalized war in effect and de-escalated one in level and scale*” wave-stratagem of (CWP).

Fourth: Moving after its war propaganda of international, regional, and national media succeeded in rallying masses worldwide in support of its cause to fight in Ukraine through NATO military operation, the (CWP) sequentially finds the way paved for adopting a strategy of (NATO Re-Allying with Global Regional Hegemons Against Russian Aggression in Ukraine) as a developed method of enlarging the (Collective Security) domain to pressurize a prompt end of the war. It is a “diplomatic and political globalization of war” step. Like media propaganda strategy, this step must also take place in a *prior stage* to the (Second Use Policy) first major strategy of (CWP) and its (NATO operation initiation) second major one. Through some bilateral conferences, congresses, and seminars, a representative delegation of NATO can conduct such a strategy with influential leaders in Asia, Central and Latin America, Africa, and Australia. Such an effort does *not* reflect an official obligation by any met-with leader; however, it helps obtain three benefits: a. enforcing international isolation on Russia in diplomatic and foreign policy realms, b. granting the war its globalized nature in effect to assist in minimizing it in level and scale, and c. provoking millions of rallies around the world in an active opposition of Russian aggression in Ukraine, following their titled leaders.

The (WP), seeing the (CWP)'s efforts to enforce its battle retreat, becomes better off by continuing its deterrence and compellence policies in Eastern Europe using the (Regional Destabilization Continuity) strategy. Again, a. financial support and weaponizing of fighting groups, b. initiating a *cyberwar* for recruiting local allies in neighboring states of Ukraine and c. attacking surrounding borders are the best tactics rationally perceived by the (WP) to de-stabilize the Eastern Europe region, imposing what was the temporal victory in (W_3) to be an *unquestionable status quo*. It does mean that the (State-Stabilization and Security Policizing by Force) strategy must be applied by (CWP) along with the war's trajectories to preclude any possible (WP)'s penetration of national security in Eastern Europe.

Fifth: Regarding the (Military Superiority) Dominant Strategy of (W_4), and by the end of this wave, the (CWP) succeeds in imposing a (Globalized Superiority) strategy through fiercely fighting NATO-forces on land, air, and sea, backed by previously and harmoniously organized (Ukrainian army, mercenaries, guerilla warfare and insurgencies) to multiply the war efforts for enforcing the enemy's military retreat completely by war or diplomacy. In a sequence to a. first, formerly initiated media propaganda of ("Global Defense of World Security" NATO Peace-Enforcement Operation); b. second, (NATO's Re-allying with Global Regional Hegemons) against Russian war in Ukraine and for gaining their (verbal/non-verbal) support of a planned NATO-defensive military operation; c. third, (CWP)'s employing of (Credible Retaliatory Threats) at the hands of Ukraine's army only under the (Second Use Policy) strategy; d. fourth, (Territorial Advance) by NATO interference and (Restoration) gradually of occupied lands, the (CWP) leaves to the (WP) no military strategic choice except the (Trapping Stalemate) one, with being globalized-superior on it. Now, it is either the military means that end the war in favor of (CWP)'s permanent prompt victory or the diplomatic exit.

3.2.5.3. The Fourth Wave's Outputs and the Diplomatic Exit Possibility

3.2.5.3.1. The Wave's Outputs

At the (W_4)'s end, the ($Output_1$) of (WP) is (Enforced Military Retreat), while the ($Output_2$) of (CWP) is (Military Advance). Using (Level III Strategies) in (W_4), which are the most intensified ever in scale, level, and effect in our modeling, the (CWP) alters

the war's equations to prove its military victory in battle zones and to impose a fair and absolute balance in a reached diplomatic exit. The (CWP)'s (DU) from its (FA-V) now is $(-\infty)$, where the distance ceased to exist, coinciding with this player's achieving of *de facto final victory*. That reversely means that the (WP)'s (DU) from its (FA-V) is (∞) , where this player is the (loser) of war at present and in the future with existing such an infinite distance to its (FA-V). We can denote the “(W₄)'s Victory-Defeat Relationship” in this formula:

If $\{ (WL) + (SWO)_{(WP/CWP)} \simeq DU (FA-V)_{(WP/CWP)} \}$, and that,

$\{ (WL) + (SWO)_{(CWP/Victor)} \simeq -\infty DU (FA-V)_{(CWP/Victor)} \}$, where

$$\begin{array}{ccc} \{-DU (FA-V)_{Px}\} & \longleftrightarrow & \{+DU (FA-V)_{Py}\} \\ \text{(Victory for One)} & & \text{(Defeat for the Other)} \end{array}$$

Then, $\{ (WL) + (SWO)_{(WP/Defeated)} \simeq +\infty DU (FA-V)_{(WP/Defeated)} \}$

3.2.5.3.2. The Diplomatic Exit Possibility

Firstly: The war might end militarily directly when stretching its length until completely enforcing the military retreat of invading Russian forces back to their borders, without reaching any diplomatic convention to put an end to the war by diplomacy. This case, if reached, reflects future stability of deterrence and conflict under the (Opponent Victory Equilibrium) of the (Deterrence Entanglement Law)'s (Relative Balance Rule), which is permanently stable, provided that there are certainty and correct perception conditions to be achieved within, where the (CWP) is the victor side at present and future. This possibility is not suggested because stretching the length of war might carry with it *many strategic surprises* or uncertainty and misperceptions like a *military coalition* occurring between Belarus and Russia to repel what they may perceive as a (manipulated war of anti-sovietism) _ that might be conducted under Putin's leadership on behalf of all ethnic Russians, for example, in Eastern Europe. In that case, it would be the (Disguised Opponent-Victory Equilibrium), if achieved in favor of (CWP), which is stable only temporarily due to deception or intentional misperception made by the enemy against this victor side. So, the more the Fourth War-Wave becomes extended, the more the risk of major war manifests in Europe and surrounding regions. In the (W₄), the (CWP)'s key

strategic objective must *constantly* remain a (*Prompt Enemy-Defeating*) plus the (International Security).

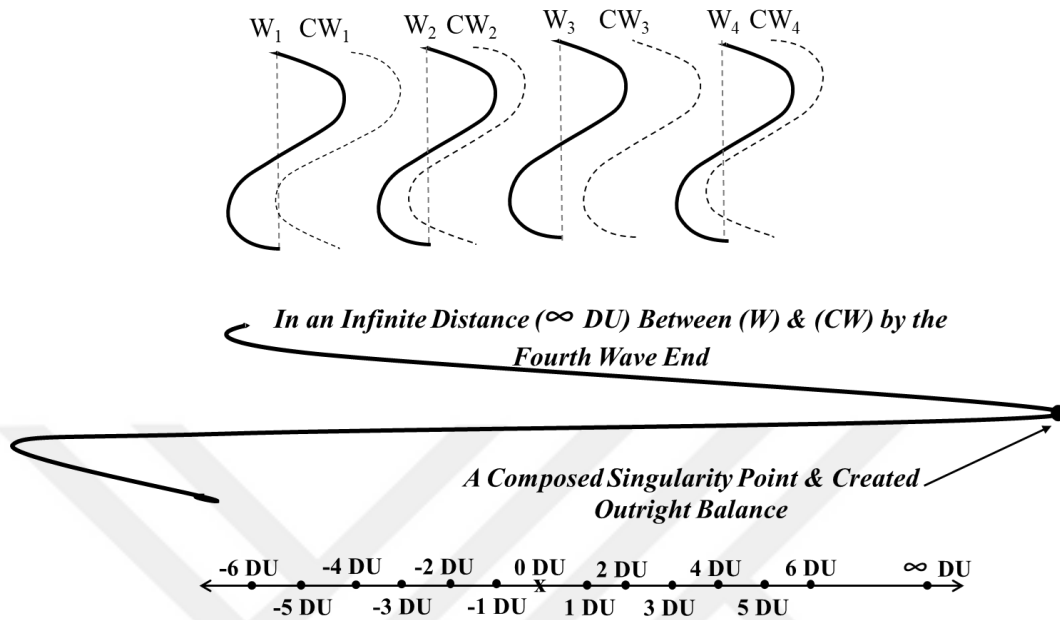


Figure 16: Illustration of a (Singularity Point of the Infinite Distance and Created Outright Balance)

Source: Prepared by the author.

Secondly: The (CWP) may go arrogant! Yet, after witnessing unmatched victories in battle zones in Ukraine against Russia, relying on the (W_4)'s strategic surprises of the (CWP)'s advanced (Attack-Defense) Key Wave-Strategy with the ability to harvest many cultivated utilities of strategies intentionally made over the previous waves for obtaining its decisive victory in (W_4), the (CWP) might *mistakenly* prefer to “*impose reparations*” on Russia due to the war's damage caused by its ambition adventure in Europe, or/and to gain a “*victory via humiliating the enemy,*” by any method followed. Apparently, the “invincibility” myth of the Russian army is assumed to be translated here into madness and completely irrationality, with Russian leaders seeing themselves better off by “*destroying Europe*” than to accept “*historical humiliation*” that disgraces their military and nation for decades or maybe centuries, particularly, under Putin's reign. The probability of this strategic choice of (WP) sequentially to the (CWP)'s possible strategic flaw is ($0 \leq p < 0.5$). On states' leaders-level analysis of politics and strategic preferences, it is empirically proved how far right-wing military leaders can lead their nations and

neighboring regional ones to thorough devastation for only satisfying their ego and fulfilling personal ambitions (e.g., Germany's Hitler and Italy's Mussolini).

Thirdly: The (Absolute Balance Rule). After the (CWP) becomes able to enforce a Russian military retreat and prove military superiority and advance with a restoration of invaded Ukrainian territories in at least 90% coinciding with the (W_4)'s termination, the path is clear now for bringing an end to the war via diplomacy where Russia correctly perceives that any future military escalation will be followed by credible and capable deterrence-via-war by the (CWP). Under this case, the (CWP) is better off by formulating terms of a. complete Russian withdrawal from all Ukrainian territories according to the status quo that existed prior to February 24, 2022, b. Russian public assurances of not re-invading Ukraine, c. issuing that Ukraine pledges not to be a member state of NATO or the European Union on any present or future occasion, d. Ukrainian guerrilla, insurgencies, and military confrontations are to be utterly halted everywhere they occur, and stability is to be restored in Crimea or any Russian zone of influence that was a war object (i.e., Abkhazia and Ossetia) as in sovereign Ukraine's territories.

Finally, the military victory of (CWP) is to be binding through another unmatched diplomatic victory with the avoidance of humiliating the enemy, the (WP), by reassuring it regarding its future security in the region. The probability of this diplomatic exit possibility is ($0.5 < p \leq 1$). This case reflects the future stability of deterrence and conflict under the (Compromise Equilibrium) of the (Absolute Balance Rule) within this study's developed (Deterrence Entanglement Law). While the (Defeated/WP)'s (DU) to its (FA-V) is (∞), the distance between the (W) and (CW) of the war becomes (∞) likewise, where both the {(W) and (CW)} fade away till a (Singularity Point of the Infinite Distance and Created Outright Balance (SPID-COB)) exists (see Figure 16) to usher the rise of a "*universal peace-beginning creation*," in accordance with a globalized stabilization of secured EU-lands, and following suit in other parts of the world, setting (seldomly, by a deterrence-via-war) the peace as the king of the day.

3.3. Revealing Uncertainty of the 2022 Russia-Ukraine War Dynamics from the Game Theory and Hypergame Theory Perspective & A Developed ('Non-Chance Space' Reduced War-Hexagon) for the War-(Hyper)Game Modeling and Counter-Modeling

This analysis section of the study aims at revealing the uncertainty manifested along with the June 2022 phase of the Russia-Ukraine War initiated on February 24, 2022, applying the game theory and hypergame theory as a theoretical foundation. Within the complex situation of this war, the strategic interactions of both Ukraine and its allies and Russia are suggested relying on the provision of each party's played (hyper)game consecutively after depending on a comparative strategic analysis of the current and previous events of the war. Thence, this work seeks to answer how the war game might occur by taking uncertainty and deception conditions into account in actual circumstances, focusing on how the war trajectory is being tracked by both conflicting parties based on the rationality argument and utility notion retrieved from the game theory, and then, explaining the modeling of the deceiver and counter-modeling of the deceived by applying a developed War Hexagon.

It is extremely crucial to ask: i. Under assumingly hypergame-based Russian-Ukrainian War 2022, is Actor I, which is (Ukraine, NATO, the EU, and the USA; or Ukraine and NATO mainly), credibly secured about its war strategies? Or that, a flow of their war (hyper)game information to the opponent Russia created an artificially-perceived image of Russian military might and invincibility myth either for this contemporary time or to prevail in future with possible Russian permanent victory (if not stopped at the right time following the right course of strategic action)? The first question leads us to the second on the war dynamics for the given war case. ii. Does Actor II, which is Russia, credibly and capably own the military invincibility ability to deter Actor I forever and build its long-lasting empire in Europe at the expense of massacred civilians in Ukraine? Rather, did an acquaintance of its opponent's (Actor I) war (hyper)game grant Russia the very tactics it reliably needed to move to for disrupting every present or future move picked by Actor I that would bring a prompt victory for the last?

Based on the previous questions, this section will provide a valid game and hypergame analysis of the currently witnessed war dynamics of the Russia-Ukraine War 2022 to first prevent, through evidence-based analysis, the massacre of more civilians in Ukraine and Europe in the present and future, and to hinder second a possible major war from the eruption in Europe and from the last to the whole world in an effect chain if a corrected course of the war is not made to deter the aggression that might develop in impact to prevail regionally and globally. Further, it is a descriptive work of how it actually is by

revealing the other's deception and access to the first player's war game and information to allow the policy prescriptions to be properly prescriptive in the future by avoiding the actions that are incorrectly perceived to be the most rational while indeed they are irrational ones when put in the right hypergame-theoretic explanation and analysis.

In this context, a comparative strategic analysis of the war status by early April 2022, and early June of the same year, is an *initial* way to prove this study hypothesis: (With the second war actor having access to the first war actor's war (hyper)game under uncertainty, misperception, and intentional deception conditions created by the second war actor, the last could deliberately camouflage its first-used war stratagems achieving its war objectives and inflicting its enemy, the first war actor, politically, economically, and militarily, if this deceived in the war situation could not reveal the uncertainty and counter deception ultimately, while the war-termination process' spoilers become better off by accelerating a realist war-end tearing war-affected societies into parts). Given that we proved this hypothesis after accomplishing the *game and hypergame-theoretic analysis* of the Russian-Ukrainian War dynamics during the specified period of wartime considered for this analysis purpose, such an advance enabled us to move next to developing what we call a ('Non-Chance Space' Reduced War-Hexagon) to find the remedy out of extremely complicated and complex war-situation and bring about strategically a future *security balance* regionally as well as internationally.

3.3.1. The First Pillar: A Comparative Strategic Analysis Between the War Situation in Early April and Early June 2022; Is It a Coincidence?

3.3.1.1. Strategic Factor I of the War Status' Changeability

This factor represents the "Altering the Enemy Outnumbering Strategy." Why did Russia, deploying thousands of troops and continuously increasing the numbers with the war initiation, resort by May and early June 2022 to re-deploy the same invasion troops it uses in Ukraine²¹⁴? Is it a coincidence that war analysts conclude that Russia faces a manpower

²¹⁴ "Military experts though still believe that Russia lacks the number of troops it needs to make significant advances in the east. Redeploying forces from the fight in Kharkiv and Mariupol is unlikely to make a difference. Jack Watling, of the Royal United Services Institute, says Russia is still short of manpower and in particular infantry. Russia has tried to reconstruct and combine some of its already battered units - dubbed "Frankenstein's Forces." (Jonathan Beale, "Ukraine War: What Might Tip the Balance?", BBC News, May 20, 2022. <https://www.bbc.com/news/world-europe-61524175>. "Access Date 06/15/2022").

stalemate, particularly after Russia declared, nationally, the recruitment of citizens over 40 (!) as reserves at this specific time of war²¹⁵?

Here, another question follows; 1. was that not the Russian worldwide unmatched manpower advantage that enabled Russia to stand for fierce German attacks of the World War II (1939-1945) from almost 1941 after Hitler declared war on Russia till the end of the war, when, and only when, Russia could defeat Hitler undefeatable troops relying on its ability to mobilize millions of reserves continuously? The Second World War's military casualties of the Russian side²¹⁶ is the best evidence of its unmatched capability of manpower mobilization during wartimes, whenever decided!

Based on the first question, the second is: 2. Is the seen scene of reconstructing and combining forces and re-deployment among the same so-called "Frankenstein Forces" within the same invasion troops with no further external deployment intended? If so, is that to hunt the Ukrainian army like chickens and slaughter them slowly first so that no possible deployment of NATO forces might be justified at present, and a sudden and gradual victory of Russia by early 2023 will halt any probable late NATO operation to save the situation. Strikingly, the highest probability and most rational war possibilities, given the comparison of current and previous Russian actions, impose themselves clearly. Also, from Russia's self-interest perspective during this stage of the war: a. Russia works on crippling EU economies protractedly, as explained later; and b. the real deployment of unmatched Russian manpower will find its place smoothly after the invasion completeness to deter NATO from even thinking about confronting Russia and restoring wholly invaded Ukraine by that time.

The first Russian stratagem is apparently; running a risk of all-out war, avoiding the risk of major war while taking the opponent to the edge of believing in the European continent's ultimate destruction if widened the scale of war and, therefore, obtaining permanent victory (if not deterred early) successfully. In other words, Russia, Actor II, is

²¹⁵ "It is already claimed that Russia has already lost around a third of its original invasion force - an estimate that includes killed and wounded troops as well as equipment destroyed or damaged. Mr. Watling says Russia is trying to address these shortages - including mobilising reserves who are over 40 years old and offering short-term contracts to fill its ranks. But training and rebuilding an army takes time" (ibid).

²¹⁶ "The Soviet Union alone lost around 27 million people during the war, including 8.7 million military and 19 million civilian deaths... Germany sustained 5.3 million military losses, mostly on the Eastern Front (primarily against Russia) and during the final battles in Germany." ("World War II," Wikipedia. https://en.wikipedia.org/wiki/World_War_II. "Access Date 06/02/2022").

better off by defeating the protégé of the EU and NATO (i.e., Ukraine) by slaughtering it gradually and achieving slow but continuous military advance, having the first move advantage, instead of giving the EU and NATO the global justification to move first counter-attacking and achieving a global military superiority that will be accompanied with an utter economic and political superiority also.

The first factor that we called the “*military troops’ re-deployment camouflage at the battle zone*,” is well played then, which happened suddenly and in a highly organized way to prove to the whole world and the Russian society simultaneously that Russia credibly suffers from a troops deployment crisis and that it cannot outnumber the enemy’s troops for now. Some can justify the last stratagem, assuming that: a. Russia did so to avoid the major war possibility, attempting to minimize the battle zone scale; when making Actor I believe that both fighting sides in Ukraine symmetrically match each other in manpower (and probably weaponry); and that b. the (*intentionally*) Russian “slowed up,” however “continuous,” military advance is the evidence of this war narrative. Did Russia realize the possibility of a major war only after three months of initiating a complete invasion of a large-size, strategic, sovereign European country? Paradoxically, factors II, III, IV, and V are to show the reason for that; it will be fair to argue that Actor II is thoroughly acquainted with Actor I’s war (hyper)game, and it picked all its moves deliberately to hinder the occurrence of Actor I’s perceived war-(hyper)game’s equilibria.

3.3.1.2. The Other Strategic Factors of the War Status’ Changeability

3.3.1.2.1. Strategic Factor II

It reflects (A complete blockade of Ukraine’s Black Sea access²¹⁷) factor, which was accomplished by nearly mid-May 2022.²¹⁸ It was arguable to see that Actor II moved to

²¹⁷ See, Daniel Boffey, “Russia’s Black Sea Blockade Pushing Millions Towards Famine, G7 Says,” The Guardian, May 14, 2022. <https://www.theguardian.com/world/2022/may/14/ukraine-says-russian-forces-withdrawing-kharkiv>. “Access Date 06/15/2022”

²¹⁸ “A document based on declassified intelligence and released by the U.S. government shows Russian naval operations in the Black Sea from February to May 2022... (in which) Russian Naval Operations Demonstrate Intent to Control Access in Northwestern Black Sea, February-May 2022... U.S. and other world leaders have accused Russia (by May 14, 2022) of intentionally disrupting global food supplies by preventing Ukraine from exporting grain and other key agricultural products” (Shane Harris, “U.S. Intelligence Document Shows Russian Naval Blockade of Ukraine: World Leaders Call the Kremlin’s Actions a Deliberate Attack on the Global Food Supply Chain,” The Washington Post, May 24, 2022. <https://www.washingtonpost.com/national-security/2022/05/24/naval-blockade-food-supply-ukraine-russia/>. “Access Date 06/15/2022”).

completely blockade Ukraine’s access to the Black Sea before accomplishing its invasion of all Ukrainian coastal cities on the Black Sea (particularly Odesa that it was trying to penetrate in March), given that it was standing at approximately the same sea position by early April and mid-May 2022.



Map 1: A Comparison Map Between the Status of Russian Invasion of the Black Sea-Ukrainian Cities by Early April and Late May/Early June 2022

Source: BBC²¹⁹

Suppose a complete and quick blockade of Ukraine’s access to the Black Sea without conquering the remaining coastal cities first was a key strategy for Actor II from the beginning to obtain the upper hand at this gate as early as possible and create an instant global food crisis; why did not it pick this move in April, or even before that date, when having almost a similar foot position of invasion at frontlines bordering the same sea?

A sudden deviation in an opponent/enemy’s strategy during wartimes must prove, constantly, that receiving accurate information on this enemy’s enemy-future moves

²¹⁹ For the first map on the left: David Brown, Bella Hurrell, Dominic Bailey, Mike Hills, Lucy Rodgers, Paul Sargeant, Mark Bryson, Zoe Bartholomew, Sean Willmott, Sana Dionysiou, Joy Roxas, Gerry Fletcher, Jana Tauschinsk, Debie Loizou and Prina Shah, “Ukraine War in Maps: Tracking the Russian Invasion,” BBC News, April 4, 2022. <https://www.bbc.com/news/world-europe-60506682>. “Access Date 06/15/2022.” For the second map on the right: David Brown, Bella Hurrell, Dominic Bailey, Mike Hills, Lucy Rodgers, Paul Sargeant, Alison Trowsdale, Tural Ahmedzade, Mark Bryson, Zoe Bartholomew, Sean Willmott, Sana Dionysiou, Joy Roxas, Gerry Fletcher, Jana Tauschinsk, Debie Loizou, Simon Martin and Prina Shah, “Ukraine War in Maps: Tracking the Russian Invasion,” BBC News, May 31, 2022. <https://www.bbc.com/news/world-europe-60506682>. “Access Date 06/15/2022”

plays the key role in changing the priority of a war actor regarding its strategy preferences in relation to the allotted time to achieve its war objectives with considering which military advances on geopolitical terms are being achieved where the strategy deviation occurs. In other words, only Russia was still gaining military superiority and achievements in Eastern Ukraine when comparing the advance's level of March and April 2022, and that happening by mid-May and early June 2022. That is, being acquainted for sure that it will be besieged from the Black Sea portal by Actor I as to be damaged militarily in the cities it conquered before and hindered regarding any attempt to create a successful global food crisis must be the most rational incentive to Russia for pushing it to close the gate that it was already guarding since initiating the invasion _ while witnessing the enemy's (Ukrainian) forces still not possess a critical advance's position for soundly breaking Russian invasion lines of the East; see the map above.

3.3.1.2.2. Strategic Factor III

Russian complete readiness of the imposed compromise deal on banning its oil by the EU, and easily delivering information to the EU through "the Russian ambassador to the EU, Vladimir Chizhov, (who) said Brussels had "already approached the limits of what is possible in terms of sanctions." Speaking to Russian state TV, he predicted "serious problems' if the EU were to try to agree on a gas embargo²²⁰," declaring the last statement simultaneously in the same context. Thus, Russia absorbed the first EU action, showing the EU that the serious problems would happen when only imposing a gas embargo that the EU was already discussing, motivating and encouraging the EU to pick the move. Yet, why?

3.3.1.2.3. Strategic Factor IV

Using Hungary's president (having close relations with Russia's President Vladimir Putin) to circulate a video via social media that Europe and the whole world depend on as a primarily news source to a. declare his country's *victory* regarding the oil ban EU agreement and *defeating* the proposal; b. defy the EU decision of banning Russia's oil *publicly* while demoralizing the European people and destabilizing their societies by

²²⁰ "Russian Oil: EU Agrees Compromise Deal on Banning Imports," BBC News, June 1, 2022. <https://www.bbc.com/news/world-europe-61638860>. "Access Date 06/15/2022"

claiming that his own people could *sleep soundly protected* from the high costs of fuel caused by the EU embargo that the *rest of Europe* will face.²²¹

3.3.1.2.4. Strategic Factor V

Hitting chemical targets and relying on artillery combat on the battleground. Russia that used internationally-banned chemical weapons in its war in Syria since 2011, with the US declaring in March 2022, based on accurate information that Russia uses in its Ukraine war same tactics it used in the Syrian war, referring to a possibility of using Chemical weapons, this same Russia after almost three months of the war chose to alter two tactics as follows: a. Hitting a chemical plant²²² instead of dropping chemical missiles as it did previously in Syria through the Assad-Syrian regime's Russian-backed air strikes, achieving the same strategic objective by causing the spread of toxic fumes to kill civilians and force the rest to flee their cities, while its first hit of a nuclear, not chemical, plant, occurring by early March 2022, was repelled by the UN rejection and defying. b. Relying and concentrating on artillery²²³ by mid-May and early June 2022, instead of focusing on air strikes as was observed with the war initiation and by early April 2022.

Such a dual-sudden deviation in strategy choice means that Russia got access to information confirming that Actor I would drop chemicals symmetrically against its troops if it did first, legitimizing and justifying the entire world's support of the war against Russia so that the last became better off by hitting chemical plants creating diversion between Actor I's forces and simultaneously a camouflage in its real intentions

²²¹ "The ban on Russian oil imports was initially proposed by the European Commission - which develops laws for member states - a month ago. But resistance, notably from Hungary, held up the EU's troubled latest round of sanctions. Mr. Orban (Hungary's Prime Minister, Viktor Orban) declared the agreement a *victory* for his country, telling Hungarians they could *sleep soundly - protected from* expensive fuel costs that the embargo would bring to *the rest of Europe*. "We succeeded in *defeating* the proposal of the European Council which would have forbidden Hungary from using Russian oil," he said in a *Facebook video*" (ibid).

²²² "A nitric acid tank has been hit by a Russian airstrike in the frontline city Severodonetsk, prompting warnings to stay inside... (Where) people in Severodonetsk are warned not to leave bomb shelters and to prepare masks to protect against toxic fumes after (the) nitric acid tank is hit" (Joe Inwood, James Waterhouse, Abdujalil Abdurasulov, Laura Bicker, Hugo Bachega, Jeremy Bowen and Steve Rosenberg, "As It Happened: City Residents Warned to Stay in As Chemical Plant Bombed," BBC News, May 30, 2022, <https://www.bbc.com/news/live/world-europe-61629260>. "Access Date 06/15/2022").

²²³ "Russia has been using its artillery and rocket launchers to tie down Ukrainian forces who are dug in - along well-prepared defensive lines... Brig Barry (a former British Army brigadier) says it appears that Russia is "trying to bleed Ukraine dry" by forcing it to concentrate its forces at key points, which can then be targeted by its artillery. Military analysts believe Ukraine is likely to have suffered significant casualties as a result" (Jonathan Beale, "Ukraine War: What Might Tip the Balance?").

of obtaining a decisive victory of the war. That is to be ascertained by killing both civilians and military troops of Ukraine, exploiting the fear stimuli's impact and manipulation benefit during wartimes and achieving desirable war gains on long-term when: a. protecting its fighting troops from retaliatory response-in-kind by chemical weapons if possibly dropped by the Ukrainian army in the battle zone and supported by the Western governments, b. not allowing to grant the regional and global justification to Actor I to defeat Russia in Ukraine in short, middle, or long-term, and therefore, c. preventing the possibility of uniting both NATO and EU militarily against Russia by confronting its military in Ukraine and deter its continuous aggression in Europe.

Nevertheless, an expected high utility from Russia's perspective here after revealing the uncertainty about its enemy war (hyper)game is to be yielded only *gradually*, with substituting (retaliatory) air strikes' Russian priority that would result in achieving an advance and probable victory to the weak (i.e., Ukrainians) when even counter-attacking from air defensive-positions, by the artillery to hunt and eliminate Russia's enemies in darkness and silence. Put it simply, by revealing that the West agreed on granting Ukraine advanced air jets and fighters and training the Ukrainian military to target Russian troops from air positions and striking sensitive Russian possessions at/near borders, each Russian air strike _ that would kill 10 Ukrainian soldiers and destroy their weaponry used and the territory targeted, is to be met by a retaliatory symmetrical air-strike to kill at least 10 Russian soldiers, possibly more, and damage their weaponry used and the territory targeted likewise. In contrast, with Russia concentrating on the artillery and encircling its enemy army within specific Ukrainian cities and towns, each rocket launched from the land would end the life, for example, of 10 Ukrainian soldiers and more civilians, whereas any successful response by the other (i.e., Ukraine's army) _ who is less organized, dispersed into many not-centralized fronts distracted by the enemy, less-skilled in combat tactics, and targeting its enemy forces from-and-in civilian towns _ would at most kill one Russian soldier, that is, if it could kill any.

If we consider that Russia was sure that the free world would never use banned weapons in actual combat against it by March and April 2022, and taking into consideration the US correctly perceived information on Russia's opting to use same war tactics it used in Syria. Then, what makes Russia strikes now in June using another alternative path of achieving the same strategic objective of gaining permanent victory through spreading

toxic fumes but by hitting chemical plants instead of carrying out chemical strikes, except that Russia received information that the free world would retaliate symmetrically against its troops in Ukraine coinciding with getting the justification worldwide to do so. Also, if Russia was worried about the international society, namely the United Nations, reaction, rejection, and condemnation of the action itself, then it would be better off should it avoid the action completely by *not* hitting any chemical plants, causing a terrible death of civilians by chemical poisons.

Briefly, Russia sought the protection of its fighting forces in the war first, and the expansion aims second as the sole strategic priority, apparently when it became well-acquainted that any chemical strike it may carry out would be met by another from the enemy (we must notice that Actor I never declared such information along this time). Contextually, the concentration of artillery efforts, not the air strikes, was that move picked to hinder the possibility of leaving Actor I conquer the air zone of war, which might result in eliminating its troops unexpectedly. Here, the alternation of the Russian course of tactics in this respect was made to intercept what it realized that NATO was going to support the Ukrainian army by fighting troops to outnumber Russia's invasion forces. So, Russia became better off by making Actor I believe, incorrectly, that: a. a probably contained, limited amount of invasion troops is already diminishing after targeting them in artillery combat, at least the third of them (see the section's second footnote), and b. no further external deployment of troops is ready now for mobilization due to a deceiving military recruitment stalemate that the war analysts observed by nearly mid-May and early June 2022, as mentioned above.

At last, what made Russia change the following strategic paths at almost the same time (mid-May and early June 2022)? a. The internationally-banned chemical weapons/missiles-strikes possibility. b. The air-strikes tactics relied on by the invasion initiation, early March and April 2022, replacing them with focusing on artillery efforts, distracting Ukraine or NATO from the concentration on (counter) air strikes. c. Rapidly completing the blockade of the Black Sea, hindering Ukraine's access to the outer world, and creating a global food famine at such an early time of war by disrupting this country-export grain and agricultural products' sea routes. That occurred in a prior time to accomplishing Russia's strategic objective of seizing the other major coastal cities first, with a less invasion zone on the Black Sea already remained, and from the symmetrically

same status of the sea frontlines and even deeper advance position in Ukraine's Eastern region itself (see the comparative maps above). The advance deeper in the East of Ukraine was supposed to make such an opponent, Russia, rationally guaranteed about its back from the sea unless it had received accurate information that NATO would penetrate it from this sea for breaking its military invasion lines in the near future. d. Utilizing Russia's ally, the president of Hungary, to not only reject the EU compromise deal but to threaten the Europeans via a video on Facebook that the whole of Europe would watch, claiming victory of his country and defeat of the EU agreement, framing the EU as the enemy of its peoples at present and future. e. Delivering to the EU a disguised message and false alarm that Russia's serious problems come with European leaders adopting a future gas-embargo policy versus Russia, incentivizing them to move for it.

All of that highlighted reveal that Actor II received correct information about Actor I's war game or hypergame so that its victory became guaranteed if Actor I could not act according to the exact or optimal manner of making rational decisions based on a clarified uncertainty but relying on intentional misperception and deceptive-uncertainty vacuum re-created by its enemy, Actor II.

3.3.2. The Second Pillar: A Game and Hypergame-Theoretic Analysis of the Russian-Ukrainian War During (Mid-May and Early June 2022) Phase

As we mentioned above that the aim of this work is to introduce a descriptive analysis to show what it is through revealing the uncertainty. Once the uncertainty does no longer exist, either Actor I or Actor II can see the right trajectory of war to build upon it the right and most rational course of action, particularly Actor I, who is exposed to international violation of a sovereign country and massacres of this country's own subjects (i.e., Ukrainians). From the perspective of the above-mentioned factors, it can be argued that Actor I had its own perceptions and beliefs on the war and how to defeat Actor II, while the last reversed Actor I's perceived game/hypergame of the war, played manipulation strategies, and enhanced a deception hypergame against its enemy.

3.3.2.1. The Firstly Played Hypergame (HG₁): Actor II Misperceiving Actor I

It can be assumed that Actor I, in its perceived war game, understood that its set of strategies in the interplay with Actor II's war strategies are: Supporting the Ukrainian

Army Militarily and Economically; Clinching a Compromise Deal on Banning the Russian Oil; Resorting to Capable and Credible Retaliatory Threats by Using Symmetrically Banned Weapons Against the Enemy's Troops After the Enemy First-Use; Obtaining the Worldwide Justification of Countering-Enemy Jointly Defense Military Operation Against this Opponent Invasion and War Crimes; Gathering the Global Publics in Support of Actor I's Cause Using Conventional and Digital Media Platforms; Relying on the Artillery Outnumbering, Air Strikes, and the Black Sea Maneuvers to Encircle the Enemy From Land, Air, and Sea Tactically for Further Military Advance. This perceived game by Actor I about its war-strategy preferences in an interaction with the understood strategy-preference vector of Actor II on the war is denoted as $(G_{1.1})$ in (HG_1) .

Simultaneously, Actor II's set of strategies of this phase only of the war and in a prior time of knowing Actor I's actual played game, in interaction with Actor I's understood strategy preferences, are: Relying on Air Strikes and Artillery Efforts in Battle Zones to Break a Sole Combat Enemy, Ukraine, Defensives and Counter-Offensives; Besieged by Oil Exports Embargo Imposed by Actor I and Economic Crises; Possible Banned Chemical Weapons Usage in Battles; International Law Violation and War Crimes to Spread Fear and Gain a Prompt Victory; Imposed Isolation and Global Publics Provocation by the Enemy; Stepping Back in Ukraine's Gate to the Black Sea Till Completing the Coastal Cities' Invasion First; Preserving the Military Advance in War. This perceived game by Actor II about the entire game and Actor I's played game is $(G_{1.2})$ of the (HG_1) , while still not being aware that there is a hypergame being played, and it has intentional misperceptions about the opponent's war game. So, the entire (HG_1) is composed of $(G_{1.1})$ and $(G_{1.2})$; $\{(HG_1) = \{G_{1.1} + G_{1.2}\}$. Given that Actor I misperceived that: a. Actor II is already acquainted about its played game of the war (G_1) , simultaneously with starting it in an actual war situation, or that b. there will be another hypergame being played by the enemy; the first played hypergame (HG_1) was an intentional misperception game. In this case: a. Actor II had intentional misperceptions about the entire game and the other player's game, which occurred firstly; b. Actor I had misperceptions, sequentially, about Actor II's actual beliefs and perceptions, and therefore, strategy choice of an unexpected and unknown war game's next phase, and that

its (i.e., Actor I's) war-relevant uncertainty is exposed. That leads to the secondly played hypergame, a deception-based hypergame.

3.3.2.2. The Secondly Played Hypergame (HG₂): Actor II Deceiving Actor I

Given the comparative analysis' five factors mentioned before, it is argued that the sudden and quick change in Actor II's war strategies meant that it revealed Actor I's war game and began to play its own hypergame, which is based on a deception that achieves its victory before the EU even start thinking that it may succeed in activating the reached compromise deal by the end of 2022 and early 2023. More apparently, Actor I, who believed that it was aware of the war situation where Actor II was not knowledgeable about its war game or that it had misperceptions about the game, is now the deceived after Actor II received information about Actor I's war strategies and stratagems.

In the same context, under a changeability of war dynamics of the Russia-Ukraine War 2022, it is safe to demonstrate that whenever one actor moves to play an intentional misperception or deception hypergame to achieve the perceived equilibrium(s) for itself or the entire game, this situation is going to change once the other player gets correct information about the other's tactics, strategies, and stratagems of the war. In other words, the war dynamics are vulnerable to be altered even on a daily basis as long as one player can obtain access to the other's war (hyper)game. That confirms that the final victory of war must be acquired should one side's played war-(hyper)game be completely or incompletely unknown to the other (a level of uncertainty is necessitated by the would-be winner to hinder the premeditatedly-counter-modeling possibility); and thence, the war equilibrium for one player only, or a correctly-perceived Nash equilibrium of war for both actors, can be reached.

At this stage of the war, by mid-May and early June 2022, and relying on the comparative strategic analysis configurations, it can be concluded that Actor II's sequentially played deception-hypergame includes the **next set of strategies** and interactions, countering Actor I's disclosed war game, as follows:

Firstly: (Halting the EU and NATO Military Intervention Possibility and Suspending Their Military and Logistic Support of Ukraine at a Limited, Easily Confronted Level, Through Minimizing the Battle Scale) strategy. The latter has been achieved by

concentrating on the artillery efforts and diminishing the significant dependence on air combat tactics, in addition to deceiving the opponent by not dispatching more troops or focused military deployments under a national military-recruitment manufactured stalemate.

Secondly: (The Tiple Destruction of the Enemy (Actor I)) strategy. In an active interaction, it means a. using the EU compromise deal on banning the Russian oil for striking down the whole continent in the future economically and politically; b. encouraging issuing a gas embargo on Russia by the EU to use it reversely in further destroying its economies; and c. using Hungary's president as an example of the same sample to implicitly threaten the EU and demoralize the European peoples via digital media, attacking the EU as an enemy from inside coinciding with bringing the end of this union with massive economic destruction witnessed in future. That can be explained as follows:

Actor II has the capability and credibility to smush Ukraine in one week; however, it cannot because the whole world would stand against such a quick, rationally uncalculated move. Simultaneously, it revealed the information of how Actor I thinks to defeat it in the battle zone. Thence, Actor II currently uses a strategy of (*Distraction, Camouflage, and Major War's Avoidance*). How did this come to be?

As we mentioned, a gradual but continuous military advance in Ukraine would achieve the war objectives for Actor II in the long term, which would be gained in the ongoing war phase through: a. pretending the lack of military recruitment citizens inside Russia and b. delivering the image of Actor II's need to build an army from the beginning to fight for Russia in Ukraine while maintaining the actual Russian army divisions and corps taking no place in the war till the mini-divisions of the Russian army finish the naïve job while keeping the EU and NATO distracted by the possibly contained amount of Russian invasion troops. Meanwhile, fewer troops will open the portal for the actual Russian army deployed in the future, the huge, unexpected one, to repel whoever might approach the Ukrainian invaded territories. Simultaneously, Russia could successfully lure the EU to issue not mere sanctions, as was expected with the preparation at the same time for oil and grain alternatives as preventive and preemptive strategies only, but a lawful deal that would necessitate six months to be effective and operational; the same amount of time

that the Russian administration needed to finish the job, the invasion, by the less number of troops paving the way for the giants.

By early 2023, if Russia continues its deception hypergame versus Actor I with no counter-modeling (provided in the next pillar) implemented to prevent and overcome it, it is rationally expected from Actor II's perspective and its beliefs about the current war situation that it will be the de facto invading of entire Ukraine with preserving Russia's military advance steady and its high-level static. It does mean, in that case, that once the EU begins to move to apply the sanctions by early 2023, it must be the *unprecedentedly* strengthened Russia that will be compromising with European partners over a *formula* of recognition of a de facto invasion of Ukraine in exchange for allowing an overtime economically-torn Europe to get access to both Russian and Ukrainian oil and grain (given that if the EU could withstand or stand firm for one year, it will be a suicide mission should it continue for another year under Russian war-victory situation).

Why is territorial expansion a Russian strategic priority, and why is a *contained* invasion the key to such expansion? That is because this territorial expansion is equal to continental, and therefore international, dominance and Russian imperialism. Also, if the contained invasion is the key to this expansion, then repelling the invasion at all necessitated means does represent the counter-key while allowing economic sanctions' effectiveness to be the case for deterring an already militarily weakened enemy, not a previously prepared, strengthened opponent. The timing factor of strategic moves is broadly discussed later during addressing Actor I's counter-modeling.

To succeed in its hypergame, Actor II preferred two mechanisms. The first mechanism is the need for the EU to impose another embargo to be on the gas. Under the effect of the latter case, if the oil, gas, and living cost in Europe generally was going to increase to double, then that would be tripled. It is a simple question, what was the major cause that pushed the Eastern European states to prefer and revolt for the separation from the Soviet Union's so-called Iron Curtain, or the zone of influence in Eastern Europe, by ousting their communist governments during the 1989 revolutions? It was the inequality comparison of the living standard between people of Eastern Europe and others of Western Europe; some are highly developed (the West), and others are so developing and probably underprivileged (the East). Yes! It is. Reversing history against Western Europe

reflects the first mechanism's activation, in this context; and the EU-Russian ambassador's statement, after concluding the Russian oil embargo agreement, of admitting the serious problems for Russia to occur after (not before) imposing another embargo of gas is *intended* to be the official lure to the EU for picking the move.

The second mechanism needed by Actor II was the (media manipulation during wartime). To own the minds of European peoples, persuading them that their union destroys their stability of life and balance, Actor II moved to apply what was mentioned previously of an (*example of the same sample*) tactic, the *actual stimulus*. No one better than the president of Hungary could convey the media message to the Europeans that they are going to suffer and starve while those who are allying with Russia thrive and live in prosperity under an average cost of living, not an unbearable cost that the "enemy" compromise causes to Europe. Using social media was the right arrow for the right target when a threat was covered as blame and delivered by a leader who seizes the highest political position ever, a president. It is further a strategy of *creating internal enemies against the enemy*, used by Actor II to bring Actor I down.

Suppose that the used, solid example by Actor II is targeted economically. In that case, it is Actor I now who counters the played strategy against it, proving to all European peoples (using social media platforms symmetrically) by the concrete evidence of economic growth comparisons on the coming war-months between countries completely supported the Russian oil ban EU agreement such as the United Kingdom, Germany, France, Poland...etc., and others did not, using an opposite (*example of the same sample*) tactic that: Russia's European allies are the ones who are penetrated economically and their economies are suffering unbearably credible threats and so far much more than Ukraine's European allies. It is considered a strategy of (reversed media manipulation during wartime against the enemy's disguised allies) and the (*counter-actual stimulus*) strategy.

Thirdly: (Hitting Chemical Plants to Achieve the War Victory Based on the Enemy's Permanent Fear Creation and the Non-(Response-in-Kind)-Retaliatory Strikes by the Other) strategy. **Fourthly:** (The Disruption of the Enemy Opportunities of Obtaining the Justification and Legitimization to the Fully and on High-Alert, External Intervention and Getting the Global Publics or Hegemons Countenance) strategy. It is the separate and rule strategy. Minimizing the scale of war, as illustrated above, explains this strategy when

resorting to owning a complete invasion in the long, not short-term, given the previous three strategies of Actor II that hinder any possibility of either a military intervention by NATO or a clear justification and legitimization of this intervention if desired. Namely, it is Russia that dominates the battle currently between it and its subjects (i.e., Ukrainians), with the latter losing hope and being full of fear to the extent that both Ukrainians, Russians, Europeans, and the whole world consider over time this war as a status quo under whatever outcome. At the same time, the Russian deception creates a passivity of any credible military action to be taken by the EU and NATO when making them believe that the economic sanctions are the solution that they already made while pushing the EU to impose a Russian gas embargo further to terminate the EU's economic future by its own hands catastrophically if counter-strategies are not used.

It is apparent now that the (Enemy Encirclement via Land and Sea Besieging; Artillery-Orientated Manipulated, Symmetrical Ground-Battles; Creating Fear of the Chemicals-Caused Death; Sustainable, Continuous, and Gradual Military Advance; and Invasion Completeness by Winter 2023) connected-military tactics represent the last major strategy of Actor II's set in the secondly played hypergame. According to that, all the five major strategies within the interactions' course understood by Actor II are to bring about this player's perceived equilibrium of the war's multiple-game under the (Permanent Victory Outcome). Simultaneously, it is Actor I, from its enemy's own perspective, who is assumed to be deceived until falling captive to the war-end sought, desired, and achieved by the opponent.

Ultimately, the explained above is Actor II's perceived hypergame in the (HG₂) since it understands not only the other actor's *strategy vector* (i.e., sv_1) but also the interactions of the entire hypergame with being aware of the played hypergame. We denote this individual hypergame as (HG_{2.2}), which is composed of the perceived game played by Actor I (G₁), and that game of Actor II (G₂). On the other hand, Actor I's actual set of strategic preferences for this war stage only is composed of these moves: Military, Logistic, and Economic Support of Ukraine Confronting Actor II's Attacks and Offensives; Holding in the Economic Sanctions on Russia as the Significant Resort for Deterring the Invasion; Non-Currently External Military Intervention in the War While Repelling Actor II's Attacks in the Battles; Non-Active Retaliatory Credible-Threats' Moves Coinciding With the Opponent's No First Use of Chemical Missiles. That is the

game understood by Actor I, denoted as $(G_{2.1})$, in interaction with the understood (*strategy vector of Actor II*, the (sv_2)). It is almost similar or an extension to that Actor I realized within the firstly-played hypergame (HG_1) due to the deception and uncertainty conditions created by the enemy. Basically, Actor I does not perceive the other player's game here or that there is a hypergame being played against it. At last, it can be said that: $(HG_2) = \{G_{2.1}(sv_1, sv_2) + HG_{2.2}(G_1, G_2)\}$, where both the $(G_{2.1})$ and $(HG_{2.2})$ are the individually-perceived and played (Actor I's game) and (Actor II's hypergame), consecutively, within the entire (secondly played hypergame) or (HG_2) .

3.3.2.3. A General Conclusion on the Second Pillar

From the perspective of this game and hypergame theory-based analysis of the Russia-Ukraine War dynamics, we can argue that neither Actor I is considerably weak strategically and militarily nor Actor II can claim its military invincibility worldwide. Nevertheless, under complex circumstances of conflict where spoiling one side's victory (i.e., Actor I) might bring prominence in politics and geopolitics, particularly to other rising powers like Russia, the power transition theory triumphs, which suggests that rising power tends to challenge weakening hegemons (the United States in our case, which is considered the defender of Ukraine as a protégé for preventing the Russian expansion) on the global stage. As well as, based on Schelling's deterrence theory perspective, we can argue that Russia could well run risks by initiating not a limited conflict but *contained all-out-war*, avoiding the major war possibility while operating on minimizing the war frontiers to the least possible extent (in such an initial conquest), until getting the upper hand by gradually achieving its war objectives conquering all Ukraine should Actor I not re-play its (hyper)game of the war sequentially.

Thence, Actor II depended on the manipulation of war strategies till this phase of the war, as explained above, when playing on the opponent (i.e., Actor I)'s perceptions of the war and war gamers. In other words, Actor II succeeds in using what we previously called *strategy navigation* tactics. This player could take Actor I to a zone of strategy maneuvering where Actor II is the guide to its enemy of how it acts, when, and by making which choice. What Actor I perceives as a deterrence action, therefore, became counter-deterrence for the enemy's favor and geopolitical interests. Further, Actor I's (i.e., Ukraine and NATO mainly) allies (the EU) could be easily manipulated by Actor II (i.e.,

Russia) to play the strategies that function threats, instability, and social, economic, and political insecurity versus Actor I over time if counter-strategies are not being used against the opponent, Actor II, in the war's next stage.

Addressing this limited stage of the Russian-Ukrainian War of June 2022, we can argue that we proved the study hypothesis: With the second war-actor having access to the first war-actor's war (hyper)game under uncertainty, intentional misperception, and deception conditions created by the second war-actor, the last could deliberately camouflage over its first-used war stratagems achieving its war objectives and inflicting its enemy, the first war-actor, politically, militarily, and economically, if this deceived in the war situation could not reveal the uncertainty and counter deception ultimately, while war-termination process spoilers become better off by accelerating a realist war-end tearing war-affected societies into parts.

3.3.3. The Third Pillar: The War-(Hyper)Game Modeling and Counter-Modeling from the Perspective of a Developed ('Non-Chance Space' Reduced War-Hexagon)

3.3.3.1. Preliminary: What is the ('Non-Chance Space' Reduced War-Hexagon)?

According to the findings reached through both the comparative strategic analysis and applying hypergame theory to the Russia-Ukraine War 2022 in its early phase, a counter-modeling by Actor I in this stage of the war, June 2022, must exist based on a perception game and certainty conditions, since the opponent Actor II revealed previously misperceptions intentionally made by Actor I. Simply, it is the phase of the war that we title: "Believe what you see, see what you must believe, and deceive in vain!" against the challenger, Actor II, guided by the defender Actor I. Certainly, Actor II is going to counter the counter-modeling provided below; however, another future countering (by Actor I) of countering this counter-modeling is necessitated for bringing about the stability out of the conflict in addition to a favorable war outcome. Based on that, in this study pillar, we build a *war hexagon* aiming at being applied to each player's game/hypergame strategies for reaching the strategic exit for the defender Actor I, in this war, rationally. That paves the way towards the ultimate balance of war outcome that favors this actor while preventing the anti-balance, which might prevail should the challenger Actor II win the war permanently.

In what we called a “‘Non-Chance Space’ Reduced War-Hexagon,” see Figure 17, there are six angles expressing integrated dynamics of any *inter-state war* case, as follows: First, the Military Dynamic; second, the Economy Dynamic; third, the Alliance Dynamic; fourth, the Media, War Propaganda, and Public Opinion Dynamic; fifth, the War Objective/Territorial Expansion Dynamic; sixth, the War Retreat/War Repelled Dynamic.

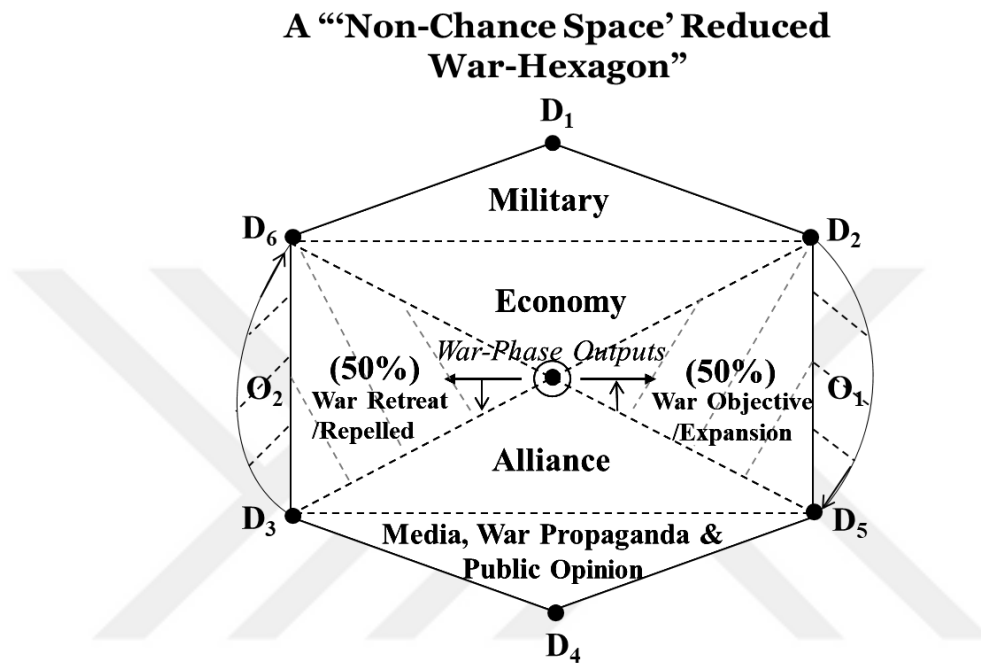


Figure 17: Illustration of the Developed (‘Non-Chance Space’ Reduced War-Hexagon)

Source: Prepared by the author.

In this context, the last two (i.e., the fifth and sixth dynamics) result in the “*War Outcomes I and II, ($O_1 + O_2$),*” whereas the first four, which are the “*Input Dynamics,*” generate the “*Output Dynamics*” of the fifth and sixth elements; generally proving that the war outcome is predictable and that the military chance room almost ceases to exist, in accordance with this reduced modeling theoretical perspective.

In the introduced War Hexagon, the fifth and sixth dynamics are initiated in 50% for every conflict/war party, and are increased or decreased depending on the **actual advance** for any in the battle zone. So, while the fifth dynamic refers to a (Favorable/Rejected-Movement Upward) for one side, the sixth dynamic indicates a (Favorable/Rejected-Movement Downward) for this same side, parallelly, in the remaining amount of a total

percentage of both dynamics collectively, (100%). Moreover, one actor must gain at the expense of the other; thus, the more advance obtained within the fifth dynamic in a high percentage for a player means the less advance for the other in the remaining (less) percentage. Simultaneously, the (War Retreat/War Repelled) dynamic achieved for one actor in a considerable, favorable (less) percent refers to the rejected achievement for the other in the remaining (high) percent.

3.3.3.2. The ('Non-Chance Space' Reduced War-Hexagon) Application to Actor II's War Hypergame of the (Mid-May and Early June 2022) Stage

Strikingly, it cannot show the exit, remedy, and strength-point of Actor I to recover its setbacks in battles and on the war in general during this early stage of the Russian-Ukraine War without illustrating: a. how the opponent could succeed, if it was actually doing, and b. in what estimated degree. Within this application of the ('Non-Chance Space' Reduced War-Hexagon), see Figure 18 below, given the results provided under the comparative strategic analysis and applying hypergame theory to this war case in the specified period of wartime, it is directly concluded that:

In the first dynamic: Russia's key strategy is reflected in this triple goal: a. the concentration on artillery efforts; b. hitting chemical plants to spread death fear and diversion among civilians as well as its enemy troops; c. preserving gradual military advance. For the second dynamic: It is shown that Actor II's key strategy is the "Enemy's Economic Turmoil Creation." Within the third dynamic, Russia focuses on a "Using the Enemy's Disguised Allies in Destabilizing This Enemy's Political and Social Security" strategy. At the same time, in the fourth dynamic, Actor II relied on a multiple-strategy choice, which lies in "Creating a Globally Public Status Quo on War" as a solid media and public strategy, as follows: a. Enforcing the *de-escalation* in global media broadcast on the war *in impact* not in the news-coverage level itself, through an "Imposed Regularity of Events" sub-strategy, which is the first cause. b. Creating the *public passivity and gradual dis-sympathy* with the war narrative on the Ukrainian people through an "intentional stretch of the war length" sub-strategy as the second cause, while working on granting Ukraine the lure to publicly claim (limited) military advance against its enemy as a camouflage.

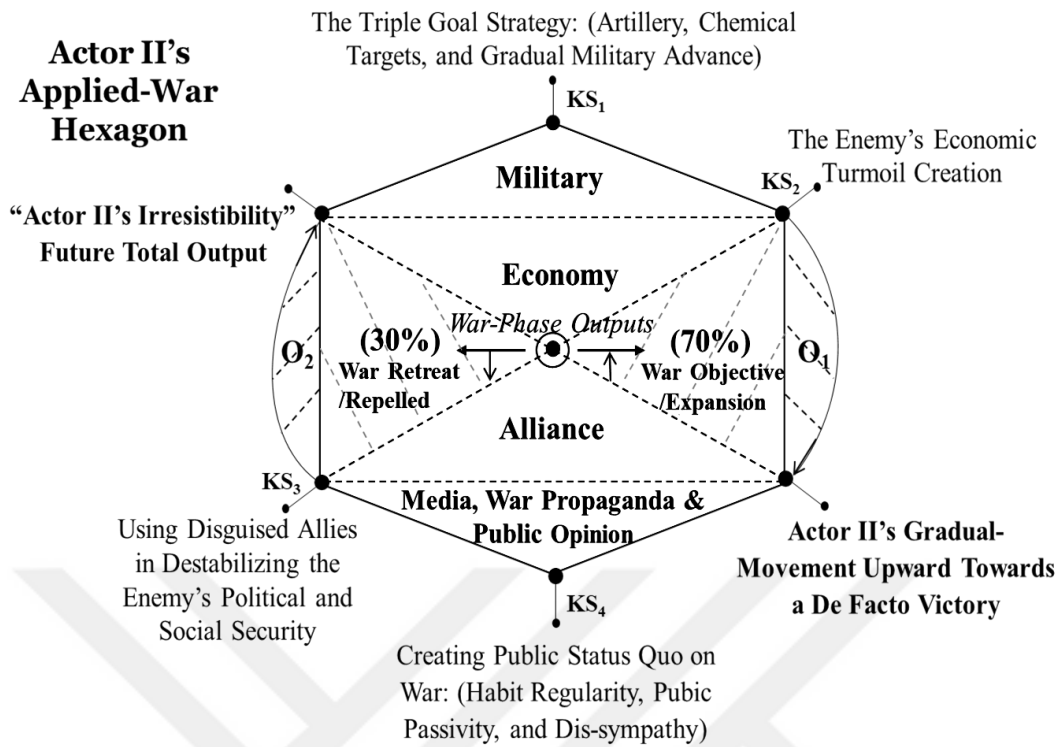


Figure 18: The ('Non-Chance Space' Reduced War-Hexagon) Application²²⁴ to Actor II's War Hypergame of the (Mid-May and Early June 2022) Phase of the Russian-Ukrainian War

Source: Prepared by the author.

Interestingly, Actor II created a considerable “*global public sphere*” composed of repeated events at the same level of amplifying in continuous, routine coverage on a daily basis of the media exposure by viewers on conventional and digital media platforms alike. The environment surrounding such a global public sphere is to successfully operate on the achievement of a major strategic objective for Russia, which is: a “Habit Regularity and Created Status Quo on War Admitted by the Public Opinion Worldwide.” Within the last, public masses in an international arena are to favor accepting what is going on, even with more likely denying what happens, converting to be *issue-silence public bubbles* under an *indirectly imposed, public spiral of silence*, where the opposing-public minority cannot find its path to resist or to be influential if it raises its voice publicly so that it

²²⁴ In Figures 17, 18 & 19: a. The (D₁, D₂, D₃, D₄, D₅, D₆) refer to the first dynamic, the second, the third, the fourth, the fifth, and the sixth ones, respectively, whereas (KS₁, KS₂, KS₃, KS₄) are abbreviations of the (Key Strategy “KS”) used in the first four dynamics consecutively. b. The Outcome I and Outcome II are denoted in sequential order as (O₁ and O₂).

theoretically and practically follows the majority. In the long term, such a media and public multiple-strategy might be effective in causing the passivity, dis-sympathy, and silence of media audiences regarding Ukraine's issue, while in the short-term, the counter-strategies must prove themselves practically successful.

Based on the four dynamics' application, the fifth dynamic estimate apparently indicates (70%) of a (*Favorable-Movement Upward*) for Actor II, Russia, regarding its (War Objective/Territorial Expansion) or (*Success*) dynamic, chosen to be occurring gradually by this player, which counts for (30%) of a (*Rejected-Movement Upward*) for Actor I (i.e., Ukraine, the EU, NATO, and the US; or simply, Ukraine and NATO as the protégé and defender respectively) over its (War Objective/Territorial Expansion) dynamic. On the other hand, the same indicator means that in the sixth dynamic of the War Hexagon, Russia achieves a (*Favorable-Movement Downward*) concerning the (War Retreat/War Repelled) or (*Failure*) dynamic, estimated to represent (30%) only, after a phasal (less retreat and more repelling), created intentionally by it. The latter reflects the remaining (70%) in a (*Rejected-Movement Downward*) for Actor I regarding the (War Retreat/War Repelled) same dynamic in accordance with a (more retreat and less repelling) in general under a doubled, *phasal* military failure of the entire battleground.

As a result of all dynamics interaction, the first outcome within this applying modeling becomes (Actor II's Gradual-Movement Upward Towards a De Facto Victory) while the second is ("Actor II's Irresistibility" Future Total Output) in a probability (p) equal to (1), ($p = 1$), provided that all surrounding war factors remain unchanged meaning that no counter-modeling by Actor I must follow *theoretically* to allow these outcomes' sustainability. Nevertheless, *practically*, Actor I's counter-game/modeling must manifest, necessarily based on a correct perception state realized and confirmed by the opponent, Actor II, and certainty circumstances, to intercept in an actual (not deceiving) proof Actor II's perceived war victory of its played hypergame, under this given stage of the war.

3.3.3.3. Initial Conclusion: Inferred Configurations on War

In conclusion, the "length validity of modeling" factor is determined based on the "invariability of the war surrounding factors" factor. Here, if the consistency of Actor II's War Hexagon dynamics leads to the sustainability of the modeling outcomes, the same is valid regarding Actor I's future counter-modeling dynamics and outcomes. That is,

should the war factors change coinciding with Actor II opting for counter-modeling after Actor I's counter-modeling (mentioned below) of Actor II's War Hexagon in the above-illustrated modeling, then the war outcomes alter likewise.

Statically, it is a direct relationship between a. Surrounding-War Factors (WFs), b. Player (x)'s War-Hexagon Dynamics $\{(HDs)_x\}$, confronting Player (y), and c. War Outcomes I and II, $(O_1 + O_2)$, for players (x and y). This relationship can be denoted as:

$$\{(WFs) + (HDs)_x = (O_1 + O_2)_{(x,y)}\}$$

Based on that, the (change in the surrounding war factors in relation to an actor's War Hexagon dynamics) is the *independent variable* that causes the (change in this War Hexagon's relevant war outcomes) as a *dependent variable*, which results in the "initiation of another stage of the war" as the *dependent variable's dependent variable* after the first dependent variable converted to be an independent one.

Symmetrically, the generated, *new war stage's* outcomes last if, and only if, the surrounding war factors and the sequentially re-playing actor's War Hexagon dynamics remain static, which confirms the invariability of these war factors and War Hexagon dynamics for this actor (i.e., Player (y), P_y). So, theoretically, if we refer to the (Invariability Factors) by (vf) while assuming that this (vf) doubles a positively resulted (Outcome "O") in (Utility "U") for (P_y), then the new war stage initiated by this counter-Player (y) is denoted as:

$$\{(vf) ((WFs) + (HDs)_y) = (vf) ((O_1 + O_2)_{(x,y)} + (O_y)^{+2U})\}$$

3.3.3.4. Reversing the Enemy's War Balance and Changing Existing War Factors via Other Unchangeable, but Adjustable, Future War Factors: Actor I's War (Hyper)Game Counter-Modeling

According to the above initial conclusion, we seek in this part to maintain the (Invariability Factors) within a counter-modeling for Actor I, considering that the last is (P_y). In other words, we assumed a "4 Qs of What If Not" method for Actor I-War Hexagon's first four dynamics. Within this method, if the opponent, Actor II, attempts to reverse any perception-based dynamic of those provided in the following counter-modeling, it will be puzzled and navigated to where the war course must be, whether or not it reveals the information of Actor I's war game here.

In the next War Hexagon, Actor I can secure its future victory based on a perception and certainty initial-game to beat the enemy and beat it fiercely, although it will not be the last stage of the war. Strikingly, through irreversible rational actions and strategies preferred by Actor I under this counter-modeling, no complete change will be occurring concerning this player's war dynamics in the future, but only what we consider a "*strategy limited-deviation zone*" according to another "strategy navigation" method developed. Namely, there will be an alternation in the war trajectory after Actor II's moving to counter-modeling the provided-below counter-modeling of Actor I; however, that player's caused alternation will be limited or/and contained in level, scale, and impact where all whatever possibilities are predicted and prepared for within Actor I's sequentially applied-War Hexagon given. In addition, any deviation this time must serve the global cause under a future adjusted re-counter-modeling (not from the beginning built) set by Actor I.

In short, there was a research necessity of the developed "'Non-Chance Space' Reduced War-Hexagon" for Actor I when the last be allowed to prove that no sequential moves of Actor II shall sacrifice the international security and any consequent counter-modeling will be by all means predicated and expected regardless of exposing Actor I's war game or not. The following modeling is reduced; however, it is guaranteed theoretically and applicably to bring the war balance in favor of Actor I's war outcomes and to achieve its future decisive victory of this war in the middle or long term through another adjusted, widened modeling that must be pursued after Actor II's opting for countering this counter-modeling. Since each future move, in that case, is considered within the below War Hexagon, the future will be the empirical proof of this study's theoretically-assumed victory for the civilians' interest under Actor I's umbrella and against Actor II's unmatched aggression.

Accordingly, in this part, we introduce the *strategic explanation*, through a perception-based-war game of Actor I from the lens of the ('Non-Chance Space' Reduced War-Hexagon) application, see Figure 19, as follows.

3.3.3.4.1. Applying the Military Dynamic of the ("Non-Chance Space" Reduced War-Hexagon)

Based on Actor I's observed weakness points illustrated in the comparative strategic analysis provided above, it can be said that the following military possibilities express the most rational strategy choices in a sequential play after Actor II's played hypergame (HG_{2.2}) that is explained in the applied-War Hexagon of this actor.

-(The War's Air Zone Seizure) strategy. It occurs through the concentration of air strikes by Actor I against the enemy's artillery offensive Lines. If Actor II already vanishes 10 Ukrainian soldiers for each Russian soldier targeted, this action now will equal the casualties of both sides, in an interaction with the second and third strategy below of this military element of Actor I. Assuming that it is credible that Ukraine lost 20 thousand soldiers during the war and up to early June 2022, besides the lives of targeted civilians. Thence, if Actor I could move to prove a continuous "*war manpower-casualty equalization tactic*" to be the case for the two-opposing fighting parties and a major strategic objective along with this war, Russia's President Vladimir Putin would bleed nationally, in accordance with the other elements of reversing Actor II's perceived war victory.

-(Symmetrically Retaliatory Threats and the Credibility and Capability of Deterrence of the Enemy from War by a Re-directed Inflicting War) strategy. It is translated into hitting chemical plants by Actor I in Ukraine wherever the enemy troops exist. After asking "What If Not;" namely, what if Actor II realizes or is aware of this strategy choice and works on avoiding it? The answer is that the other track is the creation of chemical targets to penetrate the enemy-invasion lines via exploding chemicals' transporting vans. That is because any war strategist must ask firstly (why and how to avoid?). On (why Actor II chooses to hit chemical plants?): it is to achieve unquestionable war victory. On (how to avoid that?), it is through credible and capable deterrence means. Should Actor II escape the credible, justifiable, symmetrical retaliation of Actor I in battle zones by opting for targeting chemical plants instead of dropping chemical missiles, then, the only high-utility rational course of action to a. deter Actor II from moving again to this choice or any similar one in a scale or level; and b. make Actor II see how credible, capable, and continuous in a response-of-kind the retaliatory threat is of Actor I's retaliation; is via what is mentioned in the first lines. It is through either hitting chemical plants where the invasion troops exist; or, more assuredly, exploding in-battle-positioned, penetrating (chemicals' transporting vans) symmetrically among the invasion troops, in retaliatory

moves by Actor I according to the exact level and scale of those moves of the same type picked first by Actor II against Ukrainians.

-A (Deter and Hide) strategy. The first and second strategies can never achieve their highest expected utility in interaction with any strategy choice might be picked sequentially by Actor II, where Actor I-War Hexagon's Military Dynamic success' probability be ($p = 1$), unless Actor I moves to these strategy choices under a "Deter and Hide" strategy: *First*: A declaration publicly of opening the military recruitment gate for people from Europe to fight beside the Ukrainian brothers. This move's success depends on these factors: non-officiality, thus avoiding the escalation of the war in scale and level; the credibility and capability; the efficiency and effectiveness. Why did we call it the "Deter and Hide" strategy? It is because Actor I is going to further deter Actor II, under this perspective, while being hidden from the scene.

Interestingly, one might ask another, "What If Not." The answer indeed is undeniable; let Actor II know about Actor I's war game and retaliate by recalling unmatched military mobilization. It is already prepared for this; it will be Actor II who moves its troops to their grave in Ukraine, whereas the war will never be major, and this aggressor's disguised allies will escape from around it after applying this modeling dynamics as a whole. With no war spoilers appearing on the horizon, these disguised allies will be better off by not supporting Actor II since they will be worse off by jeopardizing their political and economic interests with a would-be victor Actor I if a countenance to Actor II takes place unconditionally, with the victory of the last seeming in practical terms unreachable through this modeling dynamics' interactions and the future extended counter-modeling too. It is an equation of: (*attrition for unreachable victory and diplomacy for relief*) that Actor I is going to impose as a strategy case of the day.

Second: The achieved military recruitment strategic choice and objective, which can be fulfilled by relying on mercenaries, leads to the second dual one. In the second strategic choice and objective's first side, Actor I must deliver the accurate and undoubtedly message to Actor II that it is well-aware that Ukraine is the European fortress that Actor II attempts to break for penetrating all of Europe, while the whole continent will never give up upon it.

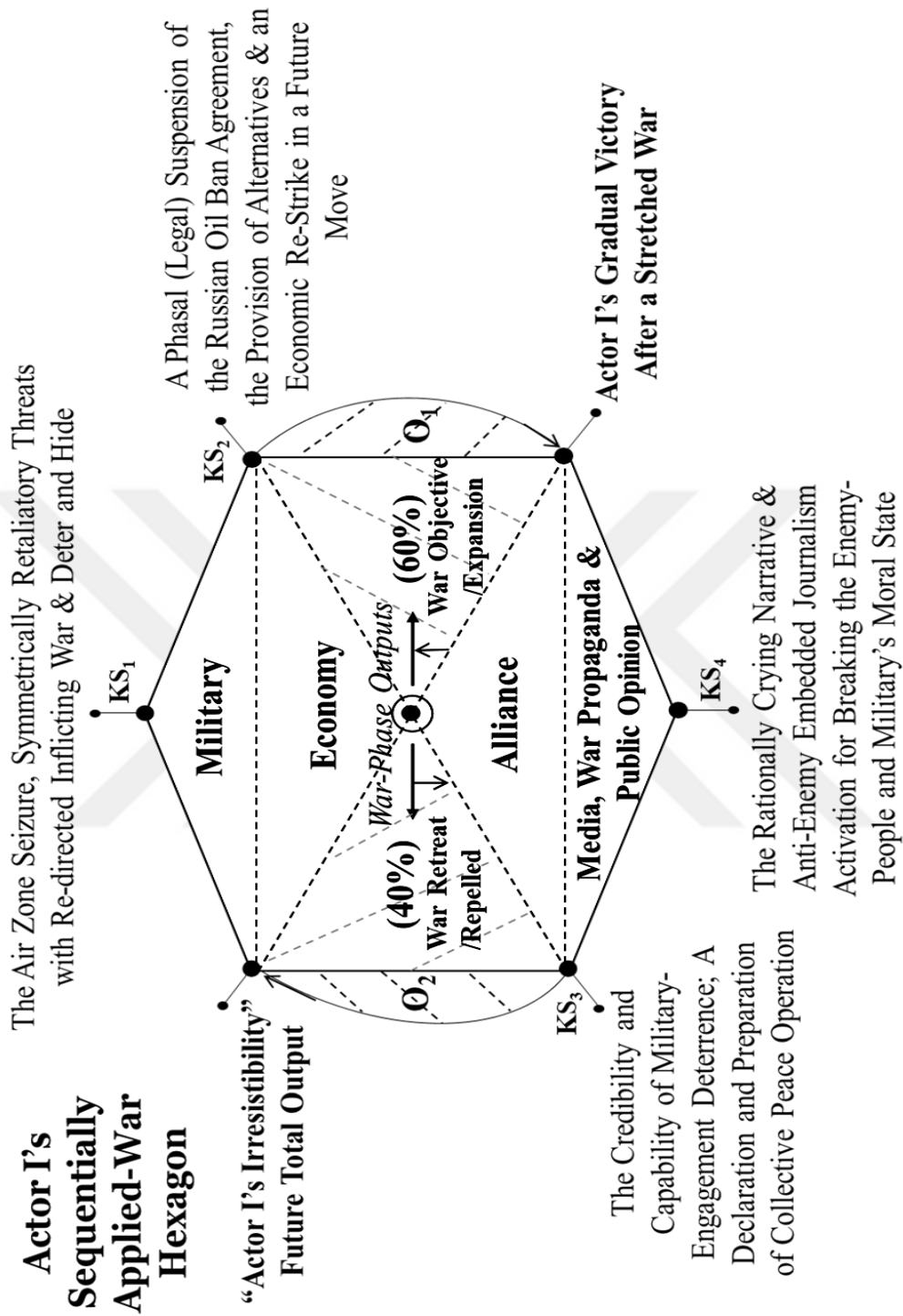


Figure 19: Applying the ('Non-Chance Space' Reduced War-Hexagon) to Actor I's Would-Be Sequentially Played-War Game in a Counter-Modeling

Source: Prepared by the author.

The same strategic choice and objective's other side is represented in modifying the war tactics on the ground through implementing an (encirclement of the enemy in Ukraine's all sides via *centralized-fighting groups*) tactic.

It is fair to suggest that Actor II made Actor I think that the latter's decisive military advance occurs through a **deceiving advantage** of (*civilian towns combat*). In contrast, the last was Actor II's mere advantage that enabled it to advance deeper in Ukraine in a comparison between its military advance positions in early April and early June 2022. In other words, with every defeat Ukraine's army faces, thousands of civilians become either *displaced* or *forced* to accept the Russian military rule in those territories where Actor II could defeat the Ukrainian army. So, Actor II would do anything to force Actor I to concentrate on artillery combat, where it was, and it is, its trump and triumph card all this time of war. Besides, leaving some space for incorrectly-perceived limited victory by the Ukrainian army when simultaneously: a. not re-deploying more forces, and b. making Russia's enemy perceives Actor II's intentionally made military-recruitment stalemate or the (only) original invasion troops' loss of a third of its soldiers and weaponry, which was the perfect *military and public stratagem* to guarantee and secure Russia's prize of seizing all the Ukrainian lands gradually, relying more on the strategic weakness of its opponent, Actor I.

Inclusively, the dominant strategies, within this modeling, for Actor I, through which it is constantly better off regardless of what the other player chooses, are: the symmetrical retaliatory threats implementation; directing the war combat on the ground through the air combat and strikes against enemy's artillery and air power simultaneously; the capable and credible military re-recruitment; the avoidance of town combat while taking the enemy to battles in the vast, non/less-inhabitant, forts-secured, agricultural/non-civilian areas, through *centralized, outnumbering, outgunning, air-zone-protected battleground-fronts* in every inch at Ukraine's possible and probable fighting lines. The last necessitates that Actor I achieves a sound military advance first to acquire the ability to manage the battle zone location second. Namely, it is the predominated side on the battlefield that can force a retreat of the enemy to at least previously and largely displaced Ukrainian civilian towns and cities without allowing the enemy's further advance.

The total outcome of the Military Dynamic now is: Russian invasion forces hunted on the basis of (one for one) instead of (one for ten); or that, the achievement of “war manpower-causality equalization” tactical objective. After all, the next three dynamics within Actor I’s applied War-Hexagon are provided directly to enhance the success of this hexagon’s predicted total Outcomes I and II; because in the wartime, each dynamic’s strategy effect not only preserves and increases the other dynamics’ strategy impact but also operates as a catalyst for achieving the outputs in an actor’s War Hexagon as well as the anticipated outcomes as a whole.

3.3.3.4.2. The (‘Non-Chance Space’ Reduced War-Hexagon) Application to Actor I’s War Game: The Economy Dynamic

Based on both the comparative strategic analysis and the hypergames initiated sequentially by Actor I and then Actor II (as explained above), it is apparent that the most optimal and rational strategy choices on the Economy Dynamic within Actor I’s applied War-Hexagon are reflected in using these strategies in counter-interaction of the actual manifestation of Actor II’s war-relevant economy strategies: a. A (Phasal (Legal) Suspension of the Application and Implementation of the EU’s Russian Oil Ban Agreement with the Continuous Provision of Oil (and Grain) Resources Alternatives and Preventing the Russian Gas Embargo Possibility) strategy.

In this manner, there is a need to ask once more; why and how to avoid it? Illustrating why the same rational action picked by Actor I might become the ultimate benefit for Actor II, it can be said that it is because the latter received the information that enabled it to rally against its enemy for the pursuit of destroying this enemy lands’ political and social security by the economic penetration gap. Thence, how to avoid that? This question takes us to why the EU moved first to this move; was that to weaken the opponent, Actor II, or to give it the weapon to eliminate Actor I? Here, the most optimal strategy move becomes the suspension that facilitates the *strategic maneuvering* in future for targeting the opponent by the same arrow in a weakness point, not in a de facto manufactured, current strength-position. At the same time, any probable annulation of the oil ban agreement before the war ending would *negatively affect* Actor I’s war utility and the future positive outcome conjectured rationally in this modeling, besides helping bring the victory to its enemy gradually via empowering this enemy economically and politically

while weakening itself on the opposite direction. Based on that, the second economy strategy for Actor I is to achieve the expected highest utility of the first.

b. The (Economic Re-Strike on Actor II in a Future Move Coinciding with a Pivotal and War Course-Transitional Stalemate's Occurrence Versus this Enemy in the Battles) strategy. In terms of seeking the desired utility of war actions and moves by one opponent versus the other, and considering this Actor I's War Hexagon and another future one after Actor II resorts to the escalation to cultivate the ultimate fear in its enemy's hearts, the proper timing of striking by unmatched, crippling economic sanctions must be carried on under these conditions: i. when Russia already loses its invasion forces' manpower and weaponry on an equal base with its enemy of (one for one); ii. after Actor I proves actual military superiority in the battlefield; iii. when the Russian society realizes by evidence how irrational and unbearably costly the war in Ukraine decision is, particularly in respect to actual, inflicting war-causalities; and therefore, iv. after Russia's disguised allies witness a generated Russian-gradual defeat, be sure that there will be no war spoils for them but a war catastrophe to all those who support the aggressor, and be forced to escape their (hidden) alliance with Russia's Vladimir Putin. This application of Actor I's War Hexagon is going to achieve the previous strategic conditions for correctly striking economically against Actor II at the right time and the right course of action, in accordance with another future War Hexagon that will be needed and necessitated as an adjustment and widened one for Actor I in a re-counter-modeling mission for confronting Actor II's sequential counter-modeling to this current one.

Strategically, it can be suggested that Russia perceived in its (HG_{2.2}) a ***creation of politico-economic turmoil cycle*** as follows: a. Encouraging Europe to impose the oil and gas ban on Russia with the war continuity and gradual Russian victory; which leads to b. doubled prices in oil and gas in Europe and the whole world; with e. increasing that all when capturing the oil positions and crucial agricultural areas in Ukraine entirely, once the military superiority brings about a Russian victory. c. With no amendments made to the economic status deterioration in terms of the invasion success and the global oil and grain resources' balance breach, that all take the European continent's industrial economies into gradual setbacks; which d. influence in crippling the global economic growth movement on a long-term and causing a recession coinciding with a global food crisis Russia constantly creates and maximizes; with e. leaving an intact example of

Hungary to lead a *quite uprising* in Europe by wealthy peoples that will be no longer wealthy against governments committed such a mistake or caused this perceived disorder while witnessing Russia's already complete invasion of Ukraine and declaring an alliance with Belarus and Hungary and other possible allies in NATO. f. At the last rotation of this cycle, and in a prior stage of preparing for initiating a new developed-cycle by Actor II versus Actor I, all that would worsen the EU economy more till the bottom as long as political inputs will determine economic outcomes after utilizing the economic inputs in shaping the political outputs first, so that a would-be successful political revisionism made possibly by Russia geopolitically in Europe will bring the EU economies thoroughly upside down, from that perspective.

From a critical view, there was always a significant difference between moving to preventive and preemptive strategies by securing alternatives of Russia's (and Ukraine's) oil and grain as to destabilize future, possible Russian strategic actions if Russia tried to impose an oil and food embargo, and between taking the strategic move that would change the war outcome for Russia's interest. Such a mistaken strategic move addresses the strategy of imposing the Russian oil embargo by the EU at a time when Russia does still seize the military superiority and advancing in the battleground, as if the EU wanted to grant Russia the time it needed to prepare its backups and alternative plans to be able to accomplish the invasion, in which it is actually moving forward, soundly. Clearly, the *wrong timing* of making rational strategic actions comes out of the miscalculated conclusion and leads to the *wrong outcome*. Further, there is another significant difference between moving to a preventive and preemptive strategy by finding the alternatives to Russia's oil, gas, and grain, and between moving in a rush to easily imposing an oil ban agreement, thus, losing the momentum of allowing Russia to ban its oil, gas, and grain itself first during the wartime forcibly in confronting and threatening Actor I's military superiority. It was the exact Russian strategic move that would motivate and incentivize the whole European leaders and people on the one hand and the entire world on the other, to repel Russia in a multinational, justified, peace-enforcement military operation in Ukraine after proving to them that the Russian aggression is a de facto globalized. It would be a minimized war in scale and a globalized one in impact, therefore. Shortly, the same war stratagem is like a knife that can be used for oneself benefit or for this one's enemy-absolute self-interest.

Lastly, it is Russia that sought to absorb one worst possibility at its triumph moment as to not only could survive a possibly worst wartime, but to counter-strike against Actor I when this actor will possibly be suffering unexpectedly and when the European continent becomes a subject for Russia, accepting all concessions in exchange for undoing the instability, insecurity, and unbalance that Actor II might create inside these territories. Assuming that the *war strategy* is: the strategy that expresses and simulates the interactions occurring in, and predicted for, the (near) future, not the present time, and it is *not* a knowledge of “let’s do” but a knowledge of what an opponent will do against the enemy when the rational choice must be made for a future that is certain with no strategic mistakes and uncertain with the human flaws. Thence, this study-introduced strategic trajectory of the Economic Dynamic under Actor I’s War Hexagon mirrors the best strategy choices with the most optimal utility ever to be obtained in the future, in interaction with a. all other dynamics explained within this hexagon and b. all those future dynamics adjusted and widened for countering Actor II’s counter-modeling that will take place next.

3.3.3.4.3. Third: The Alliance Dynamic

Under this dynamic, it is the timing of the “Credibility and Capability of a Military-Engagement Deterrence” strategy to begin to manifest. Based on theoretical assumptions of the previous Output Dynamics and Outcomes I and II in the War Hexagon of Actor II, it is valid to predict that the current counter-modeling of Actor I cannot be successfully a deterring one unless a military power greatly proves to be this actor’s dominant case. Specifically, Actor I’s most optimal alliance strategy, in this war phase and for future war victory, is: (Declaring Publicly the Preparation of Collective Peace-Enforcement Operation for Saving Ukraine). It is what we call (The Initiation of a Still-Delayed, but Demonstrating, Running-Risks’ NATO-Collective Security Military Operation in Ukraine) strategy. This strategy can be explained through the following seven inquiries:

Firstly, what is the most accurate strategic exit to deter the enemy’s, Actor II, disguised allies? It is through enforcing these allies to be part of military preparations against their ally, Russia, for whose interest they operate on destabilizing the European continent security, implicitly, in the long-term.

Secondly, will it be successful? If the enemy is being deterred from the war/invasion decision and agrees on the diplomacy outcome after that (initial) strategy is being used, then this strategic course actually predominates as the exit. However, the probability of deterring Russia via such public declaration and actual launching of collective military preparations by Actor I against the Russian invasion forces in Ukraine is: ($0 < p < 0.5$). That is given that a. Russia was already expecting, and therefore, prepared for this strategic move first, and b. it might not believe that such a threat is credible second, since Actor I continuously declares its fears of a major war in Europe and Actor II will more likely perceive that this move reflects the opposite intentions of its enemy in this case.

Thirdly, suppose that a disguised enemy of the EU and NATO could succeed in representing itself as an ally and participating in their military operations against the invasion forces in Ukraine, whereas it still collaborates with Russia and encourages it to initiate a large-scale war in Europe under the (credible/incredible) promises of being a loyal ally to Russia in this situation? In this context, Actor I has to move first to its preventive and preemptive strategy of a “Deterrence of the Enemy’s Disguised Ally or the NATO Alliance’s Covert Enemy-Ally Politically and Economically.” Without impeding the motivation, incentives, and alliance of the spoilers of the war-termination process, who operate as an intermediate variable here, no war victory for Actor I or near war-end shall manifest. Apparently, the aggressor who initiated this invasion resembles a snake with three or more interlinked heads, while this aggressor’s head is only the primary one that is stabilized by the same stabilization of the other heads, so it cannot be cut this key head and stop the poison spread unless the supplementary heads are being cut first.

Fourthly, assuming that the EU and NATO could succeed in running the Ukraine War, as explained in the above Military Dynamic, and they could also deter Putin’s disguised allies politically and economically further, then what would be the best strategy choice for Russia after witnessing and admitting a. unbearable war casualties, b. imposed isolation and c. significant, enforced initial retreat of its troops on the battlefield, while its public masses _ influenced more by the impact of Actor I’s Media and Public-Dynamic _ are rising against the government decision of war? The answer is that Russia becomes better off by moving to the diplomacy exit of the war, given that ($0.5 < p \leq 1$).

Fifthly, is it a conclusion? After a. maintaining a superior military victory for the Ukrainian army while a “*war of attrition against Russia in Ukraine*” strategic objective is achieved; b. isolating Russia from resorting or relying on any possible defensive or offensive alliance, at least in the realm of Europe and NATO member-states; c. preserving the European continent’s societal stability, political and economic security, and territorial integrity, with the Russian oil ban suspension, and using Russia’s people in confronting the leadership’s reasoning of war, Russia becomes as mentioned better off by accepting the diplomatic exit possibility in agreement with the other party.

Nevertheless, if the last case is hindered by one or more of these factors: a. a still manifesting peace spoilers’ impact from fanatic groups inside or escalation-actors outside; b. the diplomatic outcome’s dissatisfaction; c. the Russian leadership-arrogance and rational miscalculations on a war alternative outcome, where ($0 \leq p < 0.5$), the running-risks military operation by NATO must be carried on, provided that the enemy is already “*diminishing*” in *power, control, and domination* in the battle of Ukraine. However, such an action will not be made directly in this stage of the war; namely, Actor II must counter-model first, meet with possibly some remaining (disguised) allies using them to strike the EU/NATO, and try to escalate. Sequentially, the proper timing for the proper strategic actions militarily and economically will generate Actor I’s war victory and the highest utility ever, conditioning that a. no strategic mistakes are being made by Actor I, b. the stronghold of NATO and the EU on their allies is guaranteed, and c. no deception made by Russia and its probable disguised-allies in NATO or the EU remains un-revealed or non-counterred.

Sixthly, why Russia was/is still assured about its war victory by this time of early June 2022 (if Russia was not sure about such a victory, it would prefer a fair diplomatic exit for ending the war peacefully or would not move deeper in the military advance of Ukraine’s invasion)? It is more than obvious that Russia was quite sure that NATO and the EU would not take the risk of conducting a collective military operation for Ukraine, but only after months of the war when their people and the world become convinced of the necessity of such a move.

So, as long as the enemy could sleep soundly, making sure that its opponent cannot dare even to discuss the external military intervention possibility (under the pretext of a

possible great war initiation, manufactured by Russia and well-exploited by it), this enemy, Russia, could use what it perceived as Actor I's weakness point to be its strength one for a. proceeding in its invasion-military operation in Ukraine; b. assuring its allies about guaranteed victory in the long/middle-term, which is already witnessed gradually, and therefore, luring them by the prize of sharing the war spoils; c. widening the range of its (i.e., Actor II's) key strategic objective of the war, from conquering one country to conquering many countries.

Seventhly, will it be a semi-appeasement or actual counter-modeling? It can be said that the course of action followed by NATO and EU in repelling Actor II while the last approaches its war victory in near future according to Actor II's previously explained War-Hexagon (if Actor I's given counter-modeling does not be in play consequently), is what we consider a policy of "Semi-Appeasement of Russia with a Preference of Diplomacy Deterrence During the Wartime to Deterrence via War." In comparison, this Military Dynamic suggests that at the proper timing of observing the war successes and failures factors, when Actor II's victory proves to be gradually achieved at the expense of Actor I's continuous territorial losses, what was perceived to be Actor I's weakness point of *not running risks or credible military threats*, must be converted to be its strength-point. So, reversely, what became the opponent, Russia, ultimate strength point must be shifted to be this enemy's ultimate weakness point.

In the same context, Russia, and particularly the Russian society, must witness in reality around them these two facts: a. The war length will stretch till an unspecified end that Russia's enemy manages against it (not by Russia against its enemy as Actor II performs this currently), while the initiator suffers the severe consequences under the suggested war of attrition against Russia in Ukraine. b. The Russian government's war decision was irrational, unbearable, and a strategic mistake. Inarguably, the concluding inquiry of this dynamic becomes: what if Russia resorts to its first war strategy of depending more on mercenaries in fighting its war in Ukraine, to avoid the war of attrition initiated against it, not to rely majorly on the Russian army corps versus the Ukrainian army as observed in the current war-phase? Yet, it is what this applied War Hexagon's next-dynamic, the *Media, War Propaganda and Public Opinion*, tackles below in order to destabilize such a strategy effect.

3.3.3.4.4. Fourth: The Media, War Propaganda, and Public Opinion Dynamic

Given the previous war (hyper)games patterns provided in this analysis' branches, Actor I is better off by moving to two strategies to retrieve the global publics' countenance and sympathy with either the Ukrainian cause or its declaration of collective military operation in Ukraine, while any counter-media strategy used by Actor II sequentially must be in vain. These strategies are: a. (The Dependence on a Rationally Crying Narrative on the Ukraine War) strategy. Noticeably, the excitement in media news coverage is always associated with three main news principles: novelty, strangeness, and emotionality. If the strategic aim here is to get to the hearts and minds of public masses worldwide to gain and maintain their continuous support for the framed issue, then this frame must prove its weekly renewal, efficiency, and effectiveness in influencing the public attitudes in favor of founding and preserving the *belief, sympathy, and support* of the Ukrainian issue and its defenders' war goals. That mechanism is assumed to also operate on repelling the habit regularity tactic manufactured by Actor II previously for creating a public, accepted status quo on Russia's war position. b. (The Dependence on an Anti-Enemy Embedded Journalism²²⁵ for Breaking the Enemy's Moral State on the People and Military Levels) strategy. The reality points out that Russia succeeded in cultivating the fear among Ukrainians, Europe, and the whole world's unconscious minds by allowing the circulation of Ukraine's war-death narratives *regularly* on civilians and military attacks alike, with this broadcast framing and documenting this weak side's demoralizing, multiple losses in its dominant part.

Contextually, a *live* or *recorded* broadcast on the Russian manpower and weaponry losses in the actual combat in Ukraine should be the case to operate on: i. Fiercely demoralizing both the Russian invasion forces and society psychologically, and by evidence preventing them from believing or perceiving a war victory in Ukraine. ii. Destabilizing and failing any Russian positive narrative on its war in Ukraine or successes and achievements on the battlefield. iii. A counter-narrative process that works on raising the Ukrainian army and people's moral state by focusing, by evidence, on all successes and military

²²⁵ Embedded journalism was that branch of news coverage that came to be more prominent during the Invasion of Iraq in 2003 when the war journalists, reporters, and photographers were hiding in barrels or behind walls while being permitted to attach a military unit and record the war events from the (mini) spots embedded where they cover the conflict in the actual combat field.

superiority that took place or take place or will take place for their interest, with showing in comparison the Russian troops' (severe) suffering in Ukraine. If Russia attempts to maintain its military and people discipline by hiding any (live) war coverage on a truth of harsh military sufferance or humiliation that its troops faced or faces in the battles while highlighting that of its enemy to rule and rise, and rise and rule; then, it is the timing of active embedded journalism and media tactics to alter the war relevant-public manipulation equation in favor of Actor I's self-interests.

3.3.3.4.5. The Fifth and Sixth Dynamics: The War Outputs in the Given War-Stage

According to the above-illustrated dynamics, the (War Objectives/Territorial Expansion) first Output Dynamic reflects a (Favorable-Movement Upward) for Actor I in (60%), which counts for a (Rejected-Movement Upward) for Actor II in (40%). Noticeably, Actor I doubled here its first-Output Dynamic's percent accumulated in the precedent, Actor II's War Hexagon (it represented 30%). On the other hand, the same calculations reflect that in the (War Retreat/War Repelled) second Output Dynamic, Actor I achieves a (Favorable-Movement Downward) in the remaining (40%) of its war total outputs, with a less retreat and more repelling, reducing its previous second-Output Dynamic's percentage to almost the half (it accounted for 70%). Simultaneously, Actor II is being pushed to a (Rejected-Movement Downward) regarding the (War Retreat/War Repelled) Output Dynamic, in the remaining (60%), with a more retreat and less repelling, where its enemy (military, political, social, economic, media and war relevant-public manipulation) superiority imposes its dominance.

Based on that, there are two total outcomes result a. (Actor I's Gradual Victory After a Stretched War), and b. ("Actor I's Irresistibility" Future Total Output), where each outcome's probability is ($p = 1$), conditioning that all surrounding war factors remain static, meaning that no counter-modeling by Actor II must *theoretically* come in sequence in order to allow these outcomes' sustainability.

Nevertheless, this modeling operates on activating all war factors that are, in fact, unchangeable while being adjustable and available to be widened, whether or not Actor II moves to its counter-modeling. Thence, those two outcomes are achieved under these three possibilities:

The first: The possibility of *maintaining* the (Invariability Factors “vf”) exactly as they are in this war stage, with Actor I, who is Player (y), counter-modeling the previous applied-War Hexagon of Actor II’s war hypergame. Basically, the probability of this possibility is ($0 < p < 0.5$), where Actor I’s positively-resulting outcome (O) is doubled in utility (U) according to this above-provided equation:

$$\{(\text{vf}) ((\text{WFs}) + (\text{HDs})_y) = (\text{vf}) ((\text{O}_1 + \text{O}_2)_{(x,y)} + (\text{O}_y)^{+2U})\}$$

The second: The possibility of *adjusting to reducing* the (Invariability Factors) by Actor II’s counter-modeling in the next war stage, where ($0.5 < p \leq 1$), given a condition of $\{(50\%) \text{ unchangeable-stability}\}$ kept at first, concerning the war factors within Actor I’s War Hexagon. Then, Actor I’s positively-resulting outcome is being decreased in the doubled utility into half till its re-counter-modeling takes place sequentially. It is denoted by:

$$\{(\text{vf})^{1/2} ((\text{WFs}) + (\text{HDs})_y) = (\text{vf})^{1/2} ((\text{O}_1 + \text{O}_2)_{(x,y)} + 1/2 (\text{O}_y)^{+2U})\}$$

The third: The possibility of *adjusting to widening* the (Invariability Factors) into a double by Actor I’s re-counter-modeling in the next war stage of the next war stage, where ($0.5 < p \leq 1$). It is the phase of Actor I’s decisive and final victory militarily and diplomatically that ends the war, where this player obtains a multiplied positively-resulting outcome in the doubled utility, as follows:

$$\{(\text{vf})^2 ((\text{WFs}) + (\text{HDs})_y) = (\text{vf})^2 ((\text{O}_1 + \text{O}_2)_{(x,y)} + 2 (\text{O}_y)^{+2U})\}$$

CHAPTER FOUR: STRATEGIZING STATE-BEHAVIOR IN MULTI-LEVEL CONFLICT MANAGEMENT STRATEGIC APPROACH; MANAGING THE CLASH OF CIVILIZATIONS, AND INTRA-AND INTER-STATE CONFLICTS

4.1. The Representation of the Other in the Western Media: How Was Egypt Represented in BBC English After July Military Overthrow 2013 and Sisi's Presidency in May 2014?

4.1.1. Introduction and Historical Context

This analysis aims at revealing Egypt's image in the Western media after the military overthrow of Morsi's regime on July 3, 2013, that followed Egyptian mass protests on June 30, 2013, against former President Mohamed Morsi; also, after the former Minister of Defense Sisi's seizing of the legitimate power in May 2014. More specifically, it depends on framing analysis of the news coverage on the Egyptian issues in the British Broadcasting Corporation (BBC) English during the months that succeeded the June mass protests and President Abdel Fattah El-Sisi coming to office in the aftermath of the May polarized elections. Since this work is based on a framing analysis of Egypt's representation in the BBC, the content analysis method and the qualitative and quantitative approaches have been used by preparing a coding instrument for extracting the used frames in the total coverage, considering these frames' reiterative ratios in a non-randomly chosen sample of 50 news articles covering the studied topic on the BBC.

By 2011, it can be said that Egyptian people were to be close to altering the stereotypes scattered in the North's societies about one of the major South countries like Egypt as being developing, primitive, emotional, natural, or/and barbaric. However, the successive events in political settings changed all politics-game rules in Egyptian society. Again, the Egyptian people, instead of paving their way as modern, rational, cultivated, and civilized entirely among the rest of the developed world stimulated by the January 25 revolution in 2011, which established the fundamental principles of freedom and social justice within the societal body, returned to the starting point by the military overthrow of Morsi's regime on July 3, 2013. The last was supposed to keep the just transition of

power, transforming the political authority into the civil society leadership through proceeding steps, which almost never happened.

Indeed, the attempts to bring about a change in contemporary dictatorships' political structures and move forward into democracy in the Arab world began first in late 2010 in Tunisia and spread from the latter for overthrowing existing regimes across other countries in the Middle East such as Egypt, Syria, Libya, and Yemen, generating a civil war in the last three cases, under what was so-called Arab Spring Revolutions.²²⁶ For Egypt, the demonstrations have succeeded in overthrowing the regime of Hosni Mubarak, who was in power for nearly 30 years, through a popular revolution that lasted from January 25 to February 11, 2011. Meanwhile, at a time when social networking sites played an immediate role in the Egyptian uprising, satellite TV channels such as Al-Jazeera also played a crucial role in this uprising, preparing the Arab and the Egyptian masses during the previous 15 years²²⁷ for facing the dictator and authoritarian governance in the region. This preparedness impact, plus the up-to-date escalation-news coverage's effect, has been embodied in an all-out revolt against authoritarianism in the 2010s for the first time in the post-colonialism era.

In Egypt, paradoxically, it was the outbreak of June 30 protesting events in 2013 and deposing Mr. Mohamed Morsi – the first democratically elected president under individually-free will since the liberation of Egypt from the foreign royal rule in 1952 – through the military overthrow carried out by General Abdelfattah El-Sisi on July 3, 2013, that caused the rolling back to an anti-democracy course, coinciding with the eruption of an active political conflict (explained later). Such a conflict basically occurred between the Muslim Brotherhood organization, whose member Mr. Morsi was in office from June 30, 2012, till being ousted by the military on July 3, 2013, and the Egyptian military institution represented by the former Minister of Defense, President El-Sisi.

For examining how Egypt's image was portrayed in the Western media by the outbreak of the June 30 mass protests, therefore, this study takes into consideration that: the news

²²⁶ See, Michael D. Bruce, "Framing Arab Spring Conflict: A Visual Analysis of Coverage on Five Transnational Arab News Channels," *Journal of Middle East Media* 10 (Fall 2014): 1-26; and, Merlyna Lim, "Framing Bouazizi: 'White Lies', Hybrid Network, and Collective/Connective Action in the 2010–11 Tunisian Uprising," *Journalism* 14, no. 7 (2013): 921–941.

²²⁷ Khalil Rinnawi, "Cyber Uprising: Al-Jazeera TV Channel and the Egyptian Uprising," *Language and Intercultural Communication* 12, no. 2 (2012): 118-132.

media is a main source of information for national populations across the world;²²⁸ and that the BBC English news network addresses global audiences. Thence, the main focus is on analyzing the discourse on Egypt in the *BBC English news site* as one of the significant Western platforms conveying the Western perceptions of the “Other” (the non-Western; Egypt in our case) to the global masses through its divergent news coverage.

In this respect, this piece of work answers the following: a. How were the coverage tones on the Egyptian political issues in the BBC differing between the period followed June 30 protesting events and that after Sisi has seized power by May 2014? b. How has Egypt been represented by the BBC, generally and in relation to an Orientalism perspective, during the same study period? Once this research’s findings are introduced, the next section comes sequentially to apply game theory to media discourse and politics for the purpose of managing the so-called clash of civilizations, either the violent or non-violent one, in terms of that the global, regional, and national media and political discourse representations of the Other (i.e., non-Western cultures and peoples globally, and the major minority culture(s) and people(s) regionally and nationally) are being re-constructed theoretically as well as in practice as suggested.

4.1.2. On Relevant Framing Analysis’ Previous Research Results

News frames are being implied in wars’ narratives saliently. For instance, a study of the US mainstream media reveals that the visual framing of the US-led invasion of Iraq shifted from conflict to human interest, proving that during the campaign’s first five weeks, five distinct scenarios—shock and awe, conquering troops, hero, victory, and control—often coalesced around iconic images and supported a *master war narrative*.²²⁹ Nevertheless, in a “*Framing Analysis of Online News Sites in Coalition Countries and the Arab World during the Iraq War*,” the Arab media were clearly more critical of the war than the two Coalition analyzed newspapers, particularly for the Al Jazeera website,

²²⁸ Emma Heywood, “Comparative Representations of the Middle East: National Values and Russian State-Aligned Media,” *Journal of Contemporary Central and Eastern Europe* 23, no. 2-3 (2015): 195-211.

²²⁹ Carol B. Schwalbe, B. William Silcock and Susan Keith, “Visual Framing of the Early Weeks of the U.S.-Led Invasion of Iraq: Applying the Master War Narrative to Electronic and Print Images,” *Journal of Broadcasting & Electronic Media* 52, no. 3 (2008): 448–465.

which contained predominantly negative coverage and tended to incorporate a large number of negative moral terms to condemn the war.^{230/231}

Regarding the 2011 Egyptian revolution's representation in the Western media, Harlow and Johnson revealed in a study of "*How The New York Times, Global Voices and Twitter Covered the Egyptian Revolution*" that: Global Voices (71%) was significantly more likely than the NYT (36%) or Twitter (19%) to use an *injustice* frame, and to use *sympathy* frames (47%), *legitimizing* frames (76%), and *accountability* frames (59%).²³² In contrast, the NYT (12%) was significantly more likely to employ *de-legitimizing* frames, to rely on a *spectacle* frame (68%), and to include history or context about the protests (27%).²³³

Analyzing the media coverage of the uprising in Egypt (January–February 2011) by the Russian news agency RIA Novosti, Varacheva and Cherghina found that the majority of RIA Novosti news stories (29 out of 38) took a neutral approach during the first phase of the Egyptian uprising, and the protesters were presented neutrally in 27 news stories.²³⁴ Nonetheless, the 11 articles framed the events negatively, blaming the protestors for violence and disorder, and were published during the first four days of the uprising, while both the framing of incumbents and authorities was neutral, and the law enforcement agencies were presented as trying to keep the public order and mostly reacting to protester actions.²³⁵ About "*Media Representations of Technology in Egypt's 2011 Pro-Democracy Protests*," it can be said that as a tool for democratization, technology is framed as novel and modern, neutral and un beholden to corporate interests, whereas government surveillance has (almost) disappeared amidst the clamor of a public given voice.²³⁶

²³⁰ Daniela V. Dimitrova and Colleen Connolly-Ahern, "A Tale of Two Wars: Framing Analysis of Online News Sites in Coalition Countries and the Arab World during the Iraq War," *Howard Journal of Communications* 18, no. 2 (2007): 153-168.

²³¹ Dimitrova and Connolly-Ahern mentioned an example of a March 29, 2003, headline, which is: "Americans massacre Iraqis in Baghdad and use banned weapons, killing 96;" comparingly, according to this research results, no coverage among the Coalition of the Willing websites studied used similar terms to describe American or British actions in Iraq (ibid).

²³² Summer Harlow and Thomas J. Johnson, "Overthrowing the Protest Paradigm? How *The New York Times*, Global Voices and Twitter Covered the Egyptian Revolution," *International Journal of Communication* 5 (2011): 1359–1374.

²³³ Ibid.

²³⁴ Tatiana Varacheva and Sergiu Gherghina, "Neutral or Biased? The Presentation of the Kyrgyzstan and Egypt Uprisings by RIA Novosti," *Europe-Asia Studies* 70, no. 8 (October 2018): 1213–1235.

²³⁵ Ibid.

²³⁶ Melissa Loudon and B. Theo Mazumdar, "Media Representations of Technology in Egypt's 2011 Pro-Democracy Protests," *Ecquid Novi: African Journalism Studies* 34, no. 1 (2013): 50-67.

Lastly, in the US newspapers' framing of the Arab Spring, neither Western nor Eastern media appeared to support or project the protestors mainly because they were hardliners and it was entirely against their establishments, but once these protests gained some ground and popular support, the media stance usually changed.²³⁷ In the same context, by examining the broadcast coverage of Al Jazeera and the BBC on the 2011 uprising in Libya and the ensuing NATO intervention in the country, it is demonstrated that the coverage of both these networks was aligned with the national and foreign policy interests of their home countries, making their political contexts the main influence on their news agendas.²³⁸

4.1.3. Content Analysis Method and the Framing Analysis of the BBC News Coverage of Egypt's Issues after June 2013 and May 2014

4.1.3.1. The Unit of Analysis

This research depends on using the content analysis method, where the unit of analysis of the news articles' sample is *the news items/ phrases*. The phrase is analyzed in two ways: a. the denotation of the phrase, which refers to the literal or primary meaning of words, in contrast to the feelings or ideas that the word suggests; b. the connotation of the phrase that focuses on the idea or feeling that words invoke in addition to its literal or primary meaning. Procedurally, it has been selected a non-random/intended sample from *BBC English Online News Site* based on its relation to the studied topic. So, it is a non-random sample since the sample's selection criteria relied on analyzing those news articles that focus on the Egyptian political issues *only* on the BBC during the study period, dismissing any other news articles on Egypt that might cover specialized/documentary topics such as sports, archeology, etc. Given that the main research inquiry addresses: "How has Egypt been represented in the BBC after the 2013 June protesting events and 2014 May elections?", Egypt's representation is revealed by following these analysis steps: i. examining the usage extent of each frame, both the positive and negative ones, per analysis unit, through an inductive method; ii. revealing the tone of coverage, "supportive, opposing, or neutral"; iii. determining the used frames' ratios in the coverage; iv.

²³⁷ Azmat Rasul and Mian Muhammad Asim, "How US Newspapers Framed the Arab Spring," *Media Asia* 41, no. 1 (2014): 86-100.

²³⁸ Sumaya Al Nahed, "Covering Libya: A Framing Analysis of Al Jazeera and BBC Coverage of the 2011 Libyan Uprising and NATO Intervention," *Middle East Critique* 24, no. 3 (2015): 251-267.

deducing, therefore, whether the BBC news coverage of the Egyptian issues during the studied period reflects a positive or negative representation of the Other.

Building on that, this work relies on the qualitative and quantitative analysis approaches, applied respectively by preparing a “coding instrument” *_analysis form for coding the frames per analysis unit_* of the news articles. This form includes ten frames for achieving the *qualitative analysis*’ purpose _ revealing the used *frames*, either positive or negative, and the *tone of coverage*, considering the news item or phrase as the analysis unit. Sequentially, to accomplish the study’s primary objective, we calculated the frequencies of the framing analysis categories in the total sample of the examined news articles. The last approach mirrors the *quantitative iterations* or the *iterative analysis* of the research at hand

In the framing analysis, we addressed the extracted frames under two main categories: a. The first frames-category addresses *Liberal/Revolutionary Frames* or *Liberal Civilizing Orientalism’s*²³⁹ *Frames*, which are represented, in this research, in: (Freedom (Liberal Civil Ruling); Democratic Transition; Reformism; Anti-Militarism; and Human Rights), assuming that this category of frames reflects the positive image/representation of Egypt. b. In contrast, the second frames-category addresses *Classic Orientalism’s Frames*, embodied in: (Conflict; Crisis; Terrorism; Public Disorder; and Justification), which are assumed to mirror the negative image/representation of Egypt.

4.1.3.2. Definitions of the Extracted Frames

Frames have been conceptualized at various levels of abstraction; one of them was the *issue-specific or generic frames*, according to Jörg Matthes, who considered that the issue-specific frames indicate that every issue can have different frames distinguishing it specifically while the generic frames transcend thematic limitations as they can be identified across different issues such as conflict, human interest, economic

²³⁹ It has been quoted the names “*Liberal Civilizing Orientalism*” and “*Classic Orientalism*” from the work of Keskes and Martin (see Hanen Keskes and Alexander P. Martin, “Orientalism and Binary Discursive Representations of Tunisia’s Democratization: The Need for a “Continuity and Change” Paradigm,” *British Journal of Middle Eastern Studies* (2018): 1-20), without depending on indicating the binary discursive narratives of *success* and *failure* regarding the Egyptian democratization process. Instead, revealing how Egypt’s representation and constructed image in the Western consciousness were, was best accomplished by extracting frames under categories of (Classic and Liberal Civilizing Orientalisms) binary oppositions, tracing them per analysis unit, and illustrating the total results through the concluded qualitative and quantitative analysis findings _ as shown below.

consequences, morality, and responsibility.²⁴⁰ Accordingly, this analysis determines five issue-generic frames as follows: (Conflict; Crisis; Terrorism; Freedom; Human Rights). Also, it comprises five Issue-specific frames _ related to the covered Egyptian issues in BBC, which are (Democratic Transition; Reformism; Anti-Militarism; Justification; Public Disorder). Those extracted frames are explained in Table 1, with examples from the analyzed sample.

4.1.3.3. The Framing Analysis Findings

This part seeks to examine the news coverage nature on Egypt in the period following the June 30 mass protests and July 3 military overthrow in 2013, and the 2014 May presidential elections, revealing the aspects of Egypt's representation process in the BBC English online news site relying on ratios of the extracted frames illustrated above. Moreover, the analysis's main categories differentiated between the (identity of the writer, visuals' presence, tone of coverage, and the used frames of Egypt's representation). Therefore, we discuss the results of qualitative and quantitative analysis, answering this study's questions simultaneously.

4.1.3.3.1. First: The Identity of the Writer

According to the quantitative analysis results, the (Staff Reporters) subcategory in the BBC was the most frequent one to produce Egypt-related news during the study period, which accounted for (52%) of all other subcategories. Sequentially, the "Non-Arab Writers" came in second place (24%). (Arab Writers), nonetheless, were mostly producing the news with the (Staff Reporters), and the latter sometimes depended on the news agencies such as (AFP and Reuters) as well as the (Non-Arab Writers). Accordingly, the (Combined) subcategory seized the third classification, accounting for (22%). Then, it was the (Arab Writers) who produced the news _ *alone* _ about Egypt, but in a slight percentage in BBC English, where they accounted just for (2%), to come in the last ranking; see Table 2.

²⁴⁰ Jörg Matthes, "What's in a Frame? A Content Analysis of Media Framing Studies in the World's Leading Communication Journals, 1990-2005," *Journalism & Mass Communication Quarterly* 86, no. 2 (2009): 349-367.

Table 1: The Definitions of the Extracted Frames; Revealing the Representation of the Other in the Western Media

Frame	Explanation	Example “News Article’s Title/Subtitle (NAT/NAS); New Article Prelude (NAR); News Article Phrase/Sentence (NAP)”
<u>First: Issue- Generic Frames:</u> Conflict Frame	It refers to the use of news items concentrating on clashes between protestors and the security forces.	- “Egypt Authorities Accused of Cover-Up Over Deadly Clashes .” (NAT, July 9, 2013c) - “ Egypt Turmoil: Seven Killed in Cairo Clashes .” (NAT, July 16, 2013)
Crisis Frame	It brings the meanings of political or/and economic crises, the consequences of political changes, or/and the failure within the coverage of Egyptian events.	- “ Egypt’s Failed Democratic Experiment .” (NAT, July 5, 2013a) - “The worst scenario is that the violence the army says it wants to prevent will come back as a jihadist whirlwind . For all the talk of rebooting Egypt’s political system, the fact is that its experiment with democracy has failed dismally .” (NAPs, July 5, 2013) - “ Egypt Crisis: Nine Killed in Cairo Clashes ” (NAT, July 23, 2013). - “Egypt Election: Sisi Faces ‘Credibility Gap’ .” (NAT, May 29, 2014)
Terrorism Frame	This frame focuses on terror acts occurring in Egypt during the study’s period or on covering news on the so-called counter-terrorism	- “Egypt’s army chief has called for demonstrations on Friday to give the military a mandate to confront “violence and potential terrorism.” ” (NAR, July 24, 2013)

	measures taken by the government against protesters or alleged Jihadists.	- <i>“President Sisi Says Jihadists Threaten Egypt’s Existence.”</i> (NAT, October 25, 2014)
Freedom “Liberal Civil Ruling” Frame	It conveys in the news coverage the image of mass calls for establishing liberal civil ruling or of disseminating a freedom climate in Egypt.	- <i>“The Struggle to Save Egypt’s Revolution”</i> (NAT); also, <i>“There was a time in Egypt when many hailed ‘one hand,’ one square, one people rising up to make their own history”</i> ²⁴¹ (NAR). (July 9, 2013a) <i>“Mr. Morsi was Egypt’s first freely-elected president. His removal last Wednesday followed days of mass protests by people who accused him of becoming increasingly authoritarian, pursuing an Islamist agenda....”</i> (NAPs, July 9, 2013b)
Human Rights Frame	It addresses using phrases or expressions of advocating the protestors, activists, or journalists’ rights and rejecting human rights violations.	- <i>“15 leading Egyptian human rights groups expressed their ‘strong condemnation of the excessive use of force’ against Brotherhood supporters, and called for an independent investigation into Monday’s violence.”</i> (NAPs, July 10, 2013a) - <i>“Egypt’s President Sisi ‘Regrets’ Al-Jazeera Trial”</i> (NAT); also, <i>“Foreign governments, media organisations and human rights groups accused the Egyptian authorities of restricting</i>

²⁴¹ The writer of the news article refers to the 25 January revolution in Egypt that aimed at bringing about “freedom” through “unity” of all Egyptians, succeeding in ousting the Mubarak regime that ruled for approximately 30 years as a military dictatorship.

		<i>freedom of speech</i> ” (NAPs). (July 7, 2014).
<u>Second: Issue-specific frames:</u> Democratic Transition	This frame means that the coverage focuses on the democratization process-related events occurring in Egypt, such as the parliamentary and presidential elections.	- “Egypt’s newly appointed Prime Minister Hazem al-Beblawi is beginning work on forming a new cabinet, a week after the army ousted President Mohammed Morsi” (NAR); also, “The changes would then be put to a referendum - to be organised within four months - which would pave the way for parliamentary elections, possibly in early 2014. Once the new parliament convenes, elections would be called to appoint a new president” (NAPs). (July 10, 2013b) - “Egypt Election: Sisi Secures Landslide Win.” (NAT, May 29, 2014)
Reformism	It refers to the coverage of revolutionary reforms accomplished in Egypt after the June 30 mass protests in 2013 and following Sisi’s coming into power in 2014.	- “The Struggle to Save Egypt’s Revolution.” (NAT, July 9, 2013a) - “Egypt Unrest: PM Beblawi to Form Cabinet Amid Anger.” (NAT, July 10, 2013b)²⁴²
Anti-Militarism	It brings the focus on phrases acknowledging that what happened on July 3, 2013, was a military overthrow or/and criticizing it or its consequent events in	- ““Unacceptable coup”” (NAS, July 10, 2013b); also, ““Putschist’ decree”” (NAS, July 10, 2013c) - “The US says it is delaying the delivery of four F-16 fighter jets to Egypt amid unrest following the army’s overthrow of Mohammed

²⁴² The event represents an attempt at both democratic transition and reformism for Egypt; however, the BBC has also focused on the “Public Disorder” frame in the coverage by initiating its title with the phrase “**Egypt Unrest.**” In such cases, we intended to distinguish the news articles by marking them in the coding instrument/form by more than one (salient) frame.

	confronting pro-Morsi demonstrations.	<i>Morsi as president.</i>” (NAR, July 24, 2013) - <i>“Egypt Anti-Sisi Hashtag Sweeps Twitter”</i> (NAT, March 30, 2014)²⁴³ - <i>“‘Bloody crackdown’”</i> (NAS); also, <i>“Mr. Sisi... has overseen a bloody crackdown on Mr. Morsi’s Muslim Brotherhood movement in which more than 1,400 people have been killed and 16,000 detained”</i> (NAPs). (May 29, 2014)
Justification	It means the usage of news items justifying the 2013 July military overthrow or underestimating the massacres committed sequentially against civilian protestors by focusing on some aspects of reality without mentioning the scene’s other related aspects.	- <i>“The army has boosted its image in the eyes of Egyptians who demonstrated against Mr. Morsi and if it had not ousted Morsi after the 48-hour deadline it gave him to resolve the protests, it could have been damaged as an institution.”</i> (NAPs, July 5, 2013b) - <i>“Egypt’s Abdul Fattah Al-Sisi ‘Cult’ Sees Surge in Merchandise.”</i> (NAT, March 31, 2014)²⁴⁴

²⁴³ Sisi’s nomination declaration for the presidency has represented a transformation in the Egyptian scene and a widespread division throughout the country. In this context, “A hashtag insulting presidential candidate Abdul Fattah al-Sisi has been circulating widely on social media in Egypt. The hashtag, which translates as “vote for the pimp,” has been tweeted hundreds of thousands of times” (“Egypt Anti-Sisi Hashtag Sweeps Twitter,” BBC News, March 30, 2014. <https://www.bbc.com/news/world-middle-east-26811376>. “Access Date 06/15/2022”). Moreover, “Mr. Sisi’s opponents hold him responsible for what human rights groups say are widespread abuses, and fear he wants a return to authoritarianism. His supporters, however, view him as a saviour who can end the political turmoil dogging Egypt since 2011 when a popular uprising ended Hosni Mubarak’s three decades of one-man rule” (ibid).

²⁴⁴ This news article mirrored the framing of one-sided reality only, ignoring this reality’s other sides, thus, conveying a biased image to the global audience of Sisi’s cult in all of Egypt, with this cult being represented as spreading in the merchandise items everywhere in the country. Such a manipulation, manifested in the frame-building process itself by this time in particular (i.e., March 31, 2014), was absolutely apparent when mentioning one feature of reality (i.e., a cult of Sisi), justifying the excessive use of force and killing more than 1,300 persons at protests since the overthrow of Morsi’s regime _ according to the Human Rights Watch 2014 World Report. So, at the time when the anti-Sisi hashtag was sweeping

Public Disorder	This frame refers to the focus on conveying an image of Egypt's public disorder during the study period.	- <i>"Egypt Unrest: PM Beblawi to Form Cabinet Amid Anger."</i> (NAT, July 10, 2013b) - <i>"Egypt Unrest: Liberal Opposition Rejects Transition Plan."</i> (NAT, July 10, 2013c)²⁴⁵ - <i>"Egypt Unrest: US Delays Delivery of F-16 Jets"</i> (NAT); also, <i>"The US says it is delaying the delivery of four F-16 fighter jets to Egypt amid unrest following the army's overthrow"</i> (NAR). (July 24, 2013)²⁴⁶

Twitter, that news article the next day was saying: "Former Field Marshal Abdul Fattah al-Sisi's popularity among Egyptians has been taking on some unusual forms, including a wild profusion of merchandise, prompting some to speak of almost cult-like veneration. Items as diverse as T-shirts, jewellery, perfume, chocolates and even sandwiches proudly sport the image or name of the country's new national hero" (Ahmed Nour and Adam Robinson, "Egypt's Abdul Fattah Al-Sisi 'Cult' Sees Surge in Merchandise," BBC News, March 31, 2014. <https://www.bbc.com/news/world-middle-east-26775516>. "Access Date 06/15/2022").

²⁴⁵ Although this news article was framed under the "Public Disorder" frame since initiating the title by this phrase: ***"Egypt Unrest,"*** which was used repeatedly in the coverage, in many cases, no matter what the covered topic is, it is also considered an article of another salient frame of "Democratic Transition" given the issue's theme itself.

²⁴⁶ All the mentioned examples' references, respectively, are the following:

Wyre Davies, "Egypt Authorities Accused of Cover-Up Over Deadly Clashes," BBC News, July 9, 2013c. <https://www.bbc.com/news/world-middle-east-23249692>. "Access Date 06/15/2022." "Egypt Turmoil: Seven Killed in Cairo Clashes," BBC News, July 16, 2013. <https://www.bbc.com/news/world-middle-east-23323874>. "Access Date 06/15/2022." Jeremy Bowen, "Egypt's Failed Democratic Experiment," BBC News, July 5, 2013a. <https://www.bbc.com/news/world-middle-east-23197801>. "Access Date 06/15/2022." "Egypt Crisis: Nine Killed in Cairo Clashes," BBC News, July 23, 2013. <https://www.bbc.com/news/world-middle-east-23417025>. "Access Date 06/15/2022." "Egypt Election: Sisi Faces 'Credibility Gap'," BBC News, May 29, 2014. <https://www.bbc.com/news/av/world-middle-east-27616075>. "Access Date 06/15/2022." "Egyptian Army Chief Calls for Street Protests," BBC News, July 24, 2013. <https://www.bbc.com/news/world-middle-east-23434809>. "Access Date 06/15/2022." "President Sisi Says Jihadists Threaten Egypt's Existence," BBC News, October 25, 2014. <https://www.bbc.com/news/world-middle-east-29771099>. "Access Date 06/15/2022." Lyse Doucet, "The Struggle to Save Egypt's Revolution," BBC News, July 9, 2013a. <https://www.bbc.com/news/world-middle-east-23237854>. "Access Date 06/15/2022." "Egypt's Army Warns Over Disruption After Morsi Deposed," BBC News, July 9, 2013b. <https://www.bbc.com/news/world-middle-east-23247470>. "Access Date 06/15/2022." "Egypt Muslim Brotherhood Leader Mohamed Badie Arrest Ordered," BBC News, July 10, 2013a. <https://www.bbc.com/news/world-middle-east-23256937>. "Access Date 06/15/2022." "Egypt's President Sisi 'Regrets' Al-Jazeera Trial," BBC News, July 7, 2014. <https://www.bbc.com/news/world-middle-east-28192749>. "Access Date 06/15/2022." "Egypt Unrest: PM Beblawi to Form Cabinet Amid Anger," BBC News, July 10, 2013b. <https://www.bbc.com/news/world-middle-east-23251425>. "Access Date 06/15/2022." "Egypt Election: Sisi Secures Landslide Win," BBC News, May 29, 2014. <https://www.bbc.com/news/world-middle-east-27614776>. "Access Date 06/15/2022." "Egypt Unrest: Liberal Opposition Rejects Transition Plan," BBC News, July 10, 2013c.

Source: Prepared by the author.

Basically, the (Staff Reporters) subcategory occupies the first place, and not the ‘Orientals’ (i.e., the (Arab Writers Alone) subcategory that accounted for ‘2%’) to produce the news primarily about themselves. Thence, this interprets and bolsters remarkably what this study will argue about regarding the domination of the Classic Orientalism’s Frames _ presented by the West, compared to the Liberal Civilizing Orientalism’s Frames in representing Egypt globally.

For the (visuals’ presence) analysis category, on the other hand, it was apparent that the visuals (photographs or/and videos) in the examined news articles existed in every sample unit, accumulated thus in (100%).

Table 2: The Identity of the Writer

	Frequency	%
Staff Reporters	26	52%
Non-Arab Writers	12	24%
Combined	11	22%
Arab Writers “Alone”	1	2%
Total	50	100%

Source: Prepared by the author.

4.1.3.3.2. Second: The Tone of Coverage

<https://www.bbc.com/news/world-middle-east-23250567>. “Access Date 06/15/2022.” “Egypt Unrest: US Delays Delivery Of F-16 Jets,” BBC News, July 24, 2013. <https://www.bbc.com/news/world-middle-east-23442947>. “Access Date 06/15/2022.” “Egypt Anti-Sisi Hashtag Sweeps Twitter,” BBC News, March 30, 2014. <https://www.bbc.com/news/world-middle-east-26811376>. “Access Date 06/15/2022.” Said Shehata, “Egypt Crisis: Army’s New Populist Tactics,” BBC News, July 5, 2013b. <https://www.bbc.com/news/world-middle-east-23186086>. “Access Date 06/15/2022.” Ahmed Nour and Adam Robinson, “Egypt’s Abdul Fattah Al-Sisi ‘Cult’ Sees Surge in Merchandise,” BBC News, March 31, 2014. <https://www.bbc.com/news/world-middle-east-26775516>. “Access Date 06/15/2022.”

Through the qualitative analysis method, we inferred the coverage tone of the news articles' sample and then the frequencies of each subcategory through the quantitative analysis, as follows:

Given that the use of *criticizing arguments* _ by the news resource(s), writer(s), analyst(s), correspondent(s), or/and the captured photograph(s)/video(s) commentary _ on Egypt's related political issues, actors, events, course of action, institutions, etc., within the coverage per news article, was an indicator of (Critical Coverage).²⁴⁷ Thence, we argue that the latter was the most frequent subcategory appeared, accounting for (62%). Adding to that that the number of articles reflecting the (Critical Coverage) was almost multiplied after Sisi came '*legally*' into office by May 2014 (20 articles), when comparing this repetition with that of the period before (11 articles). An interpretation can be given here that this change occurred in terms of the existence of mass trials of foreign journalists and liberal activists by the second period (May 2014). In other words, that meant broadening the circle of Egyptian opposition to the military rule, from including only the Islamists' supporters _ whose agenda the Western media did not support or project at first, beginning by 2011 Arab Spring revolutions for being against their establishment (according to Rasul and Asim²⁴⁸) _ into divergent popular-sects opposing a military background-president of Egypt.²⁴⁹ Likewise, what emphasized that result was that the "Human Rights" frame was repeated in eight articles during the first period after June 30, 2013, while using it increased noticeably by May 2014 period to be reflected in 12 news articles (and both accounted for (40%) within the total news articles' sample).²⁵⁰

²⁴⁷ For instance, when BBC reported that "At the pricier end of the market, accessories designer Nermin Nazim has created a jewellery line in Mr. Sisi's honour. She told the Aswat Masriya website that she believes Mr. Sisi **"liberated Egypt and freed it from fascism"**," (Nour and Robinson, "Egypt's Abdul Fattah Al-Sisi 'Cult' Sees Surge in Merchandise," *ibid*) in reference to Morsi's regime. Considering other analogous repeated arguments in the same news article, we identify it and other similar ones as critical coverage (on Egypt's post-January revolution first-elected president Mr. Morsi, in the current case).

²⁴⁸ See, Rasul and Asim, "How US Newspapers Framed the Arab Spring," 86-100.

²⁴⁹ See "Human Rights" and "Anti-Militarism" frames-related-examples in Table 1.

²⁵⁰ This mentioned data does not contrast with the fact of existing other examples of supporting the July military overthrow of Morsi's regime in the total news coverage in BBC English, which we identified under the "Justification" frame explained above; or "Democratic Transition" frame if the covered issue accurately reflects such a frame, as in this example: "Egypt Media Celebrate Sisi Victory" (NAT), and "Most broadcast media in Egypt celebrated former Defence Minister Abdul Fattah al-Sisi's landslide win in the country's presidential election" (NAR) ("Egypt Media Celebrate Sisi Victory," BBC News, May 29, 2014. <https://www.bbc.com/news/world-27619340>. "Access Date 06/15/2022").

The (Neutral Coverage) came in second place, representing (28%); then, the (Supportive Coverage) was in the last ranking (10%), considering the frequencies' ratios of using supportive arguments relying on similar inductive reasoning traced to reveal the (Critical Coverage); see Table 3.

Table 3: The Tone of Coverage

	<i>Frequency</i>	<i>%</i>	<i>June 30, 2013</i>	<i>May 2014</i>
Critical coverage	31	62%	11	20
Neutral coverage	14	28%	11	3
Supportive coverage	5	10%	3	2

Source: Prepared by the author.

Essentially, the decrease in the (Neutral Coverage) ratios by May 2014 in comparison to June 2013 period (from 11 articles to 3), in favor of approximately doubling those of the (Critical Coverage), from 11 articles to 20, can be crystallized under the perspective that this took place coinciding with the change in Egypt's political spectacle itself by a. selecting Sisi as president through polarized elections boycotted by diverse spectrums of the political elites in the Egyptian society, b. de-legitimizing Morsi's rule, c. stabilizing a popular base for Sisi, and most importantly, d. amplifying a generated, sequential nationwide division over the liberal transition trajectory of Egypt that widened the opposition circle of Sisi's reign. Once again, such a deviation in the coverage tone agrees with the previously explained Rasul and Asim's research finding regarding changing the Western media stance _ initiating a sort of "*biasedness*" in our case, either by being pro-or-anti-one side or another _ in accordance with gaining popular support to the events.

4.1.3.3. Third: The Representation Process of Egypt in BBC After the June Mass Protests of 2013, and by May 2014, with Sisi's Legalized Presidency Era

Since we have divided the analysis frames into two main categories, we can explain the reached findings as follows: For the Liberal/Revolutionary Frames, which express the

Table 4: The Representation of Egypt in BBC English; the Other in the Western Media in a Framing Micro-Level Analysis

<i>Liberal/Revolutionary Frames</i>	<i>N/50</i>	<i>%</i>	<i>June 30, 2013</i>	<i>May 2014</i>
<i>Category 1 of frames: Liberal Civilizing Orientalism + Positive representation of Egypt</i>				
Human Rights	20/50	40%	8	12
Anti-Militarism	18/50	36%	11	7
Reformism	12/50	24%	9	3
Democratic Transition	8/50	16%	5	3
Freedom	4/50	8%	4	-
The total percentage of the <i>Liberal Civilizing Orientalism's Frames</i>, if (n) is the sub-number of the extracted frames, and (N) is the total number of them, where (n = 62) here: If (N = 188) for all extracted frames within the 50 news articles (the major sample of analysis); so, the percentage of “<i>Category 1 of frames</i>” in the whole news articles sample is approximately (33%).				
<i>Classic Orientalism's Frames</i>	<i>N/50</i>	<i>%</i>	<i>June 30, 2013</i>	<i>May 2014</i>
<i>Category 2 of frames: Classic Orientalism + Negative representation of Egypt</i>				
Crisis	40/50	80%	20	20
Conflict	34/50	68%	20	14
Public Disorder	32/50	64%	17	15
Terrorism	12/50	24%	5	7
Justification	8/50	16%	7	1
The total percentage of the <i>Classic Orientalism's Frames</i>, where (n = 126) in this case: If (N = 188) for all extracted frames within the 50 news articles, so, in the entire news articles sample, the “<i>Category 2 of frames</i>” represents nearly (67%).				

Source: Prepared by the author.

positive representation of Egypt in BBC English and reflect **Liberal Civilizing Orientalism's Frames**, we found that²⁵¹ the “Human Rights” frame was the most frequent one among the first frames category, accounting for (40%) in the news articles sample _ where ($N = 50$) per frame subcategory. Thence, the “Anti-Militarism” and “Reformism” frames came in second and third ranks, at (36%) and (24%), respectively.

In sequence, the “Democratic Transition” (16%) and “Freedom/Liberal Civil Ruling” (8%) frames were in the last rankings. Thus, the total use of the (Liberal/Revolutionary Frames) or (Liberal Civilizing Orientalism's Frames) in the entire sample is aggregated to resemble (33%), as illustrated in Table 4.

Comparingly, for the **Classic Orientalism's Frames**, which reflects the negative representation of Egypt in BBC English, we found that the “*Crisis*” frame was the most frequent one among the news articles sample, accounting for (80%), where ($N = 50$) per frame-subcategory. After that, the “*Conflict*” frame came in second place with a high ratio (68%), and the “*Public Disorder*” frame was in the third-ranking at (64%). Sequentially, “*Terrorism*” and “*Justification*” frames were less frequent, which accounted for (24%) and (16%) consecutively. Hence, Classic Orientalism's Frames-total frequency percentage was (67%) in the whole sample; see Table 4.

4.1.3.4. Coda

According to the above findings, we emphasize that the binary narratives of the ‘Other’ in the Western media still manifest. A convergence of these causes can interpret the last:

- The Other itself is conflictual with itself and its surrounding reality.
- The cultivated images in the Western consciousness about the non-Western peoples and cultures, when the news coverage by the Western on the non-Western shifts to be the media weapon to ensure and confirm the old inherited images related to the Other.
- The media escalation becomes a mechanism being fed on negative coverages for raising the news circulation

²⁵¹ We have defined the potential numbers of frames for each news article ranging between (zero, one, or more than one frame), according to the availability of the frame's explanation in the analyzed news article, during the qualitative analysis phase using the coding form. Consequently, in the quantitative analysis phase, we did not depend on gathering ratios of every *one frame-news article* within total frequencies of other *one frame-news articles* _ that we might call a “**framing macro-level analysis**.” Rather, we indicated the frequencies of all salient frames at the level of every news article in the whole sample of the 50 news articles; namely, it was an analysis of news articles considering the distinct possibility of including *more than one prominent frame* within each article, calling it a “**framing micro-level analysis**.”

and re-circulation processes and revenues for the concerned media platform, and therefore, the commerce and continuity of future production and re-production of discourse, truth, knowledge, and meaning, shaping the global audiences minds the way that serves the international media-networks countries' national interests and dominance objectives.

Therefore, for Egypt's representation case, both Orientalisms were competing in BBC English, reversing *general inferiority* primarily of the Other regarding catching up with the liberal civilizing train of the West. Inarguably, the supremacy in the used frames was in favor of the Classic Orientalism's Frames, accounting for (67%), where the representation was *negative* on Egypt *predominantly*, in comparison to the Liberal Civilizing Orientalism's Frames that were occupying only (33%) in the entire news coverage.

Strikingly, some may assume that the complexity in Egypt's political scene after the July military overthrow imposes the predominance of the "Crisis, Conflict, and Public Disorder" frames. It is noticed, however, that some issues or events that did not relate to such frames have been covered under a *given label* of "*Egypt Unrest*" before mentioning the at-hand news story title. That took place even in cases when the event or issue was conveying a "Democratic Transition" frame (16%) or "Reformism" frame (24%) related dimensions,²⁵² confirming a "negative" image about Egypt or *the Other/Orient*, and highlighting less significance to any "Reformism" aspects_ particularly those occurring in the aftermath of ousting Mr. Morsi (e.g., selecting the interim president, constituting a new cabinet, drafting the constitution, holding elections, etc.).

On the other hand, given that Edel and Josua²⁵³ have argued that Egyptian officials have made extensive use of the (security, order, and terrorism) frames, and their main narrative was that the Rabi'a Square protesters consisted only of violent MB (Muslim Brotherhood) supporters, who were represented as terrorists. The reached results here regarding the superiority of the Classic Orientalism's Frames _ "Crisis, Conflict, Public Disorder, Terrorism, and Justification" _ accounting for (67%), prove thus *compatibility*, however *asymmetrically*, between the Western Orientalism discourse about the Other (Egypt in

²⁵² See "Public Disorder" frame relevant-examples, Table 1.

²⁵³ Mirjam Edel and Maria Josua, "How Authoritarian Rulers Seek to Legitimize Repression: Framing Mass Killings in Egypt and Uzbekistan," *Democratization* 25, no. 5 (2018): 882-900.

our case), and the *self-Orientalism discourse* used by the Other _ the official narrative of the Egyptian government and mainstream media _ about itself. In other words, while the first addressed Egypt's representation from the lens of what one might call a "*generalized disturbing chaos*," the second concentrated on a like-portrayal but with framing solely one enemy of the nation-state, namely, the MB.²⁵⁴

Furthermore, the "*Human Rights*" frame was not predominant (40%) in the whole news articles' sample where (N = 50) _ given examining the usage range of every extracted news frame per news article _ particularly by June 30, 2013 (8/25 news articles) more than May 2014 (12/25 news articles). That is despite the fact of "killing over 1,300 persons at protests and arrest(ing) over 3,500 (the number that increased to reach more than 16,000) Brotherhood supporters"²⁵⁵ through systematic and organized violence by the state authority in the months following overthrowing Morsi's regime. Such a finding emphasizes that the global voice raised by BBC English on Egypt sought to embody the Other from the perspective of "*Crisis*" (80%), "*Conflict*" (68%), and "*Public Disorder*" (64%) prominently, instead of portraying more the protestors' or the Other's human rights.

Needless to say, the previous feature did contradict the supposed liberal ideology orientation of BBC, and the other Western media outlets, coinciding with witnessing that the Western interests were at stake once any focused, noticeable, effective, changing support to the human rights projection along with the Egyptian democratization process during the Arab Spring revolutions would have damaged Egypt's imagined future-liberal doctrine, whose protection was perceived to be accomplished under military rule rather than the civil one. Apparently, that was taking place considering the (past) possibility of bringing the Islamist agendas to both national and regional stages should civilian regimes raised by actual democracy (not a fake one) have had the political say of the day. In sum, it seems that the orient-relevant stereotypes and representation discourse makers in the West often needed orientation builders represented by Orientals on a should have been-

²⁵⁴ In this regard, the disruption of daily life and public order were contrasted with the security of state and citizens, then, Prime Minister Beblawi justified the use of force saying that Morsi loyalists had been inciting chaos around the country, terrorizing citizens, and attacking public and private property (ibid).

²⁵⁵ "World Report 2014: Egypt Events of 2013," Human Rights Watch (HRW), 2014. <https://www.hrw.org/world-report/2014/country-chapters/egypt>. "Access Date 06/15/2022."

amended Orientalism. Based on that, the next chapter section follows to tackle such a dilemma under a developed *Clash of Civilizations* game-theoretic model.

4.2. Applying Game Theory to Media Discourse and Politics in a Developed-Clash of Civilizations Game-Theoretic Model: The Representation of the Other and Balance of Culture; Is There a Relationship?

4.2.1. Introduction and Methodology

Through their productions that represent *other* non-Western cultures, Western media became a dominant global power controlling the flow of information from the West/North to the East/South. Western discourse, likewise, did have the power to generate stereotypes and representations of the Other (non-Western), which converted by the time to be accepted as the *truth* of the Other for the Western world.²⁵⁶ In other words, the Other in the Western media discourse is represented through dynamics of binary oppositions, embodying what this discourse portrays as “us” of a superior Western civilization versus “them” of an inferior non-Western one.²⁵⁷ On the regional or national stage, the media image does not change considerably. The representation of the Other (minority groups) in a society is pursued in a like circle of stereotyping, through media coverage portrays, in most cases, the Other as a threat to the social order.²⁵⁸

Therefore, this study does not aim to reveal the repercussions of escalating (non)violent clash of civilizations that would/did arise due to constructing a sort of media discourse functioning in an escalatory way. Instead, the critical goal was to find decisive alternative media mechanisms to be activated for restoring peace and security on national, regional, and global levels. For reaching this purpose, it has been relied on surveying media theories related to media discourse and politics and then applying game theory to this studied area. News framing, media representation, and Orientalism’s theoretical debates were a combined approach. This approach is used for exploring how “the media supply

²⁵⁶ See, Edward W. Said, *Orientalism*, 5th Ed., (England: Penguin Group, (1978, 2003)); and, Laughey, *Key Themes in Media Theory*.

²⁵⁷ See, Hanen Keskes and Alexander P. Martin, “Orientalism and Binary Discursive Representations of Tunisia’s Democratization: The Need for a “Continuity and Change” Paradigm,” *British Journal of Middle Eastern Studies* (2018): 1-20; Laughey, *Key Themes in Media Theory*; and, Said, *Orientalism*.

²⁵⁸ Eli Avraham and Anat First, “Combining the Representation Approach with the Framing Concept: Television News Coverage of the Arab Population in Israel During Conflict,” *Journalism* 11, no. 4 (2010): 481–499.

of news; construction of meaning and reality; the portrayal of other groups or/and cultures in a given society or relevant/unlike societies” are being operated within the daily cycle of constructing the Western media discourse worldwide.

On the other hand, game theory as a science of modeling the strategic behavior of decision-makers in diverse fields was the methodological tool we used for modeling a Game of Clash of Civilizations. The solutions or equilibria of this game, thus, are reached based on the game theory’s mathematical and economic tools. There are two players on national, regional, and global levels in the Clash of Civilizations Game. The first player is *Occident* on the global level, *Israelis* on the regional one, and *Turks* at the national level. Correspondingly, the second player is *Orient vs. Occident*, *Arabs vs. Israelis*, and *Kurds vs. Turks*. In a normal form representation of the game theory, our game included actions picked by the players in a simultaneous move. In contrast, each plays in a sequential move in a Clash of Civilizations Game represented in an extensive form of game theory.

Thence, the contributions of this research are the following: i. The study is one of the first to develop a game-theoretic model in *media discourse and politics* called *Clash of Civilizations Game*.²⁵⁹ ii. It reveals the *cause and effect* of an integration process of discourse and media representation, Orientalism, and news framing in the Western global media. iii. It develops a theoretical approach which is a convergence between media discourse and politics theorization and international relations’ Realism theory based on main assumptions of the developed game-theoretic model. iv. Answering these questions: How could *cultural* conflict-generated terrorism²⁶⁰ be countered on national, regional, and global levels? How is *cultural containment*

²⁵⁹ The game’s name is quoted from Samuel P. Huntington’s theory of “*The Clash of Civilizations*,” which emerged by publishing his Article of 1993 in *Foreign Affairs Journal* under the same title, coinciding with the end of the Cold War (1948-1991) between the two historical rivalries: the USA, and USSR.

²⁶⁰ Many forms of terrorism are a compass of theoretical debates in the International Relations discipline. This study, nevertheless, focuses only on the so-called *conflict-related* or *conflict-generated terrorism*. It can be defined as a tactic or a mode of operation that includes a politically motivated use of (or threat to use) violence deliberately against civilians, which is a weapon of the weaker side (a non-or-sub-state actor) in an asymmetrical armed confrontation against the strong – who might be a nation-state, a community of states, or an international organization of a states’ coalition (Ekaterina Stepanova, “Terrorism as a Tactic of Spoilers in Peace Processes,” in *Challenges to Peacebuilding: Managing Spoilers During Conflict Resolution*, ed. Edward Newman and Oliver Richmond (USA: United Nations University Press, 2006), 84-86).

Three levels of a culture dissimilarity-based-terrorism (or *cultural* conflict-related-terrorism) have been concerned for strategizing the (*contemporary*) clash of civilizations, in our game-theoretic model: a- The global level of the West vs. East/Islam. The level that focuses on eliminating any choice for the religion-based-terrorist organizations such as the Islamic State of Iraq and al-Sham (ISIS) toward exploiting Muslim youth under the *false* slogan of Jihad against the West or/and Western civilians. b- The regional level, which

being re-shaped to be a *culture balance*-oriented strategy for stabilizing the global, regional, and nation-state system's structures? How could *real* global peace and security be restored relying on a neo-construction of reality built on a cultural understanding's shared political language within global, regional, and national media discourse?

Moreover, the study focuses on proving the validity of these hypotheses: a. A game-theoretic model built on the *normal form representation* of game theory and based on media discourse and politics contributes to settling violent or non-violent (present/future) aspects of the clash of civilizations, coinciding with reaching the equilibrium/solution to this game. b. A game-theoretic model built on the *extensive form representation* of game theory and based on media discourse and politics contributes to settling violent or non-violent (present/future) aspects of the clash of civilizations, coinciding with reaching the equilibrium/solution to this game.

Based on that, this section includes five parts. First, we discuss a brief theoretical review in which debates on news framing, media representation, and Orientalism are utilized in developing this academic work to build upon this study's theoretical-strategic modeling. The second part introduces the theoretical assumptions of our developed Clash of Civilizations Game and the description and information of this game-theoretic model. Explaining the model in the normal form representation of game theory comes thirdly. At the same time, the fourth part focuses on describing the model in an extensive form. This research's inferred findings and developed theoretical perspective are addressed as a general discussion.

4.2.2. Theoretical Review and Development

4.2.2.1. News Framing, Media Representation, and Orientalism

highlights the Israeli-Palestinian conflict as a cultural one. In this regard, Hamas's rockets or/and bombs suicides against Israeli civilians, and Israel's resorting to the so-called *loyalist violence* _ exerted against civilian Palestinians for being a *popular base* or *supporters* to Hamas, are assumed to be aspects of the *clash of civilizations* on its regional level of Israelis and Arabs in general, where a solution can be built. 3- The national level concentrates on dealing with the Turkish-Kurdish conflict issue, assuming the PKK (*Partiya Karkerên Kurdistanê*/The Kurdistan Workers' Party) Kurdish terrorist organization's deliberate attacks against civilians, and the Turkish wars against PKK, to be elements of *sub-civilizations clash/conflict*.

Accordingly, this research develops a workable solution starting by managing the media discourse on all levels and its accompanying politics primarily and then proceeding towards settling Huntington's *clash of civilizations*, which we ascribe to be "a *major* cause, and the engine, of triggering, waging, and escalating such (armed) *cultural* conflict(s)-related terrorism phenomenon," even if the combat was for acquiring disputed territories.

News framing is a process in which the construction of the meaning of social or/and political reality occurs through placing some facts or chosen elements of an issue or event in a frame, making them more salient in the media supply, and promoting a causal interpretation, definition, moral evaluation, or/and treatment recommendation of an object, with the frequency as a significant factor for a given impact.²⁶¹ In such a process of inclusion and exclusion of meaning, the targeted audience is affected by those frames in terms of linking the latter's power to its ability to shape or alter the audience's ideas, thoughts, judgments, political preferences, attitudes, or/and behaviors regarding current affairs viewed (frequently) in media platforms.²⁶² So, frames are organizing principles that work symbolically to structure the social world and shape an understanding of political issues, when journalists select some aspects of a perceived reality employing them in constructing the verbal and visual formula within media discourse.²⁶³

News framing is based on two *major* dynamic processes: frame-building; and frame-setting.²⁶⁴ In the former, the role of journalists, elites, and social movements in the structural process of frames in a text, and the factors affecting this process, manifests obviously. Kothari, for example, has revealed through some interviews conducted with

²⁶¹ See, Andreas R.T. Schuck and Claes H. de Vreese, "Between Risk and Opportunity: News Framing and its Effects on Public Support for EU Enlargement," *European Journal of Communication* 21, no. 1 (2006): 5-32; Carol B. Schwalbe, B. William Silcock and Susan Keith, "Visual Framing of the Early Weeks of the U.S.-Led Invasion of Iraq: Applying the Master War Narrative to Electronic and Print Images," *Journal of Broadcasting & Electronic Media* 52, no. 3 (2008): 448-465; Michael D. Bruce, "Framing Arab Spring Conflict: A Visual Analysis of Coverage on Five Transnational Arab News Channels," *Journal of Middle East Media* 10 (Fall 2014): 1-26; and, Stephen D. Reese, "The Framing Project: A Bridging Model for Media Research Revisited," *Journal of Communication* 57 (2007): 148-154.

²⁶² See, Claes H. de Vreese, "News Framing: Theory and Typology," *Information Design Journal* 13, no. 1 (2005): 51-62; Dennis Chong and James N. Druckman, "A Theory of Framing and Opinion Formation in Competitive Elite Environments," *Journal of Communication*, 57, no. 1 (2007a): 99-118; Dennis Chong and James N. Druckman, "Framing Theory," *The Annual Review of Political Science* 10 (2007b): 103-126; James N. Druckman, "The Implications of Framing Effects for Citizen Competence," *Political Behavior* 23, no. 3 (September 2001): 225-256; and, Schuck and de Vreese, "Between Risk and Opportunity: News Framing and its Effects on Public Support for EU Enlargement," 5-32.

²⁶³ See, Avraham and First, "Combining the Representation Approach with the Framing Concept: Television News Coverage of the Arab Population in Israel During Conflict," 481-499; Bruce, "Framing Arab Spring Conflict: A Visual Analysis of Coverage on Five Transnational Arab News Channels," 1-26; Ibrahim Saleh, "Sitting in the Shadows of Subsidization in Egypt: Revisiting the Notion of Street Politics," *Democracy and Security* 4, no. 3 (2008): 245-267; Reese, "The Framing Project: A Bridging Model for Media Research Revisited," 148-154; Schuck and de Vreese, "Between Risk and Opportunity: News Framing and its Effects on Public Support for EU Enlargement," 5-32; Schwalbe, Silcock and Keith, "Visual Framing of the Early Weeks of the U.S.-Led Invasion of Iraq: Applying the Master War Narrative to Electronic and Print Images," 448-465; and, Yusuf Yüksel, "An Analysis of the Media and Government Relationship," *Journal of Selcuk Communication* 8, no. 1 (February 2013): 57-70.

²⁶⁴ Chong and Druckman, "A Theory of Framing and Opinion Formation in Competitive Elite Environments," 99-118; and, de Vreese, "News Framing: Theory and Typology," 51-62.

four New York Times journalists that the individual biases and motives of the journalists and their sources significantly influenced the news coverage.²⁶⁵ On the other hand, frame-setting focuses more on framing effects on the targeted subjects of media outlets, as far as to influence these subjects' internal system of values, thoughts, knowledge, emotions, cognition, predispositions, opinions, attitudes, or/and behavioral patterns.²⁶⁶

From another perspective, media representation within discourse tends to be the *reverse* of the framing process through its classification system that is relied on a mechanism of binary divisions. Some kinds of (acceptable) behaviors become prominent in media supply through this mechanism, and others (unacceptable ones) are ignored or distorted. Representation deems to be a *complementary* process of framing given its stereotyping force, on the other. Defining Representation, Hall in 1997 mentioned that it means "using language to say something meaningful about, or to represent, the world meaningfully, to "Other" people ... representation is an essential part of a process by which meaning is produced and exchanged between members of a culture."²⁶⁷ The last, thence, emphasizes a primary dimension of the representation process: the *construction of meaning, reality, or/and cultural identities*. Here, *stereotyping* is considered another face of this process.²⁶⁸ Therefore, the classification system of representing the Other (minority/dissident societal group(s), or an external *enemy*) in society operates through many Ideological State Apparatuses (ISA) _ where media is one of them, separating some acceptable sorts of knowledge and behavior, and excluding those which are *not* in harmony with the dominant ideology of the ruling class/elite, in order to create a discipline (or a disciplinary society) and preserving the drawn course of politics and social order.²⁶⁹

For media representation and discourse, Michel Foucault is one of the leading scholars of poststructuralism, who revealed the relationship between *power, truth, language*, and

²⁶⁵ Ammina Kothari, "The Framing of the Darfur Conflict in the New York Times: 2003–2006," *Journalism Studies* 11, no. 2 (2010): 209-224.

²⁶⁶ See, Chong and Druckman, "A Theory of Framing and Opinion Formation in Competitive Elite Environments," 99-118; Chong and Druckman, "Framing Theory," 103-126; de Vreese, "News Framing: Theory and Typology," 51-62; and, Druckman, "The Implications of Framing Effects for Citizen Competence," 225-256.

²⁶⁷ Avraham and First, "Combining the Representation Approach with the Framing Concept: Television News Coverage of the Arab Population in Israel During Conflict," 482.

²⁶⁸ See, *ibid.*

²⁶⁹ See, Althusser, "Ideology and Ideological State Apparatuses (Notes Towards an Investigation)," 79-87; Avraham and First, "Combining the Representation Approach with the Framing Concept," 481–499; and, Foucault, *Discipline and Punish: The Birth of the Prison*.

knowledge, within the dominant elite's discourse in society. Tying the concepts of elites, discourses, and the power of language and binary oppositions together, Foucault has created what he labeled the 'regime of truth' that constructs and sustains meaning and truth that serves the interest of the favored actors.²⁷⁰ Foucault has differentiated between a double mode for political authority in exercising individual control function: *binary division and branding*; and *coercive assignment*, of differential distribution of who the citizen is, where he must be, or how he is to be characterized in society.²⁷¹ Throughout this course and relying on the power of language, the elite speaks out the discourse for employing a social branding process, in which authority distinguishes between what it classifies as good versus evil, or peace versus war, etc. So, the "discourse disperses (both) power and knowledge by dividing and differentiating itself into what Foucault (1989) calls discursive formations,"²⁷² which are constructed out of discourse and reflect the binary oppositions of it.

After Foucault described the notion of discourse in *The Archaeology of Knowledge* (1970) and *Discipline and Punish* (1977),²⁷³ another significant contribution to the field was Said's work in 1978 of what he called "*Orientalism*." Said described the misrepresentation of the *Other* (meaning the East or Orient) within the Western discourse (i. e., academia, media, etc.) while considering this discourse as a linguistic form of knowledge and power. Orientalism can be defined as a manner of regularized writing, vision, and study, dominated by imperatives, perspectives, and ideological biases ostensibly suited to the Orient.²⁷⁴ Emphasizing aspects of the ideological biases towards the *Other*, Said demonstrated that "a web of racism, cultural stereotypes, political imperialism, dehumanizing ideology holding in the Arab/Muslim, is very strong, in which the nexus of *knowledge and power* creating 'the oriental' and in a sense obliterating him as a human being is an *intellectual matter*."²⁷⁵

²⁷⁰ Aishling Mc Morrow, "Poststructuralism," in *International Relations Theory*, ed. Stephen McGlinchey, Rosie Walters and Christian Scheinflug (England: E-International Relations Publishing, 2017), 58.

²⁷¹ Foucault, *Discipline and Punish: The Birth of the Prison*, 199.

²⁷² Laughey, *Key Themes in Media Theory*, 74.

²⁷³ Please refer to, Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Pantheon Books, 1970); Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Pantheon Books, 1977); Michel Foucault, *The Archaeology of Knowledge* (London: Routledge, 1989).

²⁷⁴ Said, *Orientalism*, 202.

²⁷⁵ *Ibid*, 27.

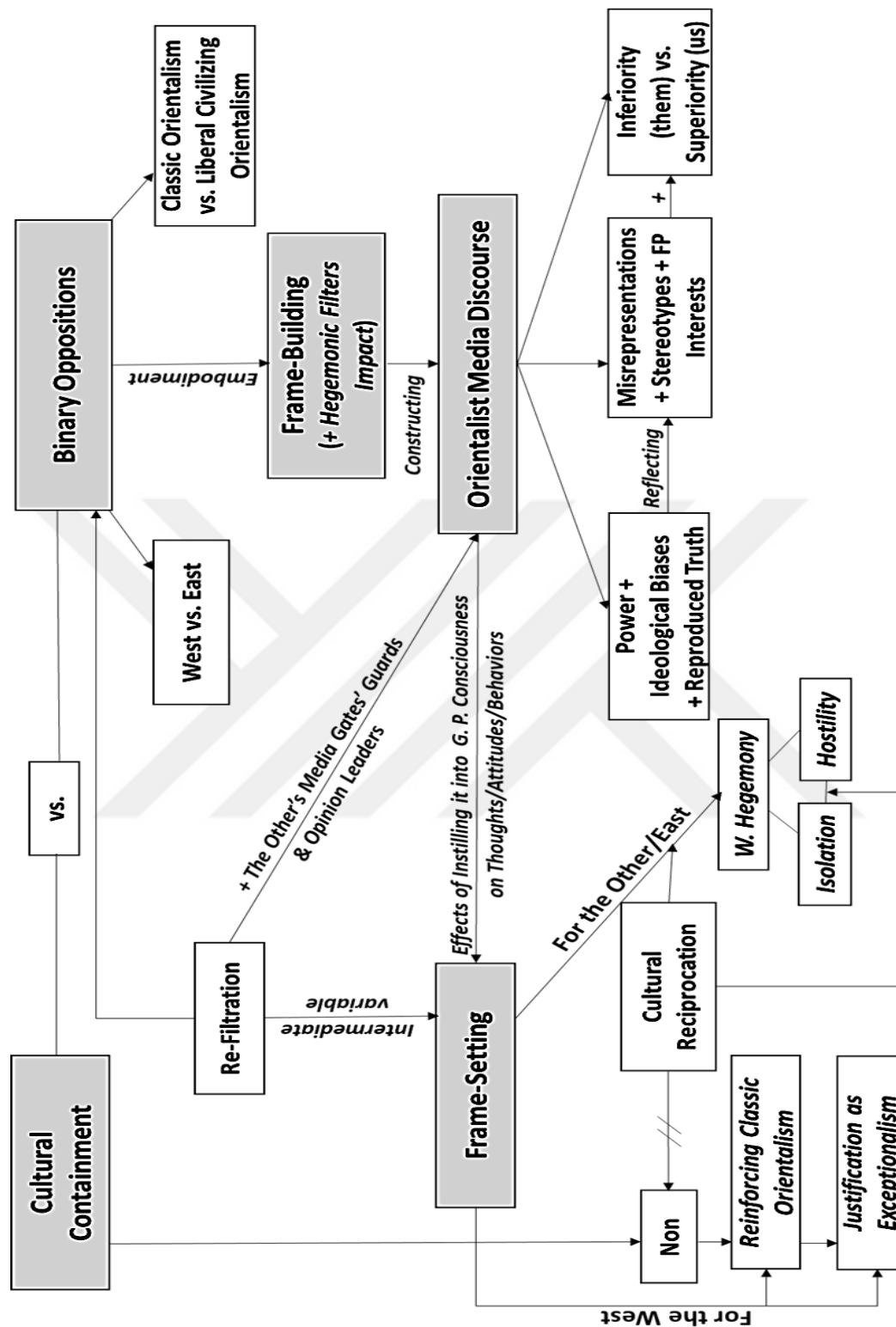


Figure 20: The Cause and Effect of an Integration Process of Discourse and Media Representation, Orientalism, and News Framing in the Western Global Media

Source: Prepared by the author.

In this context, binary oppositions distinguishing between the West and the Orient have been constructed biasedly within the Western media discourse. The discourse that embodies the West (us) as a “developed/modern, rational, cultivated, masculine/powerful, white/pure, civilized,” and the Orient/Other (them) is portrayed, on the contrary, as a “primitive, emotional, natural, feminine/vulnerable, colored/stained, barbaric.”²⁷⁶

In a recent study of the *Orientalism and binary discursive representations of Tunisia’s democratization*, Keskes and Martin argued that two Orientalisms were competing through Western binary discourse on *failure and success narrative*: the first was a *classic Orientalism* shaping the *failure* narrative relying on perceived ontological inferiority of the *Arab world* and its incompatibility with democracy.²⁷⁷ By contrast, the second was a *liberal civilizing Orientalism* acknowledging an *essential sameness* between the West and the *Arab world* while placing the West as the temporal pinnacle of democracy and modernity.²⁷⁸

4.2.2.2. Theoretical Development: The Cause and Effect of an Integration Process of Discourse and Media Representation, Orientalism, and News Framing in the Western Global Media

According to the previous literature, it can be illustrating how binary oppositions of the Western media discourse are being constructed, then internalized by the global public through the framing process. Where we argue that ***the cause and effect of an integration process of discourse and media representation, Orientalism, and news framing in the Western global media*** (see Figure 20) occur through five phases as follows:

4.2.2.2.1. Frame-Building and Structural Standard (Cause 1)

Discursive representations reflecting binary oppositions of the Other and influenced by Western hegemonic filters (political forces and activities)²⁷⁹ are being embodied within

²⁷⁶ Laughey, *Key Themes in Media Theory*, 139.

²⁷⁷ Keskes and Martin, “Orientalism and Binary Discursive Representations of Tunisia’s Democratization: The Need for a “Continuity and Change” Paradigm,” 1-20.

²⁷⁸ Ibid.

²⁷⁹ Given the *Orient* that appears in Orientalism is a system of *representations framed by* a whole set of forces that brought the Orient into Western learning, Western consciousness, and Orientalism was itself a product of certain political forces and activities (Said, *Orientalism*, 202-203). These forces and activities were called “*hegemonic filters*” by Laughey (*Key Themes in Media Theory*, 140).

the frame-building process of a text or subject. Two different kinds of binary oppositions are determined by the discourse-makers, accordingly. The first refers to representing the Other (the Orient/East) from a dual-antithetical perspective, namely, '*Classic Orientalism vs. Liberal Civilizing Orientalism*.'²⁸⁰ The other sort is to differentiate between the Occident/West (us) versus the Orient/East (them).

4.2.2.2.2. The Construction of Orientalist Media Discourse of the Other (Cause 2)

Three mechanisms manifest in this phase: a) *Power and discourse*:²⁸¹ in this mechanism, the *linguistic power* is employed for reproducing *knowledge* and re-constructing the *truth* of the Other/Orient within the discourse's *discursive formations*. Throughout this discourse, *political power* is being dispersed, or/and (possible) ideological biases of the *Other* are being rooted. b) *Reflection*: this mechanism relates to the reversal of misrepresentations or/and stereotypes of the Other and the national/foreign policy (FP) objectives of the media-supply concerned state. The latter is considered a constituent part of the concerned state's news agenda's primary interests.²⁸² c) *Frequency*: it emphasizes, as a framing process-related mechanism, the inferiority of *Orient (them)* versus superiority of *Occident (us)* within the Other's constructed discourse.²⁸³

4.2.2.2.3. A Re-filtration Process by the Other (the East/Orient): Self-Orientalism (Cause 3)

Public opinion leaders in a two-step flow of Western (news) media information, and the media gate guards in the Western discourse's receiving country, are assumed to re-construct the Other's portrayed image within the Western discourse and redirect it to the targeted Oriental audience. Thence, that contributes to reproducing the image (current

²⁸⁰ See, Keskes and Martin, "Orientalism and Binary Discursive Representations of Tunisia's Democratization," 1-20.

²⁸¹ This first mechanism is derived from the theoretical debate of the order of discourse, and the discursive formations (see Foucault, *The Archaeology of Knowledge*), besides that of the Orientalist representation of the Other (see Said, *Orientalism*).

²⁸² In this regard, AL Nahed, examining the coverage of Al Jazeera and the BBC on the 2011 uprising in Libya and the ensuing NATO intervention in the country, proved the mentioned result, demonstrating that the coverage of both those networks was aligned with their home countries' national and foreign policy interests, making their political contexts the main influence on their news agendas (Sumaya Al Nahed, "Covering Libya: A Framing Analysis of Al Jazeera and BBC Coverage of the 2011 Libyan Uprising and NATO Intervention," *Middle East Critique* 24, no. 3 (2015): 251-267)

²⁸³ See, Keskes and Martin, "Orientalism and Binary Discursive Representations of Tunisia's Democratization," 1-20; Laughey, *Key Themes in Media Theory*; and, Said, *Orientalism*.

representations/repeated stereotypes) of the Orient in a '*self-Orientalism*'²⁸⁴ process inside an Oriental society, either by demoralizing the re-circulating of a perceived Western image on the Other or by reinforcing it if this image serves the interests of the favored actors/elites (the regime of truth). Therefore, the re-filtration process is a *cause* re-shaped to be an *intermediate variable* interfering in the Western discourse's effect by increasing, decreasing, or neutralizing it.

4.2.2.2.4. Converting Biased Subjectivity into Reproduced Truth's Objectivity: Instilling Ideological Biases of the Western Media-Constructed Representations of the Other (Through the Frame-Setting Process) into Global Public (G. P.) Consciousness²⁸⁵ (Effect 1)

The individuals become affected, thus, by the constructed frames, particularly the negative ones²⁸⁶ of the Other. That might diversify of being an impact on thoughts, attitudes, or/and behaviors, except for the politically knowledgeable citizens where framing effects are not as high as those of non-or-moderately politically-knowledgeable individuals.²⁸⁷

4.2.2.2.5. Sustaining Cultivated Perceptions of the Other/East for a Global Audience (Effect 2)

²⁸⁴ One example about self-Orientalism, we derived from Edel and Josua study, who argued that the Egyptian official narrative had made extensive use of the frames, "security," "order," and "terrorism," on Rabi'a Square protestors (the Other/opposing group in society) (Mirjam Edel and Maria Josua, "How Authoritarian Rulers Seek to Legitimize Repression: Framing Mass Killings in Egypt and Uzbekistan," *Democratization* 25, no. 5 (2018): 882-900). The self-orientalism contrasts in some cases with global media representations of the Other's (Muslim Brotherhood's protestors) image as being not terrorists _ such as the case of BBC news coverage on the issue; see, "Profile: Egypt's Muslim Brotherhood," BBC News, December 25, 2013. <https://www.bbc.com/news/world-middle-east-12313405>. "Access Date 06/15/2022."

²⁸⁵ Based on 1- Said's 1978 work of *Orientalism*, and that 2- framing effects imply that citizens base their political preferences on arbitrary information, where elites often use framing to manipulate citizens' judgments (Druckman, "The Implications of Framing Effects for Citizen Competence," 225-256). 3- If people remain outside the political process, their opinions are vulnerable to being shaped arbitrarily by how the issue is represented in media (Chong and Druckman, "Framing Theory," 103-126).

²⁸⁶ see Schuck and de Vreese, "Between Risk and Opportunity: News Framing and its Effects on Public Support for EU Enlargement," 5-32.

²⁸⁷ Schuck and de Vreese have argued that: i. the framing effect is not fully independent but moderated by political knowledge, so the less knowledgeable individuals are generally more affected by the manipulation of framing; ii. people are generally more affected by negative framing comparing to the positive one (ibid).

On the Western audience level:²⁸⁸ Western media discourse's influence appears through a. *reinforcing Classic Orientalism*, which is assumed to have resulted from the frequency of news principles reversing previously constructed stereotypes or/and misrepresentations of the Other.²⁸⁹ b. The *Justification* of emerging civilizing features of the Other related to modernity (e.g., democratization) considering it as *exceptionalism*.²⁹⁰

On the Eastern audience level: Three waves of western media's influence²⁹¹ can be recognized here: a- Western culture *hegemony*²⁹² (positive impact); b- *isolation* of the Western culture (neutral impact); or c- *hostility* towards Western culture (negative impact).

In applying the cultural containment as a strategy of the Western media discourse: The transformation into a balance of culture mechanism, in this context, is an exit assumed to be seen through an equivalent representation of the Other (East/Orient). The impact, therefore, on the western audience of perceiving the Other will be changing favorably through a neo-construction of the Western discourse depending on new media items. That is to say that such strategy of *Cultural Containment* ought to concentrate on taking three actions: *nonreinforcement* of Classic Orientalism; *non-justification* of modernity's aspects (if appeared in the Other's society); and *naturalism* vs. *exceptionalism*. For the Other/East, *Cultural Reciprocation* strategy will be a new response (thence, a positive impact of the Western discourse) parallel with the prior taken actions of the *Cultural Containment* strategy, see Figure 20. Based on the '*imbalance representation of the Other*

²⁸⁸ Examining media effects of the Western perceptions of the Other (Muslims) after the 9/11 terror attacks, Lett, DiPietro, and Johnson revealed that negative personal emotions were positively associated with television news viewing on the coverage of 9/11 attacks 2001, as were negative perceptions of Islamic peers (Meridith Diane Lett, Andrea Lynn DiPietro and Danette Ifert Johnson, "Examining Effects of Television News Violence on College Students through Cultivation Theory," *Communication Research Reports* 24, no. 1 (Winter 2004): 39-46).

²⁸⁹ See, Said, *Orientalism*.

²⁹⁰ See Keskes and Martin, "Orientalism and Binary Discursive Representations of Tunisia's Democratization."

²⁹¹ On the level of world politics, Huntington determined three responses of non-Western civilizations to Western power and values represented by attempting to; i. pursue a course of *isolation* to insulate their societies from *penetration* or *corruption* by the West; ii. join the West and accept its values and institutions, the *band-wagoning* effect (Samuel P. Huntington, "The Clash of Civilization," *Foreign Affairs* 72, no. 3 (Summer 1993): 41) And iii. to *balance* the West by developing economic and military power and cooperating with other non-Western societies *against the West* while preserving indigenous values and institutions (ibid). Thus, the "Isolation, Hegemony, and Hostility" are reverse to Huntington's responses, respectively, regarding Western media's influence on non-Western civilizations.

²⁹² For instance, for Said in his 1978 book, a Palestinian Arab living in America deploys the tools and techniques of his adopted professional location to discern the manner in which cultural hegemony is maintained (Bill Ashcroft and Pal Ahluwalia, *Edward Said* (London and New York: Routledge, 2001).

culture(s)/peoples' dilemma illustrated, we built a game-theoretic model through which we attempted to explain the actions and probabilities of both the Occident and the Orient in a media representation and politics-based Clash of Civilizations Game as it comes below.

4.2.3. The Model's Assumptions, Description, and Information

4.2.3.1. Theoretical Assumptions of the Clash of Civilizations Game

Defining a civilization, Huntington showed that it is “a cultural entity, villages, regions, ethnic groups, nationalities, religious groups, all have distinct cultures at different levels of cultural heterogeneity... A civilization is... the highest cultural grouping of people and the broadest level of cultural identity.”²⁹³ Moving from this perspective, we assumed existing global, regional, and national levels of the clash of civilizations. Both the first and second levels occur among states from different civilizations competing globally or regionally, or/and between groups of people belonging to states from each distinct civilization, where the clash might occur violently or non-violently. More specifically, a civilization consists of “common objective elements, such as language, history, religion, customs, institutions, and by the subjective self-identification of people.”²⁹⁴ Accordingly, the third level of the clash of civilizations we assumed to be a “major or sub-civilizations clash occurring *intra-state*.” Namely, the national level of the clash. Our model aimed to settle the *clash of sub-civilizations* in a given society, that is, of Turks versus Kurds _ where this clash's constituted groups represent two subdivisions of a broader *Islamic Civilization*. Essentially, the *Clash of Civilizations Game* is based on these theoretical assumptions:

Assumption I: A cultural unipolarity's global system²⁹⁵ (i.e., Western cultural hegemony system); a cultural multipolarity's discriminatory regional system of the Orient, excluding (major) minority Eastern cultures (i.e., Iranian and Israeli/Jewish cultures among the East's dominant cultures, say, the Arabic, Turkic, Hindu, and Confucian); and a cultural

²⁹³ Huntington, “The Clash of Civilization,” 23-24.

²⁹⁴ Ibid, 24.

²⁹⁵ Polarity is a condition that defines the distribution of (economic, military, and political) power amongst the great powers of the global international system. A system with a single great power dominating it is *unipolar*, with two great powers is *bipolar*, and that with three or more great powers is *multipolar*. Our study employs the *polarity* concept to refer to the “*distribution of cultural power*,” instead, on global, regional, and national levels of an inter-and-intra-state system.

unipolarity's national system of the Oriental itself, are all but proportionally *causes* of the clash of civilizations globally, regionally, and nationally, respectively. Such a clash did/does coincide with the transformation of media discourse, at all mentioned levels, from a state of (non-equivalent cultural representation of the Other) formula to another of (representing cultural conflict-based (biased) principles against the Other).²⁹⁶ These cultural systems combined, we assume, did/do contribute to exacerbating the occurrence of transnational, regional, or/and national terrorism phenomenon.

Assumption II: A cultural bipolarity's global system representing the West/North and the East/South in a balance of culture relationship; a cultural multipolarity's including regional system of both dominant and (major) minority Oriental cultures in the (Middle) East; and an equivalently representing cultural bipolarity's national system of a nation-state's two major (disputing) cultures, are entirely surrogate choices for a cultural conflict's de-escalation-based-policy making, at all levels.

4.2.3.2. The Game-Theoretic Model's Description and Information

Description: A game-theoretic model has been built with different strategies and actions to illustrate the incentives and (actual) strategic alternatives in the clash of civilizations at national, regional, and global levels. Based on applying the normal form representation of game theory and that of the extensive form in a non-cooperative dynamic *Clash of Civilizations Game (CCG)*, we analyzed the strategic behavior of two players on three level-analysis (see Table 6; Figure 21). The model can be described as follows: First: The players of (CCG): 1- Occident, at the global level of the game (Western civilization); 2- Israelis, at the regional level (Jewish civilization); 3- Turks, at the national level (Islamic/Turkic civilization). Those players represent Player I on a three-level analysis' game. Similarly, Player II is 1- Orient (Eastern civilization) vs. Occident; 2- Arabs (Islamic civilization) vs. Israelis; 3- Kurds (Islamic civilization) vs. Turks in a *clash of sub-civilizations*. Second: For the (CCG) in the normal form: The model shows the set of actions/strategic preferences of all players in the game, the moving sequence of each

²⁹⁶ The "Other" in our study's assumptions and the developed theoretical approach represents the Orient (Eastern peoples or/and cultures) globally, *major* minority peoples or/and cultures regionally, and a nation-state's *major* minority people or/and culture nationally. For the (CCG) in the extensive form, the description of the Other is the same on the global and national levels, considering that the Other is the (*conflicting*) peoples or/and cultures of the region (Middle East) on the regional level: (Arabs vs. Israelis).

player, and the information set every actor has about the game. The normal form is distinguished by the simultaneous nature of the game's move and that no player knows the payoffs received when picking any move or at the end of the game, given the uncertainty about the other(s)'s actions. Third: For the (CCG) in the extensive form: It is known for all players, in a game of complete information, the other player(s)'s strategic preferences, the payoffs received by each when picking any action from a player's own set, and the would-be outcome when reaching an equilibrium of the game.

Information: Based on our description, the Clash of Civilizations Game is considered an incomplete or imperfect information game in the normal form. That is to say, no player has complete or certain information about the other player's set of actions or the expected payoffs of the game's moves. Thus, the simultaneous nature of this game's moving sequences imposes such uncertainties, leaving Players I and II to merely depend on expectations before picking their actions. In contrast, the Clash of Civilizations Game in the extensive form is a game of symmetric (and complete) information. Each player has the same, and a complete, information set by which both players know the strategic preferences and the expected (future) moves of the other(s), and the received payoffs by picking any action in the game.

Since the Clash of Civilizations Game of our game-theoretic model introduced is dynamic, some players observe other players' behavior, conditioning their future actions on what the other player(s) did at first. The dynamic game, therefore, allows players to enhance their chosen strategies in future moves. Interestingly, in the normal form of the game, such a condition of dynamic play is achieved in a second play of the game. Yet, players move simultaneously but act upon what the other chose first in the first play of the same game. Moreover, in our game, the so-called *subgame perfect Nash equilibrium* is reached at one point. As mentioned in the second chapter that the subgame is a smaller part that emerges from any node of the entire game and continues till the end of this game, which might be played in the future. So, if Nash equilibrium of an extensive form-game is reached to every subgame of it, it is called *subgame perfect*. From here, the concept of subgame perfect Nash equilibrium represents the reasonable solution to the game, noticing that no player shall act upon *incredible* threats or promises.

4.2.4. Game-Theoretic Model in the Normal Form Representation of Game Theory

4.2.4.1. Description of the Clash of Civilizations Dynamic Game in the Normal Form

In this game, Player I's (Occident/Israelis/Turks) strategic preferences include two choices: {Cultural Understanding (CU); Cultural Conflict (CC)}, picking any in a simultaneous move where no player knows the other player's future action(s). At the same time, Player II's (Orient/Arabs/Kurds) strategic alternatives are: {Cultural Conflict (CC) Irrespective of What Player I Does; Cultural Conflict (CC) If Player I Chose It in the First Play of the (same) Game; Cultural Understanding (CU) Irrespective of What Player I Does}, as provided in Table 6. If chosen by any in the game, the (Cultural Understanding) strategy comprises a. *global, regional, or domestic politics level*: the agreements or non-clash policies with the other player militarily, politically, and diplomatically.

Table 5: Actions and Probabilities of the Clash of Civilizations Dynamic Game in the Normal Form Representation of Game Theory

		Orient/Arabs/Kurds		
		(CC) Irrespective of What Player I Does	(CC) If Player I Chose It in the First Play of the Game	(CU) Irrespective of What Player I Does
Occident/ Israelis/ Turks	<i>p</i> (Cultural Conflict)	<i>p</i> ₉	0.5	<i>p</i> ₁₀
	<i>p</i> (Cultural Understanding)	<i>p</i> ₁₂	0.5	<i>p</i> ₂₀
<u>Assumptions:</u> i. $p_9 + p_{12} = 1$; $p_{10} + p_{20} = 1$ ii. $p_{12} < p_9$; $p_{10} < p_{20}$				

Source: Prepared by the author.

And b. *media and publics level*: a variety of actions related to pro-representations of the other player in the media discourse of both, at all levels, first, and governments-guided *productive* social interactions between Player I and Player II's public masses, communities, or/and societies, second. The (Cultural Conflict) strategy is the opposite of that as a whole or in part, which might be used violently or non-violently according to each player's actions ordering with every chosen move. We assumed that {*p* (CC), and *p*

(CU)} are the probabilities of Player I's using of (Cultural Conflict) and (Cultural Understanding) strategies, respectively, simultaneously with Player II's moves, see Table 5.

4.2.4.2. Analysis

This game shows six probabilities of the strategic moves, see Table 6, these are: i. If Player I picks (Cultural Conflict 'CC') action and Player II chooses (Cultural Conflict (CC) Irrespective of What Player I Does) move, simultaneously. Then both players will be worse off with payoffs (0, 0) in the game.

Table 6: The Clash of Civilizations Dynamic Game in the Normal Form

Representation of Game Theory

		Orient/Arabs/Kurds		
		<i>(CC) Irrespective of What Player I Does</i>	<i>(CC) If Player I Chose It in the First Play of the Game</i>	<i>(CU) Irrespective of What Player I Does</i>
Occident/ Israelis/ Turks	<i>Cultural Conflict</i>	(s_{10}, b_{10}) $(0, 0)^*$	(s_9, b_{13}) $(-1, 1)^{**}$	(s_{13}, b_9) $(0, 1)^{***}$
	<i>Cultural Understanding</i>	(s_{12}, b_{12}) $(1, 0)^{***}$	(s_{12}, b_{12}) $(1, 0)^{****}$	(s_{20}, b_{20}) $(2, 2)$
* <i>Actual Case</i> ** <i>Terrorism Threat Case</i> *** <i>Peace Initiative in a Violent or Non-Violent Cultural Conflict</i> **** <i>Containment Policy's Implementation Case</i> <u>Assumptions:</u> i. $s_{10} > s_9$; $s_9 < s_{12}$; $s_{20} > s_{10}$; $s_{10} < s_{12}$; $s_{12} < s_{20}$; $s_{10} \geq s_{13}$ ii. $b_{10} < b_9$; $b_{12} < b_9$; $b_{10} \geq b_{12}$; $b_{20} > b_9$; $b_{10} < b_{13} < b_{20}$; $b_{13} = b_9$ iii. $s_{20} = b_{20}$; $s_{12} = b_9$				

Source: Prepared by the author.

ii. If Player I moves to (CC) action with Player II's using the (Cultural Conflict (CC) If Player I Chose It in the First Play of the Game) strategy. When the latter picks its move, conditioning it on what Player I did by choosing (CC) in the first play of the same (simultaneous) game. Here, the threat of *culture dissimilarity-based terrorism* arises by shifting (Cultural Conflict) action, taken by Player II before, from a state of *non-violence* into another of *violence*. Player I will be *severely* worse off, and Player II becomes better

off, with payoffs (-1, 1) for both consecutively, where $(-1 < -0.5 < 0 < 0.5 < 1 < 1.5 < 2 < 3)$ in the Clash of Civilizations Game.

The reason is that Player II observes Player I's behavior in this dynamic game. The matter that enhanced the former's future strategies, allowing him to choose its *best response* even if in a simultaneous-move game distinguished by *uncertainties* about each player's actions but mere *expectations*. The last action interprets one aspect of the security dilemma related to the phenomenon of trans-national, regional, and national terrorism, respectively. iii. In this possibility, Player I picks (CC) from his set of actions, and Player II chooses to move to (Cultural Understanding (CU) Irrespective of What Player I Does) strategic preference. Player I, thus, is worse off, and player II becomes better off, with payoffs (0, 1). That explains the case of advancing towards implementing a *peace initiative* as an action taken by Player II, either in a violent or non-violent cultural conflict. iv. If Player I moves to (CU) strategic alternative, while Player II chooses ('CC' Irrespective of What Player I Does) action. Player I, in this case, is better off (achieving cultural hegemony, or/and the neutralization of the cultural conflict), and Player II will be worse off (acting by hostility in a de-escalated cultural conflict), with accumulated payoffs: (1, 0). Using that pair of strategies is a reversal of another case of going to a peace initiative _ an action taken by Player I this time, in a violent or non-violent cultural conflict, whereas Player II insists on choosing (CC). v. Suppose Player I picks (CU) action simultaneously with Player II's choosing of ('CC' If Player I Chose It in the First Play of the Game). Player I's strategy chosen coinciding with that of Player II in an actual case will be a temporary "exit" for the culture dissimilarity-based-terrorism dilemma. That reflects the implementation of containment policy (taken by Player I) for containing the violence (if there is) caused by Player II (only some groups from the Orient/Arabs/Kurds) by peaceful means. Thence, Player I becomes better off while disrupting Player II's action (if taken by some groups). The payoffs will be (1, 0) for Player I and Player II, respectively. vi. Changing his alternatives, Player II moves to ('CU' Irrespective of What Player I Does) simultaneously with Player I choosing (CU) action. One of the game's equilibria will occur with payoffs (2, 2), where both players receive the highest (and stable) outcome when using that pair of strategies in this sequential-move game. By reaching this position, no player as a rational actor would have the incentive to deviate. The payoffs of the entire game are shown in Table 6.

4.2.4.3. Outcomes and Conclusion

In this game, (Cultural Conflict ‘CC’) is a dominated strategy for Player I only, based on Table 6 assumptions. Where: $\{b_9 = b_{13}\}$ for Player II, and $\{s_{12} > s_{13} > s_9\}$ for Player I. The latter, then, becomes worse off whenever he picks (CC) regardless of what Player II chooses. Whereas the threat of culture dissimilarity-based-terrorism does continue, for the same reason; if Player II (only some terrorist groups) was a “violent” actor and preferred (b_{13}) to (b_9) considering that both (b_9 and b_{13}) yield rationally equal payoffs for him, while (b_{13})’s related action damages Player I’s gains in the game. On the other hand, (Cultural Understanding ‘CU’) is a strictly dominant strategy for this game since each player is better off whenever choosing it. Therefore, we have a dominant strategy equilibrium for the Clash of Civilizations Game in the normal form, that is: using $\{(CU), (CU \text{ Irrespective of What Player I Does})\}$ pair of strategies by Player I and Player II, respectively.

Finally, according to these configurations: i. The assumptions in Table 5, showing that ($p_{12} < p_9$), and ($p_{10} < p_{20}$). ii. The “*actual case*” of existing violent or/and non-violent cultural conflict between groups of people, and states from different civilizations, based on *The Clash of Civilizations* theory argued by Huntington 1993.²⁹⁷ iii. Player I’s deviating from his dominant strategy “(CU)” in the game into his dominated one “(CC)” in some *Realpolitik*²⁹⁸ situations, which can be ascribed to the *Hobbesian human nature*²⁹⁹

²⁹⁷ For Huntington, the main hypothesis of the Clash of Civilizations theory is that “the fundamental source of conflict in this new world will not be primarily ideological or primarily economic. The great divisions among humankind and the dominating source of conflict will be cultural... the principal conflicts of global politics will occur between nations and groups of different civilizations. The clash of civilizations will dominate global politics. The fault lines between civilizations will be the battle lines of the future” (Huntington, “The Clash of Civilization,” 22). Considering the clash as being violent or non-violent, Huntington argued that “the clash of civilizations... occurs at two levels. At the microlevel, adjacent groups along the fault lines between civilizations struggle, often violently, over the control of territory and each other. At the macro-level, states from different civilizations compete for relative military and economic power, struggle over the control of international institutions and third parties, and competitively promote their particular political and religious values” (ibid, 29).

²⁹⁸ *Realpolitik* is seen as a reversal of the Machiavellian concepts of *interest and necessity* upon which the ruler’s or a state’s policies arise and continue in a state of cross-international actors’ competition, for best serving the state’s interests and strengthening it (Kenneth N. Waltz, *Theory of International Politics* (The USA: McGraw-Hill, 1979)).

²⁹⁹ Gaskin, editing Thomas Hobbes’s “*Leviathan*” book (1651) with an introduction, has mentioned that Hobbes identifies the (*Hobbesian*) *State of War* from this perspective: “given that human nature is commonly concerned with self-preservation, and with the attaining of whatever each individual holds to be his or her personal and individual good, its unrestrained outcome will be a miserable conflict of isolated individuals, each taking what he can get” (Thomas Hobbes, *Leviathan*, ed. J. C. A. Gaskin (USA: Oxford University Press, (1651, 1996)), XX). Gaskin continues demonstrating that “Hobbes’s state of war is

(1651) manifesting obviously in shifting an optimal strategic behavior of (CU) that should be taken by each player as a rational actor in the *Clash of Civilizations Game*, into a non-optimal one of (CC) in (one) actual case. iv. And that (Cultural Understanding) is the *dominant strategy* for both players in the game.

We argue, therefore, that the equilibria for the *Clash of Civilizations Game* in the normal form are using these pairs of strategies by Player I and Player II, consecutively: 1- {(CC), (CC Irrespective of What Player I Does)}; 2- {(CU), (CU Irrespective of What Player I Does)}. Based on the last equilibrium, we prove the validity of our first hypothesis: A game-theoretic model built on the normal form representation of game theory and based on media discourse and politics contributes to settling violent or non-violent (present/future) aspects of the clash of civilizations, coinciding with reaching the equilibrium/solution to this game.

4.2.5. Game-Theoretic Model in the Extensive Form Representation of Game Theory

4.2.5.1. Description of the Clash of Civilizations Dynamic Game in the Extensive Form

In this symmetric and complete information game of sequential-move nature, Player I's strategic alternatives include: {Culture Understanding + Hegemony with Non-Equivalent Representation of the Other (CU + HNERO)}; {Cultural Conflict (CC)}; and {Cultural Understanding + Balance of Culture with an Equivalent Representation of the Other (CU + BCERO)} actions. Player II has a broader set of strategic preferences, conditioning his (future) choices on what Player I _ who has the first play advantage, did at first by observing his behavior. Those preferences are: {(Subordination); (Isolation); (Hostility); (Clash); (Threat/Terrorism); and (Cultural Reciprocation)}, see Figure 21. In the same context, we assumed that Player I has a *mixed strategy* of two strategic preferences to choose from them in the game's first stage, and he starts a subgame in a second phase,

realistic in the sense that it would be the inevitable outcome of human nature if human nature is in fact the acquisitive, competitive, fearful, egocentric thing Hobbes identifies" (ibid, XXXII).

Thus, the game's first equilibrium reached above agrees with the Classical Realists' (identified below) argument in terms of ascribing (one) cause of the (clash)/conflict or war to Hobbesian human nature. Here, the {(Cultural Conflict), (Cultural Conflict)} equilibrium has achieved stable (not highest) payoffs for players in Huntington's Clash of Civilizations thesis, and therefore, in our game's one *actual* case.

using a *pure strategy* (only one choice). Player II, however, uses a *mixed strategy* (more than one choice) in the game's two stages. The actions and probabilities of stage I, and stage II of the game, are shown in Table 7 and Table 8, in which $\{p(CU + HNERO); p(CC); \text{ and } p(CU + BCERO)\}$ are the probabilities of Player I's choosing of his strategies mentioned, with Player II's (conditioned) actions. The potential outcomes of the game, accordingly, are illustrated in Table 9.

Table 7: Actions and Probabilities of Stage I

		Orient/A/K			
		<i>Subordination</i>	<i>Isolation</i>	<i>Hostility/Clash</i>	<i>Threat/Terrorism</i>
Occident/I/T	$p(CU + HNERO)$	p_1	p_2	p_3	0
	$p(Cultural\ Conflict)$	p_{21}	p_{22}	p_{23}	1
<u>Assumptions:</u> i. $p_{21} + p_1 = 1; p_{22} + p_2 = 1; p_{23} + p_3 = 1$ ii. $p_{21} < p_1; p_2 < p_{22}; p_{23} > p_3$					

Source: Prepared by the author.

4.2.5.2. Stage I: Prior to 2020 and Beyond

In this phase of the game, there are two possibilities. The first is that Player I (Occident/Israelis 'I'/Turks 'T') prefers to pick (CU + HNERO) choice from his set of actions, while Player II (Orient/Arabs 'A'/Kurds 'K') in a sequential move chooses from among: $\{(Subordination); (Isolation); (Hostility)\}$ actions. In the second, Player I moves to (Cultural Conflict) choice, where the picked moves by Player II will be changing, partially, according to the change occurring in Player I's behavior. The last allows Player II to randomize his strategic moves, choosing between these preferences: a- Subordination; b- Isolation; c- Clash; d- Threat/Terrorism. Therefore, the payoffs³⁰⁰ of the game in the first stage can be explained through these two cases:

³⁰⁰ The expected payoffs of the entire game are parallel with both players' strategic actions' outcomes. Here, we defined the major *outcomes* of picking two *strategic preferences* by Player I and Player II, consecutively, in the sequential-move game, according to the following categories: a- The *Non-Equivalent*

Case I: When Player I prefers (CU + HNERO) strategic choice; the payoffs for Player I and Player II, respectively, become: a- (1, 0) if Player II moves to (Subordination) action, where Player I will be better off, and Player II worse off. b- (0, 0.5) if (Isolation) is chosen by Player II, who becomes adequately better off, and Player I will be worse off. c- (0, 1) if Player II prefers (Hostility) choice in response to Player I's action. Player II now is better off by propagating for (or/and sustaining) an *alternative cultural self-hegemony project* on a global, regional, or national/local level, while Player I becomes worse off.

Case II: When Player I moves to (Cultural Conflict) strategic alternative; the payoffs change predominantly: a- (1.5, 0) if Player II chooses (Subordination), who becomes worse off whereas Player I will be increasingly better off. b- (0, 0.5) if Player II picks (Isolation) move to be adequately better off, while Player I is worse off. c- (0, 0) if Player II responds by moving to (Clash) choice. Both players become worse off. d- (-1, 1) if Player II (only some “terrorist” groups of the Orient/Arabs/Kurds) chooses (Threat/Terrorism) action, committing violent behavior expresses acts of transnational, regional, or national terrorism, respectively. Player I, here, is severely worse off, and Player II is better off.

4.2.5.3. Stage II: The Subgame, “Future Play!”

Avoiding “credible” threat in case of (Threat/Terrorism) strategic preference is being chosen by Player II (only some groups), Player I moves to a subgame emerging from the (Threat/Terrorism) node, thus changing his strategy from an “actual case” of choosing (Cultural Conflict), to another of using (Cultural Understanding + Balance of Culture with an Equivalent Representation of the Other).

Cultural Representation (NECR)/Cultural Subjugation (CS) strategy is an outcome of choosing {Cultural Understanding with Hegemony and Non-Equivalent Representation of the Other + Subordination} strategic actions. b- The *Mutual Cultural Non-Equivalency (MCNE)/Parallel-Ignoring (PI)* strategy, results from using {Cultural Understanding with Hegemony and Non-Equivalent Representation of the Other + Isolation}, or {Cultural Conflict + Isolation} strategic choices. c- The *Pushing Back (PB)* strategy equals picking {Cultural Understanding with Hegemony and Non-Equivalent Representation of the Other + Hostility} strategic preferences. d- The *Equivalent Cultural Reciprocity (ECR)* strategy, when choosing {Cultural Understanding with a Balance of Culture and an Equivalent Representation of the Other + Cultural Reciprocation} preferences. e- The *Cultural Subjection (CS)* strategy occurs by moving to {Cultural Conflict + Subordination} actions. f- The *Cultural Conflict Matureness (CCM)* strategy, equals choosing {Cultural Conflict + Clash} moves. g- The *Omnipotent Cultural Conflict (OCC)* strategy, occurs when preferring {Cultural Conflict + Threat/Terrorism} strategic actions. See Figure 21.

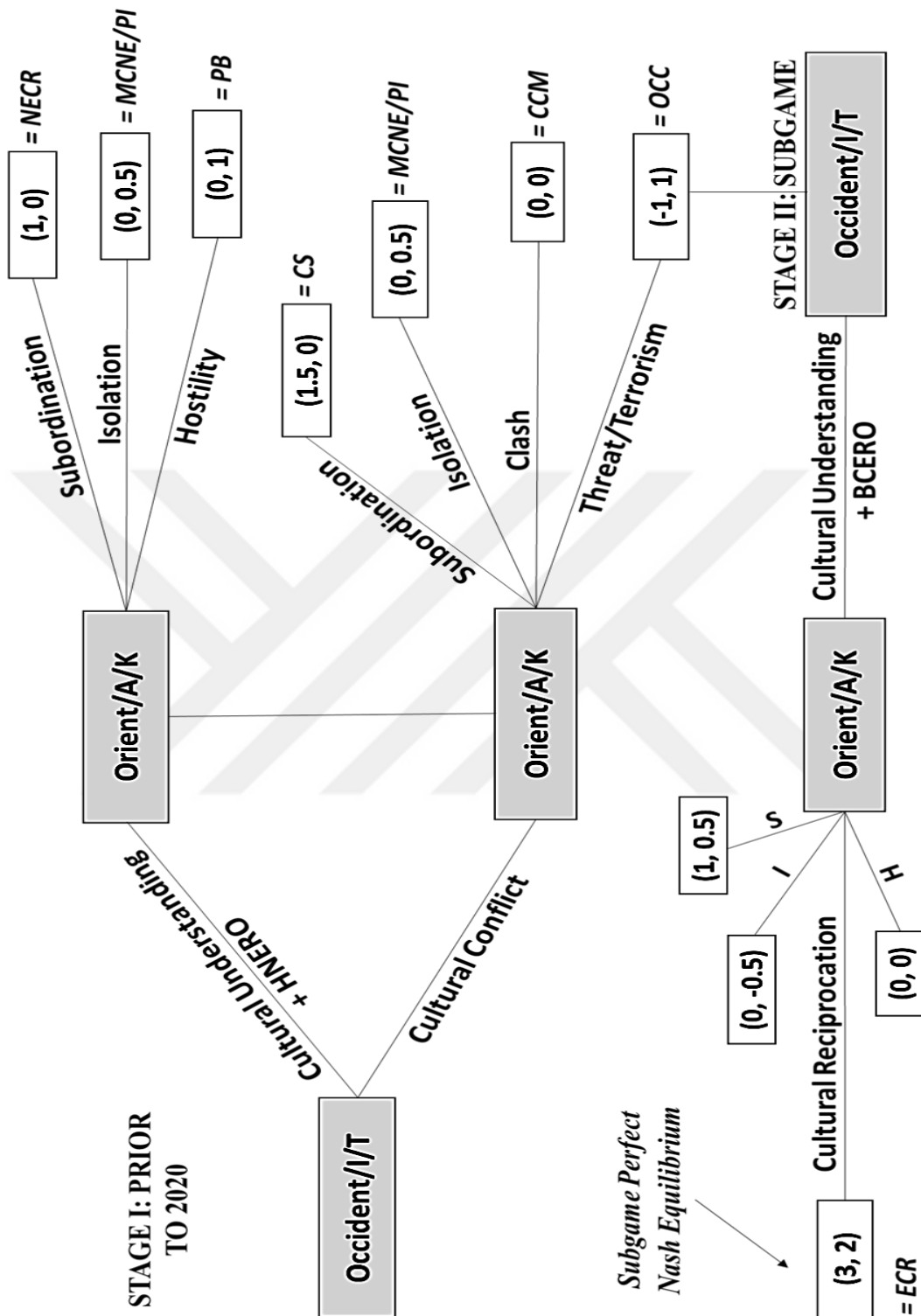


Figure 21: Strategic Options of the Clash of Civilizations Dynamic Game in the Extensive Form with Subgame Perfect Nash Equilibrium

Source: Prepared by the author.

Thence, there will be four strategic preferences Player II has, given Player I's pure strategy; these are: {Subordination; Isolation; Cultural Reciprocation; Hostility}. With Player I's using of (CU + BCERO) (pure)strategy, the payoffs received will be changing, subsequently, as follows: a. If Player II prefers (Subordination 'S'), he will not be worse off, with payoffs: (1, 0.5). b. On the other hand, if Player II picks (Isolation 'I') action, he becomes adequately worse off, losing the outcome of choosing (Cultural Reciprocation). In comparison, Player I will not be worse off as Player II, with payoffs (0, - 0.5) in this case. c. Likewise, suppose Player II moves to (Hostility 'H') choice _ as an irrational actor in terms of the (CU + BCERO) strategy used first by Player I. In that case, both players will be worse off, with no gains/payoffs "(0, 0)" for any in the game. d. Player II is more likely assumed to choose (Cultural Reciprocation) strategic alternative in a sequential move as a rational actor.

Since his future payoffs will be stable and the highest that he can receive in the game, depending on his own rationality where $\{2 > 1 > 0.5 > 0 > - 0.5\}$, and, also, on Player I's rationality where (CU + BCERO) (pure)strategy is the latter's *best choice* that results in its highest (and stable) payoffs with Player II's move parallelly. No player, thus, will be worse off. Instead, both players are better off with an outcome: (3, 2), making their *best response* in the (sub)game simultaneously, and multiplying the payoffs' maximum received ever by each of them in the entire game. Given eliminating the probability of picking (*Threat/Terrorism*) choice that could have been chosen by Player II (*only some groups*) if Player I would *not* have altered his (mixed) strategy '(CC),' in the subgame, see Figure 21.

Table 8: Actions and Probabilities of Stage II

		Orient/A/K			
		<i>Subordination</i>	<i>Isolation</i>	<i>Cultural Reciprocation</i>	<i>Hostility</i>
Occident/I/T	$p \text{ (CU + BCERO)}$	p^4	p^5	p^6	p^7
<u>Assumptions:</u> i. $p^4 + p^5 + p^6 + p^7 = 1$ ii. $p^4 > p^7; p^5 > p^7; p^6 > p^4; p^6 > p^5$					

Source: Prepared by the author.

Ultimately, there are five outcomes with a higher probability for the *Clash of Civilizations Game* in the extensive form in which Player I has the first play advantage, based on the whole game's assumptions shown in Table 7 and Table 8. These outcomes are: i. (occ1, or1) of choosing the {(CU + HNERO), (Subordination)} strategic preferences, where (occ1) represents an outcome for Player I (Occident/Israelis/Turks), and (or1) is an outcome for Player II (Orient/Arabs/Kurds). ii. (occ2, or2) of picking {(Cultural Conflict 'CC'), (Isolation)} strategic choices. iii. (occ3, or3) of moving to {(CC), (Clash)} actions. iv. (occ4, or4) of preferring {(CC), (Threat/Terrorism)} moves. v. (occ5, or5) of choosing {(CU + BCERO), (Cultural Reciprocation)} strategic preferences. In the recent four cases, (occ2, occ3, occ4, occ5) are considered outcomes for Player I, whereas (or2, or3, or4, or5) represent outcomes for Player II; see, Table 9.

Table 9: Outcomes of the Clash of Civilizations Game in the Extensive Form³⁰¹

		Orient/A/K				
		<i>Subordination</i>	<i>Isolation</i>	<i>Hostility/Clash</i>	<i>Threat/Terrorism</i>	<i>Cultural Reciprocation</i>
Occident/I/T	<i>CU + HNERO</i>	(occ1, or1)				
	<i>Cultural Conflict</i>		(occ2, or2)	(occ3, or3)	(occ4, or4)	
	<i>CU + BCERO</i>					(occ5, or5)
<u>Assumptions:</u> i. $occ5 > occ1 > occ2 \geq occ3 > occ4$ ii. $or5 > or4 > or2 > or1 \geq or3$						

Source: Prepared by the author.

4.2.5.4. Outcomes and Conclusion

The Clash of Civilizations Game in the extensive form is ended in its first stage with both players having variable and unstable outcomes, namely, without reaching an equilibrium.

³⁰¹ It is worth noticing that the (*Hostility*) action is one of the strategic preferences for Player II if, only, Player I picked the {(CU + HNERO); or (CU + BCERO)} choices. Otherwise, it is the {(Clash); and (Threat/Terrorism)} choices that exist, instead, if Player I uses the (CC) (mixed)strategy, see Figure 21.

Then, a subgame starting from the (*Threat/Terrorism*) node has represented a future direction of the game, where Player I changing his strategic preferences, played only a pure strategy, that is, the (CU + BCERO). Here, moving to the {(Cultural Understanding + Balance of Culture with an Equivalent Representation of the Other), (Cultural Reciprocation 'CR') } strategic alternatives by Player I and Player II, respectively, simultaneously in a sequential move, becomes the *best response* for both in the entire game, based on the assumptions in Table 7, Table 8, and Table 9. In sum, using the {(CU + BCERO), (CR)} pair of strategies is the *subgame perfect Nash equilibrium* of the (CCG) in the extensive form given that no player acts upon “*incredible*” threats or promises.

Theoretically, a subgame perfect Nash equilibrium requires that the predicted solution to a game be a Nash equilibrium in every subgame.³⁰² Comparingly, if Player I, having the first-move advantage, starts a subgame _ using the (CU + BCERO) (pure) strategy, from any node of the {(CU + HNERO); or (Cultural Conflict)} branches. Namely, to be initiated from the nodes of (Subordination); (Isolation); (Hostility); or (Clash) _ rather than starting it from the (*Threat/Terrorism*) node. The reached subgame perfect Nash Equilibrium will be a fixed outcome in every subgame and the solution to the entire game. In a similar context, this equilibrium can be achieved using the backward induction³⁰³ for reducing the extensive form of the Clash of Civilizations Dynamic Game and its strategic options shown in Figure 21. Again, choosing the {(CU + BCERO), (CR)} pair of strategies will appear, *directly*, as the *subgame perfect Nash Equilibrium* _ where no player as a *rational actor* would have the incentive to deviate from those stable outcomes and the highest payoffs received ever in the game. Based on the mentioned results, we prove the validity of our second hypothesis: A game-theoretic model built on the extensive form representation of game theory and based on media discourse and politics contributes to settling violent or non-violent (present/future) aspects of the clash of civilizations, coinciding with reaching the equilibrium/solution to this game.

Finally, we argue that the sequential, and simultaneous move's nature of the Clash of Civilizations Game, causes the distinction between the reached equilibria for the game in

³⁰² Graham Romp, *Game Theory: Introduction and Applications* (The USA: Oxford University Press, 1997), 32.

³⁰³ Backward induction is a principle applied to dynamic games in the extensive form that involves ruling out the actions, rather than strategies, that players would not play because other actions give higher payoffs, where this method will give a unique prediction which is the subgame perfect Nash equilibrium (ibid, 33).

the normal form (GNF) from the game in the extensive form (GEF), partially, as follows:

i. It can be said that the {(CU), (CU Irrespective of What Player I Does)} strategies if used, reflect an equilibrium for the (GNF) which is equivalent (but not equal) to this equilibrium: {(CU + BCERO), (CR)}, reached for the (GEF). Given both represent the highest (and stable) outcome for each game's players.

ii. In contrast, while the equilibrium of {(CC), (CC Irrespective of What Player I Does)} for the (GNF) might be mirrored in the (GEF) by choosing the {(CC), (Clash)} strategic preferences, the last cannot be an equilibrium for the (GEF). We prove that based on the assumptions of Tables 5; 6; 8; 9, by this way: If $(p_{12} < p_9)$ where $(s_{10} \geq s_{13}; b_{10} \geq b_{12})$; and if $(p_5 > p_7)$ and $(p_4 > p_7)$ where $(occ2 \geq occ3; or1 \geq or3)$. Then: (s_{10}, b_{10}) , as (one) equilibrium's outcome for the Clash of Civilizations Game in the normal form, in a relation to $\{(s_{13}, b_9); \text{ and } (s_{12}, b_{12})\}$ is not equal (or equivalent) to $(\neq)$ the $(occ3, or3)$ parallel outcome of the game in the extensive form, in a relation to $\{(occ2, or2); \text{ and } (occ1, or1)\}$.

4.2.6. Discussion and Theoretical Development

4.2.6.1. Towards Countering Cultural Conflict-Generated Terrorism

Answering (how could *cultural* conflict-generated terrorism be countered on national, regional, and global levels?) we argue that such an operation is being initiated through modifying the concerned state(s)'s (i.e., Player I's in the "CCG") media discourse itself. Here, a process of producing and reproducing the truths of the Other (i.e., Player II in the "CCG") is needed to be implemented by converting that discourse into an instrument of *containing* that Other culturally, politically, and socially, irrespective of what the Other's "*past*" reality is. Throughout that course, the "*broadest class(es)*" of culturally differentiated groups of people or/and nation(s), on all levels, must be the *target* for which *Cultural Understanding* strategy (defined above) policies and cultural containment-based-media representations (that are culturally balanced and each other's image is equivalent within their portrayals) of the Other are being employed.

Practically, as Player I (Occident/Israelis/Turks) in the Clash of Civilizations Game is the most powerful and dominant one (i.e., economically, militarily, or/and politically) at the different illustrated levels, this player having the first-move advantage proves both the *capability and credibility* of de-escalating current or future (violent/non-violent) aspects

of the *clash of (sub)civilizations*. That is to say that this de-escalation³⁰⁴ is ascertained if Player I alters his (current) used strategy, re-playing an amended one, that is, (Cultural Understanding + Balance of Culture with an Equivalent Representation of the Other).

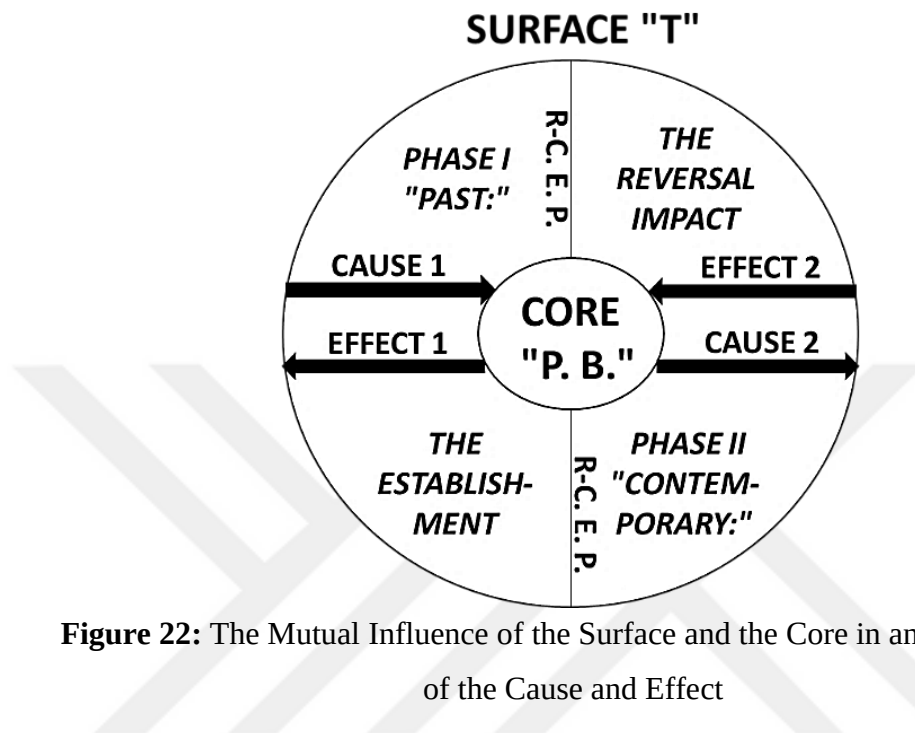


Figure 22: The Mutual Influence of the Surface and the Core in an Interrelation of the Cause and Effect

Source: Prepared by the author.

The solution to the game, in this respect, is reached sequentially, when Player II (groups of the ‘Orient/Arabs/Kurds’ that supported terrorist groups/acts; namely, *the popular base* of terrorism) chooses, as a rational actor, the (Cultural Reciprocation) strategic alternative _ thus “*responding in kind*,” achieving a stable outcome and the highest payoffs received ever in the game.

Furthermore, that followed course is best to prove a “*Denial of the Liar*” strategy in this specific context of observation if the “*Denial*” occurs by Player I’s explained actions vs. the “*Liar*,” some terrorist groups, internalizing the latter’s masses themselves peacefully and permanently. Then, it is a *movement* from the (*Surface change*: of terrorists) into the (*Core’s change*: of their popular base). In this context, we assume that the **Surface** (the terrorists ‘T’) has been the **cause** of the Core (the terrorists’ popular base ‘P. B.’) in the (establishment of the terrorist organization(s)) period, phase I _ the (idea as a seed) stage.

³⁰⁴ In a state of *instability* of peace, “(violent/non-violent) clash,” not in a state of an “active” armed conflict or war.

Alternatively, the **Core**, through a *repeated-cultivated effect's process (R-C. E. P.)* (as an intervening variable-shifted “*exacerbating*” dependent variable) resulted by the Surface in phase I, has transformed to be the **cause** of the Surface in phase II _ the (reversal impact / publicized-matured idea) stage. That mirrors an interrelation between the Surface and the Core in a *cause and effect's mutual influence* process. Where we deal here with phase I's generated-contemporary stage, that is, phase II, as appears through Figure 22.

In sum, the equilibrium of the (CCG) in its relevance to tackling the dilemma of the cultural conflict-generated terrorism will *de facto* occur by Player I and Player II's using of the $\{(CU + BCERO), (CR)\}$ pair of strategies, respectively, in a would-be an actual case of our sequential-move dynamic game, (i.e., the (GEF)). For more success in that trajectory, the following section approaches a developed vision towards paving the way for achieving that equilibrium and beyond in the future, sustainably and more coherently.

4.2.6.2. Media-Liberalized Discursive Realism:³⁰⁵ A Developed Approach

³⁰⁵ Realism is a key theory in the International Relations discipline that emerged through a series of theoretical debates crystallized in the United States after the Second World War (1939-1945), defining the permanent state of the Cold War between the US and the Soviet Union (1948-1991). Through his book “*Leviathan*,” published in 1651, Thomas Hobbes (1588-1679) is considered one of the founding fathers of Realism who believed that human beings are aggressive and acquisitive beasts need a hegemon ruler or government to control them in a *constant state of war* caused by the absence of this ruler. For Hobbes, the world without government in a constant state of war, with no ruler to restore security or impose peace, is a state described as *anarchy*, where this anarchic world forces human beings to seek *survival* (see, Michael Cox and R. Campanaro, *Introduction to International Relations* (London: University of London, 2016)). Therefore, anarchy for Realists is a condition dominating an international system that, if found, stimulates the units (*states*) of the system to secure their survival by the accumulation of power. Since *power* is *relative* according to Waltz, who defined it in terms of the distribution of economic; military; and political capabilities among the system's units, power is thus a necessary condition for achieving state(s)'s *self-interests*, ensuring its *survival* as a *joint goal* for all units/states in a ‘*self-help system*’ (Waltz, *Theory of International Politics*, 111, 118, 131). Here, the system's *polarity* (explained above) is another significant concept for Realists on both the global and regional stages. Agreeing on their organizing principles, both schools of Realism, the Classical Realism emerging after World War II by the work of Hans Morgenthau, and Structural Realism, accept the theory main concepts: statism, survival, and self-help (Cox and Campanaro, *Introduction to International Relations*) or a state's self-building strategies. According to Classical Realism, human beings feel as in Thomas Hobbes's *state of nature* that their lives became nasty, solitary, brutish, poor, and short in a constant *state of war* (see Hobbes, *Leviathan*), where the cause of the conflict or war is ascribed to Hobbesian human nature which is aggressive and flawed. Founded through Kenneth Waltz's 1979 book of ‘*Theory of International Politics*,’ Structural (or Neo-) Realism focuses on the anarchical nature of the international system's structure, interpreting the cause of war by ascribing it to the “*security dilemma*” (Waltz, *Theory of International Politics*, 186-187) of this system's “like units” (ibid, 93). This dilemma emphasizes that each nation as a *rational actor* should seek to secure its interests and survival through the accumulation of power defensively. The condition that is being perceived as a threat by other nations that respond to it by increasing their arming strategies in a similar course, defending their security against any aggression might arise from that, first, increasingly armed nation(s), in a mutual suspicion-based-international system.

This part focuses on answering the other research questions: a- How is *cultural containment* being re-shaped to be a culture balance-oriented strategy for stabilizing the global, regional, and nation-state system's structures? b- How could *real* global peace and security be restored relying on a neo-construction of reality built on a cultural understanding's shared political language within global, regional, and national media discourse? Here, we present an inferred theoretical perspective derived from both this study's related-theoretical approaches and reached results of our game-theoretic model. Accordingly, this developed approach which we called "**Media-Liberalized Discursive Realism**," can be introduced outlining the following:

4.2.6.2.1. Main Premise and a Balance of Culture Model

A "*cultural containment*" mechanism coping with what we consider a "*binary oppositions' dilemma*" of global, regional, and national media discourse is being activated by both the Top (e.g., elites) and the Bottom (i.e., public masses) of the global, regional, and nation-state systems' structures, consecutively. This mechanism is assumed to be operated initially through diffusing "*discursive formations*" by the structures' Top (the global, regional, and national society's ruling class(es), elite(s), hegemon power(s), or/and interest groups), reflecting *containment culture-oriented-media representations* and "*adjusted*" stereotypes of the *Other* (defined above), at all levels _ *the Top level's dependent- "first" changeability*.

The process, in which any *culturally unlike* group(s) of people, or/and nation(s), is being represented *equivalently* as each system's *culturally like people(s) or nations*, culminates gradually in the construction, as an outcome, of a *secure* global, regional, and national environment for various cultures, peoples, or/and nations, to exist homogeneously. Throughout this "*open public sphere*," previously culturally-clashing peoples/nations can communicate *freely* to a- accept and contain (not to clash between) each other _ *the Bottom level-resulted "first" changeability*. And to b- seed and sustain "*equivalent cultural reciprocity-based-individual relationships*," *collectively*, stabilizing these relations *socially* and *politically* depending on using and the exposure to digital and conventional media outlets employed by both (*clashing*) parties (*the Bottom level-resulted "second" changeability*).

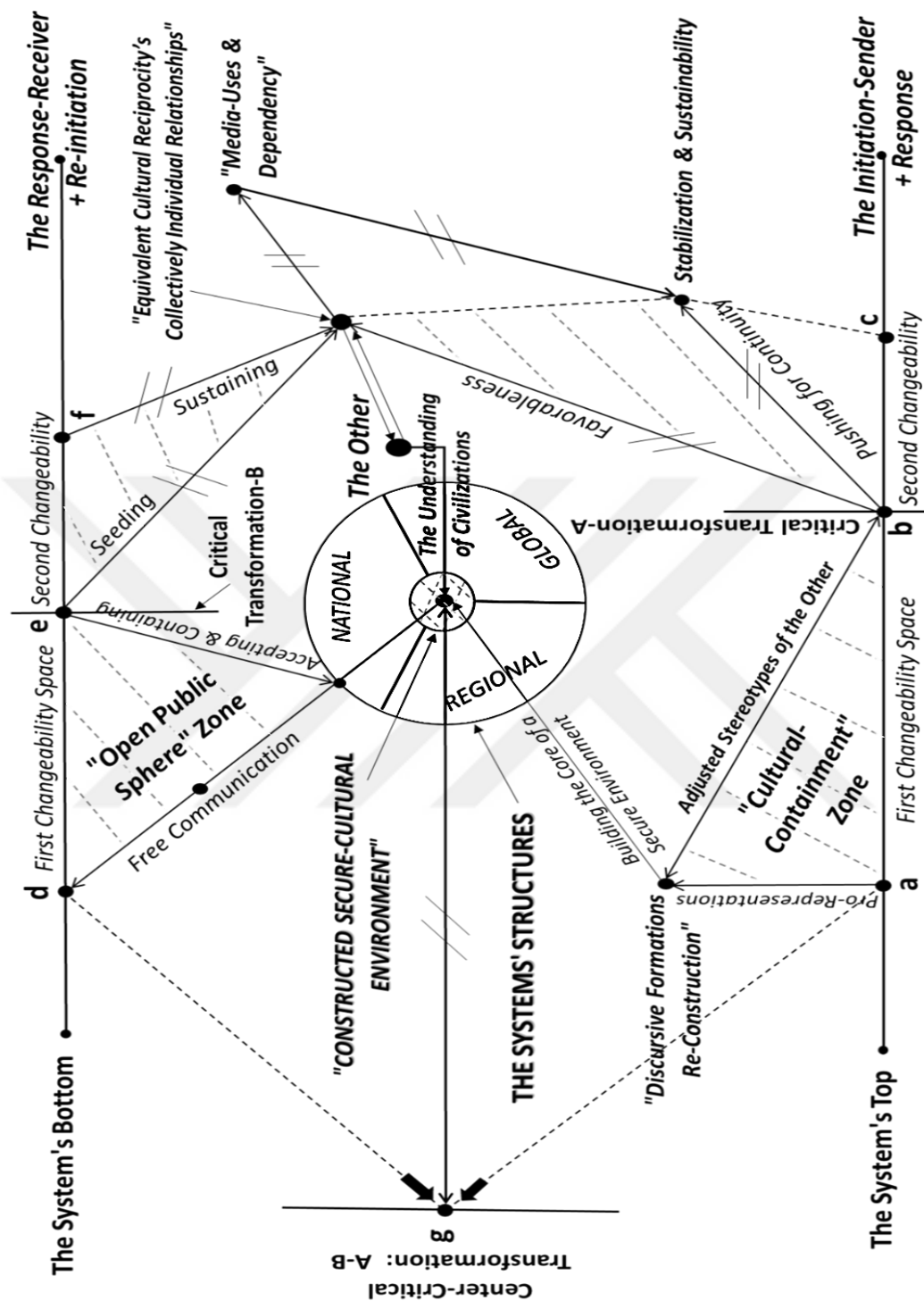


Figure 23: The Balance of Culture Model; Cultural Containment Coping with the Binary Oppositions Dilemma as a Culture Balance-Oriented Strategy for Stabilizing the Global, Regional, and Nation-State System's Structures

Source: Prepared by the author.

The latter relies on the global, regional, and national systems' decision makers' favorableness to such correlation's continuity _ *the Top level's dependent-“second” changeability*. See Figure 23.

Based on that, we reveal how culture containment can be re-shaped to be a culture balance-oriented strategy for stabilizing the structures of the global, regional, and national systems, strategizing what we call a “*balance of culture*” model through Figure 23, illustrating that: i. During its “First Changeability” phase in a *First Movement*, the Top of the global, regional, and national system has the “*Initiation*” opportunity _ which is equal to the *first-play advantage* in game theory. From a mass communication perspective, the Top here is the “*Sender*” within a *political, media, and academia* discourse of “*persuasive*” messages of the “*Cultural Containment Zone*” upon which the “*Response*” results. ii. Sequentially, the Bottom transmits that *Response* of the Top's messages through its moves during the (Bottom's) “First Changeability” phase. Now, the Bottom is the “*Receiver*.” At the same time, the actions of the Top cannot cause the Response if this Sender does not succeed in “Building the *Core* of a Secure-Cultural Environment.” The latter is a “*conditional*” variable in that case. iii. Moving from being the *Receiver*, the Bottom alternates the *first-move advantage* with the Top in a *Second Movement*, “*Re-initiating*” the strategic interactions by the (Seeding & Sustaining) preferences made within its “Second Changeability” phase. iv. Depending on moving to the (Favorableness & Pushing for Continuity) strategic alternatives, the Top reacts shifting to be the “*Response*” to the Bottom's “*Re-initiation*” strategy. v. The *Other* as the third (accepted/contained) actor of the *Second Movement* _ choosing *rationally* to use the “*Respond-in-Kind*” strategy, during the “Bottom-Top's Re-initiation-Response” relationship, sets the cornerstone in achieving the equilibrium of the “*balance of culture*” model entering the “*Understanding of Civilizations*” accumulated outcome into the “*core*” of the Secure-Cultural Environment built in the *First Movement* by the Top's activated actions and reinforced by the Bottom's *responsive* ones. Consequently, the *construction* of that secure environment is completed. vi. Three *focus points* of what we assume to be “*Critical Transformation of the Systems' Structures*” appear through our modeling:

First, the “Critical Transformation-A:” $\{(CT-A) = (ac) - (bc)\}$ where $\{n(ab) > n(bc)\}$ _ given the “*Building of the Core*” effect, if (n) refers to the “*Influence*” required and achieved (give & take) by that point.

Second, the “Critical Transformation-B:” $\{(CT-B) = (df) - (ef)\}$ where $\{n(de) \geq n(ef)\}$ _ given the *Re-initiation* (second) movement starting from the (ef) space with the “*optimal*” outcome resulted in the *core*.

Third, the “Center-Critical Transformation: A-B:” $\{(CCT-AB) = (ag) + (dg)\}$ where $\{N(ag) = N(dg)\}$ _ if (N) is the “*Total Influence*” of the Top or the Bottom by the reached accumulated point, that is, the *Dual-First Changeability Space*.

Reaching the “(CCT-AB)” point, here, is *parallel* to reaching the point of the “Establishment (E) (not a final *Construction* yet) of a Secure-Cultural Environment (S-CE).” **Then:** $\{(CCT-AB) \parallel E(S-CE)\}$ _ where the *parallel lines* used in Figure 23 refer to existing *actual* parallel relationships between the points/actions of every two marked arrows of a triangle in real-world events.

4.2.6.2.2. Key Theoretical Assumptions

Assumption 1: Given that the international global and regional political system’s structure is anarchic, entailing the non-existence of relations of super-and subordination among its units (states), where there is no central authority of a system defined by anarchy (Waltz, 1979). Each civilization of the system’s units, we assume, seeks *survival* competing with other (sub)civilizations nationally, regionally, or/and globally. That has caused the emergence of a. a global system of cultural unipolarity, in which the Western civilization is the central hegemon; b. an Oriental regional system of discriminating cultural multipolarity; c. a hierarchic state-system of a mainstream culture-dominated national one. The flaws of these systems, respectively, in representing the *Other* equivalently, tend to be causes of the clash of civilizations. Where each nation (or/and groups of people) _ either culturally predominant or marginalized in a system, persists in fulfilling *cultural self-help* strategies, for sustaining its belonged (sub) civilization’s own survival at the expense of other (sub)civilizations’ one, cooperating with the system(s) ’s units (states/actors) for/with preserving this objective or/and clashing with others defending it.

Assumption 2: As Huntington identified that the most important conflicts of the future to have occurred along the cultural fault lines separating these civilizations: “Western, Confucian, Japanese, Islamic, Hindu, Slavic-Orthodox, Latin American and possibly African civilization”³⁰⁶ from one another. A *balance of culture* globally, regionally, and nationally, which can be seen as a remedy for the clash of civilizations dilemma, is assumed to be maintained as long those *major* civilizations preserve their survival, shaping three kinds of a “balance of culture” system:³⁰⁷ a- *A global system of cultural bipolarity*, representing the *Western* civilization, and the “*Rest*” of Huntington’s identified non-Western civilizations, equipollently. The purpose, here, is “to maintain the stability of the system without destroying the multiplicity of the elements composing it.”³⁰⁸ Then, such a cultural-bipolar system is a *reverse in virtue* to a *multipolarity’s* global political system of major powerful states (principal civilizations in a global *cultural* system) coexisting peacefully, rather contending for mastery.³⁰⁹ b- *A regional system of equivalently representing cultural-multipolarity* of both the *dominant* cultures and the *major* minority ones of the system. And c- *a nation-state’s system of cultural bipolarity*, expressing the *mainstream culture* in society and the *predominant subculture* of it, at an equal foot. The three forms of systems are assumed to compose a *stable* domain for conducting “*optimal*” strategic cultural interactions among any system’s units of states/actors (level A of interactions) and between the system’s subjects themselves of ordinary individuals consuming media-supply re-constructs *properly* neo-pro-representations of the *Other* (level B of interactions).

Assumption 3: The global, regional, and national politico-cultural media information system is constituted of a hierarchic-anarchic structure at all levels. The system structure’s hierarchic nature arises from the existing policies and functions organized between super- and subordinates in the media institutions globally, regionally, and nationally. The anarchic nature, on the other hand, is derived from non-equivalently representative discursive formations constructed by hegemonic political polar/force(s) reflecting: a- Western (unilateral) discourse globally; b- discriminating multilateralism of discourse

³⁰⁶ Huntington, “The Clash of Civilization,” 25.

³⁰⁷ A “balance of culture system” we define, tracing the *main* lines of the “balance of power” system, as a condition in which no single “cultural” power or group of “cultural” powers can overwhelm the other(s) or the *major* minority “cultural” power(s) within this system.

³⁰⁸ Waltz, *Theory of International Politics*, 120.

³⁰⁹ See ‘*Determinants of Polarity*’ in “Waltz, *Theory of International Politics*, 129-131.”

regionally; and c- semi-multilateralism of (unilateral) discourse nationally. All, we assume to be causes of the clash of civilizations' continuity on these three levels, respectively: a- West vs. East; b- dominant regional cultures vs. region's (major) minority culture(s); c- mainstream national culture vs. society's *cultural status quo*-altering subculture. Targeted subjects, thence, for that hierarchic-anarchic media system are, in general, the global public, or/and ordinary citizens, instilled implicitly or explicitly by a renewed "*clash*" principle of a non-existing *present-day* of disputed history of civilizations. Or rather, the target is audiences, their minds cultivated with a still-existing clash/conflict, affected by its "*ended*" past, through using language in both cases within a discourse conveying what became known as *truths*. Revealing the truth of language, "Nietzsche said that 'after long use seem firm, canonical, and obligatory to a people: truths are illusions about which one has forgotten that this is what they are'." ³¹⁰

Assumption 4: *Neo-Orientalism* reversing the *balance of culture* system as one of the nation-state's guarantees for peace and security in its relations to major (minority) culture(s) globally, regionally, and nationally, tends to be an *optimal* strategic mode for settling the clash of civilizations' primary level, as follows: 4.1. A neo-global system of cultural bipolarity consists of both the *West (or North)* and the *East (or South)*, reflects the neo-Orientalism's *secure* global environment. This conditions that their representative images of each other are being constructed to portray emancipated and equal individuals (and cultures) having *patrimonial developed or developing societies*. The representations employed by the West/East ought to be instilled into the global public consciousness for the enlightenment of an "*emancipatory cultural-egalitarianism*" era for the "*understanding of civilizations.*" 4.2. The "*Orient vs. Oriental*" renewed discourses (i.e., in media, politics, academia, etc.), in an equivalently representing cultural-multipolar regional system, embodying unbiased neo-pro-representations of the Other, are considered a *macro-level* of a "*neo-self-Orientalism,*" for settling the clash of civilizations. 4.3. The *Oriental* coping with the *Oriental/itself* intra-state in a cultural-bipolar nation-state's system, representing the Other equivalently _ given an alternative cultural multipolarity's national system is more likely to feed chaos, or inherited/inherent

³¹⁰ Said, *Orientalism*, 203.

cultural conflict(s), becomes a *surrogate* status quo, or a *revisionist* state for settling the clash of (sub)civilizations at a *micro-level* of the neo-self-Orientalism.

4.3. The Conflict Analysis and Management Case “Egypt” and Its Generalization on the Middle East’s Conflicts: Managing the 2013 Egyptian Intra-State Conflict Based on Merged Theoretical Perspective

As the Middle East has become a fertile environment of ethnic, sectarian, ideological, cultural, and religious conflicts, it can be said that it shifted to be an intrinsic ground of exporting radicalization to other countries in the globe, increasingly after the 2001 coalition war against al-Qaeda in Afghanistan, and that of 2003 against the Baathist regime of Iraq. Simultaneously, the outbreak of the Arab Spring revolutions in the 2010s has been an extended cause indeed, to the increase in numbers of conflicts in the region; thus, creating an appropriate climate of conflict-generated-chaos, disorder, and terrorism, reaching the level of all-out wars or internationalized intra-state conflicts in Syria, Yemen, and Libya, for instance.

Accordingly, this study aims at reaching solutions for eliminating the conflicts in the Middle East, either for those limited conflicts such as the Egyptian intra-state one or the all-out conflicts in other regional states. So, the international military intervention as one main means to bring liberal peace to the state(s) affected by the war or conflict may be substituted, in this context, for other peaceable-deterred practices in achieving the genuine notion of peacebuilding intra-and inter-state. Seeking the method of applying abstract norms of an ideal or liberal peace _ which is positive, sustainable, and including the win-win peace principle, to the conflict management course in the Middle East is a fixed objective here. Thence, we depended on theoretical surveying of some peace, conflict, and media theories, analyzing the Egyptian internal dispute as a case of the region’s intra-state conflicts. In the first section, we discuss relevant theoretical literature, while the second focuses on conflict analysis. In a sequence, the third part suggests this study’s framework, combining some aspects of applied theories and answering the central question: how to achieve positive and sustainable peace intra-and inter-state in the Middle East? Based on that, the Egyptian intra-state conflict as a case of similar ones can be resolved and transformed into a state of positive or liberal peace, *theoretically*, from our framework perspective.

4.3.1. Historical Background

After the outbreak of June 30 protesting events 2013 against first-elected Egyptian president, Mr. Mohamed Morsi, in the Egyptian squares, and the sequential military overthrow of Morsi led by the Minister of Defense, General Abdel Fattah El-Sisi on July 3, 2013, an intra-state conflict erupted causing the death of hundreds of political opponents and their supporters, and dozens of state-officers. Basically, the conflict parties have embodied in a- the Muslim Brotherhood movement (MB), whose member, Mr. Morsi, was in office from June 30, 2012, till July 3, 2013, and b- the ruling military regime represented in General Sisi, who came to power through polarized elections in May 2014.³¹¹ Being a constituent part of the second conflicting party, paramilitary forces (beside official ones) who fought irregularly for the military junta against civilian protestors are a different reason to consider this junta the “*violent veto holders*”³¹² during the conflict. Namely, those who shout loudest, hold the most weapons, and can cause a negative impact on the quality of any peace resulting from a peace process³¹³ due to including them at the expense of tolerating violent behaviors committed by their side or/and overlooking other non-militant conflict actors’ interests in some cases. Thus, the violent veto holders might threaten the balance of peace arrangements, particularly if such a process may contradict their stakes regarding getting the power position, political authority, territorial possessions, etc., when their strategic preference becomes represented in the re-resort to (organized) violence and resuming conflict.

Moreover, power-sharing is not implemented yet, for the Egyptian case, in any form of settlement with the (MB) side. Since the country reached a state of victor peace at the feet of mass death, executions, and mass arrests, any efforts for managing the current political crisis, or that ‘*sleepy conflict*,’ are supposed to transform the internal political setting from the phase of the conflict, crisis, or victor peace (negative and relative that occurs at the expense of the other side’s losses) to a state of positive or durable liberal peace (win-win mode). Otherwise, the crisis, assumingly, is vulnerable whenever the clashes or/and

³¹¹ Before announcing the May 2014 elections results, the military junta presided by Sisi, who executed the coup under mass demands, has been running the country beginning by July 3, 2013, constituting a provisional government in September of the same year managed by this junta.

³¹² Roger Mac Ginty, “Northern Ireland: A Peace Process Thwarted by Accidental Spoiling,” in *Challenges to Peacebuilding: Managing Spoilers During Conflict Resolution*, ed. Edward Newman and Oliver Richmond (The USA, New York: United Nations University Press, 2006), 169.

³¹³ Ibid.

violence erupt intra-state to be escalated into higher levels of conflict resembling those of the Rabia massacre incident that targeted the (MB) sit-ins' civilian protestors by militarized state-officers in August 2013 _ which is one of the conflict's severe facets.

In the same context, given that the military regime represented in Sisi deployed its collective forces for not renouncing the political power,³¹⁴ or that the (MB) refrained in the conflict's early stages from participating in any diplomatic talks with Sisi's side, third parties managing the Egyptian conflict/political crisis here need to depend on the *threat-based and deterrence-based approaches*. The latter focuses on the "threat/use of *hard* (coercive) power in the pursuit of interest, (using) the tools to compel other parties, and the various instruments of coercive diplomacy"³¹⁵ to deter those who previously seemed to be *undeterrable* conflicting parties. Also, the third parties may employ an *accommodationist approach*, including the soft power of persuasive diplomacy as a means for brokering an agreement to bring a chaotic political situation to an end.

Summarizing that, after the overthrow of Morsi on July 3, 2013, the Egyptian conflict has undergone two phases. First: the *severe conflict* phase, when the clashes and violence took place in the Egyptian streets between both conflict parties; this stage extends from July 3, 2013, to the presidential elections results' announcement on May 29, 2014. During that period, the conflict estimates sharpened the curve expressing a shifting to an all-out conflict or civil war, coinciding with executing mass massacres against civilians in Rabia and Nahda squares.³¹⁶ Under the observed pacific order followed by the Muslim Brotherhood (MB) members, and witnessed through not committing the arming method

³¹⁴ It first occurred in May 2014 when precedent political leaders, groups, movements, and parties were legally prosecuted and forbidden from practicing or re-entering the political life, leading to an overwhelming victory to Sisi in the 2014 presidential elections. Again, in the renewal elections, "Sisi crushed all dissent in his bid to seek a second term in office, with five potential opponents prevented from getting on the ballot. Despite Sisi's inevitable victory, the race also highlighted discontent at his rule from within the state itself" (Sisi Wins Landslide Victory in Egypt Election," The Guardian, April 2, 2018. <https://www.theguardian.com/world/2018/apr/02/sisi-poised-to-declare-landslide-victory-in-egypt-election>. "Access Date 06/15/2022").

³¹⁵ Butler, *International Conflict Management*, 14.

³¹⁶ The Pro-Morsi demonstrators held sit-ins in the Rabia and Nahda squares from June 28, 2013, until the massacres were executed by police, military, and paramilitary forces against them on August 14, 2013. That occurred, sequentially, after Sisi had asked the Egyptian people to give him *a mandate right* to eliminate terrorism (referring to those anti-military regime protestors at the squares). As the 2014 World Report of Human Rights Watch showed, "in the months following the ouster of President Morsi, police used excessive lethal force, killing over 1,300 persons at protests, and arrested over 3,500 Brotherhood supporters" ("World Report 2014: Egypt Events of 2013," Human Rights Watch (HRW), 2014. <https://www.hrw.org/world-report/2014/country-chapters/egypt>. "Access Date 06/15/2022").

as a means to fight against the military regime's ordinary and paramilitary forces, the conflict underwent its highest intensity level, moving to its track two, the second stage. This one is best described as the *sharp crisis* phase, beginning with the Sisi reign by the end of May 2014 and beyond, in which several features are remarkable. The main factor, we assume, is capturing an absolute political power by Sisi since his landslide victory in 2014. The second is the continuation of mass arrests, human rights abuses, atrocities, and death sentences practiced against his opponents of the (MB) and their supporters or any other dissident group, movement, or party, as explained below. This stage embodies a state of political instability, disorder, or *coercively* imposed-military order translated into a forcibly *obedient* disciplinary, politically and socially unstable society.

At last, this analysis highlights all dimensions of the Egyptian intra-state conflict, concentrating on managing it. It is divided into three pillars according to the applied conflict mapping model. The first discusses the *nature of conflict* by illustrating the factors, problems, objectives, instruments, attitudes, and the environment and connection of this conflict. The second pillar explains the conflict causes; individual and communal, national, regional, and global, while the third applies conflict settlement strategies to our case. These strategies are the early warning and early intervention, coercive diplomacy, and peace talks. Finally, the conclusion shows (current) obstacles, risks, and limitations of managing the Egyptian conflict.

4.3.2. Methodological Dimensions of Analysis According to the Conflict Mapping Model³¹⁷

4.3.2.1. First Pillar: The Nature of Conflict

4.3.2.1.1. Factors

It can be said that the key internal actors who supported Sisi and the July coup d'état 2013 are; Sheikh Al-Azhar,³¹⁸ the Pope of the Egyptian Churches, Al-Dostour party or Hizb

³¹⁷ The model has been introduced by "Ertan Efegil, *Devlet-İçi Çatışmalar ve Çatışma Yönetimi (Intra-State Conflicts and Conflict Management)*, (Istanbul: Gündoğan Yay., 2019), 42-43."

³¹⁸ Al-Azhar University is the oldest Islamic university worldwide that had symbolic importance as the leading source of graduating the Islamic studies (Sunni) scholars.

El-Dostour (center-left liberal wing), National Salvation Front or Tamarod Movement,³¹⁹ Al-Nour party (far right-wing; Wahabi-Salafist Islamic party), and the Salafist movement (the religious wing of the Al-Nour political party).

Table 10: The Main Factors of Shaping the 2013 Egyptian Intra-state Conflict's Nature

Conflict Factors	Sisi's Side	The Muslim Brotherhood's Side
Abilities and Power	A military army and an overwhelming scale of national arming arsenal.	Unarmed civilians. These civilians confront/clash with the police, military, and paramilitary forces at the Egyptian squares.
The Conflict's Influence Degree	Pivotal and offensive. Given the committed massacres while having low-level losses on this side, in return.	Derivative and defensive, in terms of the enormous human losses on this side, down to thousands of deaths.
Supporters' Size	Nationwide popular, considering the June 30 mass protests against Morsi's regime and pro-military, including this side's key internal actors.	Nationwide popular, considering their votes' majority (i.e., over 13,23 million votes, representing 51,73%) in the 2012 presidential elections, the mass sit-ins in Rabia and Nahda squares, and several Islamic parties and movements support.
Foreign Aid's Existence	Congress appropriates nearly \$1.4 billion in annual total bilateral (military and economic) assistance for Egypt. ³²⁰	Unannounced financial aids from regional states _ officially uncertain.

Source: Prepared by the author.

³¹⁹ Tamarod Movement is a rebellion front founded to force ex-president Mr. Morsi to call for early elections in his first inauguration anniversary on June 30, 2013, prompting anti-Morsi mass protests followed by the July coup d'état.

³²⁰ Jeremy M. Sharp, Egypt: Background and U.S. Relations (USA: Congressional Research Service, 2019 (Updated in September 30, 2021)). <https://fas.org/sgp/crs/mideast/RL33003.pdf>. "Access Date 06/15/2022."

For the Muslim Brotherhood's side, or the Freedom and Justice Party,³²¹ which has announced the sit-ins in Rabia and Nahda squares for supporting and bringing Morsi back to power, the key actors are the Muslim Brotherhood movement's members and supporters and other right-wing conservative political-Islam parties such as Al-Wasat, Al-Binaa Wa Al-Tanmya, and Al-Asala. Table 10 illustrates the conflict's factors for both parties.

4.3.2.1.2. The Conflict Generated Problems

Structural problems: After January 25 revolution, Egyptian society was undergoing some economic and political obstacles. Given the shortcomings in the economic structure-function mechanism, internal insecurity and political fragmentation were also significant features of the day. Getting absolute political power by June 2012, the MB contributed to moving the MB's loyalty doctrine to confrontation with the deep-state pro-military one _ that lasted for more than 30 years along with the Mubarak era and even before.

Non-structural problems: Besides the structural problems, these non-structural facets determine apparently how the military overthrow of Morsi found its way out through the mass-public support: i. the eruption of hundreds of labor sit-ins during the first (and last) year of Morsi's rule, which took place on a regular basis and was well-organized as well; ii. the continuity of anti-Morsi protests in the capital (Cairo) and the riots and violence's acts of new emerging rebel movements; iii. the media-spread mass accusations against Morsi of following the '*tribe*' teachings _ referring to the general leader (i.e., the Imam) of the religious (MB) movement; and iv. similarly, the mass accusations versus the (MB) itself of treason in terms of claiming existing foreign agendas of Qatar and Turkey.

Conflict-related subjects and crisis developments: The political conflict increased in level throughout these accumulating factors: i. the emergence of anti-Morsi mass-movement, Tamarod, which claimed to have collected more than 22 million signatures in registering opposition to Morsi by June 29, 2013; ii. the sequential outbreak of mass demonstrations against Morsi and the (MB)'s rule on June 30; iii. the overthrow of the

³²¹ Freedom and Justice Party is the political wing of the Muslim Brotherhood religious movement, founded on April 30, 2011 _ after the January revolution that erupted against Mubarak's regime _ and was banned by the Military regime under Sisi's leadership on August 9, 2014.

democratically first elected president after the 2011 January revolution by public-demanded-coup d'état on July 3, 2013; iv. the resulted clashes between police, military, and paramilitary forces from one side, and pro-Morsi civilian protestors on the other, causing mass killings in Rabia, Nahda, and other squares around the country;³²² v. the mass arrests of thousands of Morsi's supporters, and the judicial decisions and death sentences executed upon others as to come below.

4.3.2.1.3. Objectives

The static goal of the Muslim Brotherhood during the conflict is considered retrieving Morsi's '*legitimate*' rule and provoking a new wave of the January revolution re-confronting the renewed military rule in Egypt. At the same time, Sisi declared his aim of eliminating terrorism – referring to the (MB) members and their supporters clashing with the police in protests as well as to the Sinai's fighting groups, while banning the Freedom and Justice Party, which is the political wing of the religious (MB) movement, in August 2014, naming the (MB) as a terrorist organization. Thus, Sisi was up to restoring the military reign of Egypt that began by the Nasir's era after the 1952 revolution against the royalty rule and continued through the Sadat and Mubarak takeovers of power consecutively, in the aftermath. In retrospect, the (MB) had not behaved by any pronounced means through a declared speech or otherwise regarding accepting approaching the diplomatic path of conducting official negotiations or talks with Sisi to tackle the two parties' joint issues since the latter had the presidency in May 2014 and up to early 2021 (given Morsi's death under imprisonment on June 17, 2019).

4.3.2.1.4. Means

This element refers to the used devices by each party to achieve its interests along with the conflict course. Sisi's instruments before and after being in office, by May 2014, fundamentally are: controlling the state's political, economic, and social structures through an iron-military hand expressing a military lines-shaped disciplinary regime; directing both private and mainstream Egyptian media in line with the state-official discourse; controlling the national military and its arsenal with having an underlying

³²² See, "World Report 2014: Egypt Events of 2013," Human Rights Watch (HRW), 2014. <https://www.hrw.org/world-report/2014/country-chapters/egypt>. "Access Date 06/15/2022."

loyalty among the army as the general chief of military forces and ex-defense minister; and the credibility and capability of arresting and killing political opponents under the name of maintaining the national security. On the Muslim Brotherhood's side, the means are: non-militarism versus the other side, non-recognition of Sisi's presidency, and non-legitimization of his rule; having safe heavens in some hosting countries supporting their issue (i.e., Turkey and Qatar as key foreign actors); establishing some political fronts defending them abroad; and owning news media channels broadcasted abroad and inside Egypt by the approval of the host state (e.g., the "Watan, Al-Sharq, and Mukkamleen" TV channels launched from Turkey).

4.3.2.1.5. Attitudes

This aspect refers to the conflict parties' attitudes and whether these attitudes are cooperative, neutral, or conflictual. As a deeply popular split distinguished the Egyptian conflict, both parties and their supporters, either ordinary individuals, political parties, social movements, or/and civil groups inside society, are considered oriented to standing with having (and preserving) conflictual attitudes towards the other side. That is to say, there are no ethnic or sectarian roots of this conflict; rather, it was an ideological one with a dual classification spread over the country expressing an "anti-Morsi versus pro-Morsi; or pro-Sisi versus anti-Sisi" formula. Given that both conflict parties took conflictual attitudes towards each other, the situation resembles a "*zero-sum game*," where one party wins at the expense of the other, and there is no room for cooperation. At the same time, competition becomes the only accepted coin for dealing with ongoing developments, acknowledging that the "losers vs. winners" opposition will constantly identify the end of such a disputing situation-based game.

One example is the Rabia Square massacre when the (MB) leaders publicly and repeatedly declared the continuity of sit-ins until Morsi returns to the office or they get the *Shahada* (Death for God's sake in Islam). Simultaneously, Sisi asked the Egyptian people (i.e., anti-Morsi citizens) to give him a *mandate right* to eliminate terrorism³²³ _

³²³ "In a speech at a military graduation ceremony broadcast on television, Gen Sisi said: 'I urge the people to take to the streets this coming Friday to prove their will and give me, the army and police, a mandate to confront possible violence and terrorism.' 'So that in case there was a resort to violence and terrorism, the army would have a mandate to confront this.''" ("Egypt Unrest: US Delays Delivery of F-16 Jets," BBC News, July 24, 2013. <https://www.bbc.com/news/world-middle-east-23442947>. "Access Date 06/15/2022.").

referring to the (MB) particularly, bringing the (MB)'s sit-ins to an end after that using publicly-justified excessive state-force on August 14, 2013 and beyond. That binary situation typically stimulated the initiation of a *zero-sum game* during the conflict trajectory. On the contrary, if some/all conflict parties had taken *cooperative* attitudes, the conflict track would have shifted, we assume, into an analogy of a *win-win model*,³²⁴ with all parties achieving *absolute* gains without (heavy) human losses, arrests, (deadly) torture cases, or confiscation of property observed against any for being loyalist(s) to one side or the other.

4.3.2.1.6. The Conflict Environment and Connectedness

This element focuses on foreign state-and non-state actors such as state leaders, international governmental/non-governmental organizations, neighboring/regional states, and superpowers, standing with each conflict party, either implicitly or explicitly. On Sisi's side, The United States of America,³²⁵ Israel, Saudi Arabia, and the United Arab Emirates are considered the main supporting foreign actors; comparingly, for the (MB), Turkey and Qatar are key supporting ones.³²⁶

³²⁴ The well-known win-win situation was developed by the mathematician John Forbes Nash Jr. in the 1950s, who reached the concept of Nash equilibrium as a rational solution that occurs in non-cooperative games when all players in the game depend on each other's rationality, making their best response to the other(s)'s strategy choice simultaneously. Therefore, the win-win situation includes using winning strategies by all players, which is an equilibrium of non-cooperative games. Integrating a third party, the Community, Papakonstantinidis defines a win-win-win model he developed as follows:

"The win-win-win model may be proved to be a creative approach to conflict resolution based on Nash' 'Non-Cooperative Game' and its 'win-win' situation (equilibrium point), according to which both parties involved in a negotiation may formulate winning strategies, Community involvement may be seen a three-way negotiation. Taking part in such a negotiation, each member of the Community should ask him/herself three questions, i.e. 'what is the best for me?', 'what is the best for me, taking into account, that, also the other part is thinking like me, trying to maximize him/her payoff?' and – at the same time - taking into account that also Community as a whole 'tries' to maximize its own utility/payoff, i.e. 'what may be the best for me, for the other and for the Community (the 'C' factor).'" (Leonidas A. Papakonstantinidis, "The Win-Win-Win Model," ResearchGate, June 2002. https://www.researchgate.net/publication/256022546_The_Win-Win-Win_Model. "Access Date 06/15/2022").

³²⁵ In clear support to Sisi's side, "United States President Donald Trump, in April during al-Sisi's visit to Washington, said "he has done a fantastic job in a very difficult situation" ("World Report 2018: Egypt Events of 2017," Human Rights Watch (HRW), 2018, para. 44. <https://www.hrw.org/world-report/2018/country-chapters/egypt>. "Access Date 06/15/2022").

³²⁶ After Sisi overthrew Morsi on July 3, 2013, "the army's moves were welcomed by some Gulf states, and two - the United Arab Emirates and Saudi Arabia - have made major pledges of financial help in a show of support for the new administration. But other nations were strongly against the army's actions - perhaps the most vocal of which was Turkey" ("Egypt Unrest: Liberal Opposition Rejects Transition Plan," BBC News, July 10, 2013c. <https://www.bbc.com/news/world-middle-east-23250567>. "Access Date 06/15/2022").

4.3.2.2. Second Pillar: The Conflict Causes

Individual and communal: This analysis angle sheds light on how each side's leader might have reasoned for making his decision before and during the conflict. For Sisi, it could be said that it was the (MB) who overthrew the military rule of Egypt that lasted from the 1952 July revolution until the 2011 January revolution _ which outbroke against Mubarak's 30-year military dictatorship. Hence, the (MB) went for a conflict versus the military regime to reverse that prolonged modality of having consecutive military authorities under the pretext of how far Morsi's (ousted) authority legitimacy is. Taking into consideration how the Egyptian community members reason, the conflict must inevitably have erupted. For a majority of people born and grown up to sanctify the military rule as the '*holy guardian*' of their nation *internally*, not only externally, for decades, it was reasonable to witness the millions of ordinary citizens at the Egyptian streets demanding the overthrow of Morsi's '*civilian*' rule on June 30, 2013. From another perspective of being a developing country, the public realization of the democratic liberal rule's (future) utility is seen *unmatured* yet, if not at stake among only a few highly sophisticated groups/parties inside Egyptian society.

National: Given the political polarization taken shape during the one-year Morsi rule, the religious background of Morsi tracing its roots to the (MB) teachings, and the political fragmentation after the 2011 regime change, agreeing on a joint leader for both (far) right-wing Islamists, far-left-wing military ultra-nationalist groups, and center-left-wing liberals did not occur as it ought to be. Therefore, June 30 mass protests 2013 had been seen as a reasonable solution by the military junta, liberal elites, and the (MB) doctrine-discontented popular groups and movements, marking a '*rolling back*' choice and transforming undesired one political setting into a new start.

Regional: Over decades of accepting the status quo, it was the Arab revolutions of the 2010s that would cause *more likely* the spread of new revolutionary ideas, and *probably* the political Islam's values, in other gulf royal-states of the region _ if these revolutions had had the upper hand in the last scene. Seeing *revisionism* as the strategy of the day, many gulf states such as Saudi Arabia and the United Arab Emirates gave a hand backing the Sisi's side, more obviously through non-refundable generous financial aids; thus,

avoiding possible consequences of exporting the Egyptian 2011 revolution's guidelines, if fully succeeded, to their still status quo's accepting societies.

Global-international: Saying that the most apparent goal of the US foreign policy in the Middle East is: protecting Israel as a *protégé*. Thence, from the perspective of a *defender* (i.e., the US), a revisionist regime of Morsi as a *challenger* who supported Hamas _ which is the (MB)-backed-political-military Palestinian organization fighting against Israel, and is considered a *protégé* of Turkey (i.e., the defender of Morsi's regime), represented the cornerstone that would initiate the overturning of political stability reached in the Middle East in favor of still-manifesting American hegemony. Challenging the Western flag by the political-Islam parties one, in terms of having rising Turkey regionally under the AK party era as a playing-back actor, meant that that mirrored a devastation tool for the US and Western interests in the region, adding to that protecting their seized oil resources in Afghanistan, Iraq _ and later in Syria and Libya, as another vital objective. So, as the US-annual (military) aid-receiving party, Sisi's side was the US-foreign policy's trump (i.e., winning card) in the Middle East along with the Egyptian conflict course. In this context, the US aid becomes one salient feature of the well-known *dollar-diplomacy*, practiced by consecutive US diplomats and decision-makers for achieving (future/present) political and economic ends, goals, or/and payoffs, such as getting the aid-receiving states' vote in the UN assembly supporting the US (global/regional) decisions/suggestions made.

4.3.2.3. Third Pillar: Main Strategies of the Egyptian Intra-state Conflict

Management

There are three strategic tracks followed in general, achieving the conflict management purpose:³²⁷ the first is the *conflict settlement*, solving an open crisis, clash, or de-escalated/limited conflict and preventing the causes of outbreaking a future conflict; the second is the *conflict resolution*, ending an ongoing war or conflict, and hindering the re-eruption of war/conflict in future; and thirdly, the *conflict transformation* tackling the conflict/war root causes, which operates through a diversity of peace tactics addressing building new political, economic, and social structures in the post-conflict society. Opting for the best conflict management track in our case, we consider first that i. the Egyptian

³²⁷ See, Efeğil, *Devlet-İçi Çatışmalar ve Çatışma Yönetimi (Intra-State Conflicts and Conflict Management)*.

conflict has been frozen at the *sharp crisis* phase with Sisi seizing the political authority since May 2014 and beyond; ii. the regular/possible outbreak of clashes and violence between ordinary and paramilitary forces and demonstrators at the Egyptian streets after Sisi came to office; iii. the killings of dozens of opponents either by shooting protestors or by executing some detainees inside prisons according to the Human Rights Watch's 2018 world report; iv. other conflicting parties did not concede their demands and interests (mainly the MB), expressing theirs regionally and globally, instead, after being suppressed nationally through state-level observed-systematic persecution. Thence, the most suitable strategic track given the Egyptian conflict's current phase is the conflict settlement. The latter's salient strategies of early warning and early intervention, coercive diplomacy, and peace talks³²⁸ are applied to the Egyptian conflict case here, including crucial *refinements* we developed as follows:

4.3.2.3.1. Early Warning and Early Intervention: Three Dimensions of a Necessitated Cost-Benefit Analysis

First: The taken risks. Through this dimension, we refer to three points: a. what *risks* calculated by every side are if they accepted the negotiation with the other conflict party or rejected it; b. what interests would result from the conflict discontinuation _ suppose they both went for negotiation; and c. what the cost is of renouncing (part of) the sides' demands of conflict initiation and continuity. Here, the risks taken by the Sisi's side lie in granting the legitimization, and the free passage and movement advantages to the ex-legitimate authority/political opponents in society, perceiving that this hinders his authority's legitimacy. For the (MB): the MB-doctrine's national, regional, or/and global loyalty will be under question in terms of violating this doctrine's principal proclamation regarding the call for resistance in ongoing struggle(s) against (military) dictatorships. This factor's manifestation occurred through organizing the Rabia and Nahda mass protests in Egypt under continuous sit-ins against existing/possible prolonged-military rule. In this context, the (MB) declared a *constant stand* representing; non-recognition, non-legitimization, and non-compromising with/of Sisi's authority. Up to the period after Morsi's death in June 2019 at the prison, that attitude was significantly held, where no concessions seen made _ even if thousands of the (MB) members/supporters were paying

³²⁸ Ibid.

the price of such a *hardline* policy, getting killed or harshly arrested and tortured or sentenced to death either in the state prisons or under forcible concealment conditions. So, serving the global ideology of (MB) has been preferred to settling an inflamed political conflict in the Egyptian society (!).

Second: *The seriousness or credibility degree.* This dimension concentrates on determining whether both conflict parties do *credibly* intend to move to the “settling of conflict” stage or both/some may use this approach to achieve political goals it would not be able to get during the conflict, at the other’s expense. That is to ask, will it be a non-zero-sum game based on the *absolute* gains for all, or another opposite one of zero-sum that results in mere *relative* payoffs for one winning side only at the game’s end? Three points we consider in this regard: i. The calculation of both sides’ human and monetary losses since the conflict began, during the current phase, and in future possible negotiation cases. Also, the opposite is right. Each party might be informed what possible *gains* would be politically, diplomatically, or/and socially if accepted the negotiations credibly. Most importantly, the made promises by any must be kept unchanged through the third-party intervention and its taken guarantees of the peace process implementation. ii. Power-sharing road map. A newly drawn role is assigned to the (MB) and other political parties under the imposed umbrella of (*prolonged*) military reign. Again, a limited definition of each party’s position in the post-conflict stage with guaranteeing all the agreed-on terms of any reached settlement through (neutral) third-party interference is supposed to maintain the resuming-conflict possibility as less as it must be. iii. The accommodationist approach. In the light of the previous steps, if taken, this one aims at making undeclared or unofficial communications with both parties’ key leaders (even if they were imprisoned, in the MB case), using persuasive means or the soft power to get them in or their followers from the second/third-line leaders in a would-be convened peace process.

Third: *What are each conflict party’s interests or benefits from the diplomatic exit?* For Sisi’s side, the main interest can be considered; acquiring complete legitimacy and strengthening his rule basis by merging the (MB) and its nationwide popular base with his. That means having the (MB) partner rather than an enemy threatening his by force-built (unstable) political authority. Otherwise, Sisi’s imposed state of counter-terrorism inside the Egyptian society by naming the Muslim Brotherhood movement as a terrorist organization asking the global community to do likewise, reversing a “win-lose”

situation, does *more likely* widen the gap between both parties spectrums from one hand. On the other, it helps, increasingly, include broader classes *unconsciously* gradually to the (MB)'s circle after re-witnessing an extremely suppression-state based on severe military lines, repeating those of the Mubarak era – the image that millions dreamed altogether to remove from their consciousness by participating in the January revolution 2011. The outcome for Sisi out of such a peace process, if implemented, is creating *political stability* in favor of the military regime, not against it, coinciding with achieving *reconciliation* with the (MB). For the MB, the interests of *credibly* negotiating with Sisi are: i. saving more than 15 thousand³²⁹ innocents (including 150 children) from deadly torture and the long-years imprisonment in Sisi's prisons;³³⁰ ii. preventing the killings of civilian protestors in the streets;³³¹ iii. protecting more than 800 civilians from death sentences.³³²

In sum, conducting the mutual negotiations is assumed to be built on releasing all the MB's (and other revolutionary movements') detainees, integrating them all into a constructed peaceful societal environment, and the concession to Sisi/military institution for (high-ranking) political rights or positions in return, down to reach a state of stability

³²⁹ "Security forces rounded up hundreds of dissidents, mainly targeting the outlawed Muslim Brotherhood. The Ministry of Interior's National Security Agency arbitrarily detained, disappeared, and tortured people. There were numerous incidents of what appeared to be extrajudicial killings, including of previously detained persons in staged "shoot-outs." Authorities placed hundreds of people on terrorism lists and seized their assets for alleged terrorism links without due process. Military prosecutors continued to send hundreds of civilians to military trials in cases related to political dissent, whether violent or peaceful. President al-Sisi has approved in August 2016 a five-year extension of a 2014 law that expanded, to an unprecedented extent, grounds for trying civilians before military courts. Between October 2014 and September 2017, authorities sent at least 15,500 civilians to military courts including over 150 children." ("World Report 2018: Egypt Events of 2017," para. 2-5)

³³⁰ "The Interior Ministry's National Security Agency (NSA), operating with near-absolute impunity, was responsible for the most flagrant abuses, including widespread and systematic use of torture to coerce confessions. Torture techniques included beatings, prolonged painful stress positions, and electrocutions. Prosecutors rarely investigated torture claims and almost never dropped torture-tainted confessions." (Ibid, para. 6)

³³¹ "Human Rights Watch documented three incidents in 2017 in which individuals were killed in alleged shootouts after having been detained. The Egyptian Coordination for Rights and Freedoms, another independent group, said that police "liquidated" at least 37 people in the first half of 2017. The government undertook no known investigations into these killings and provided little or no information to the families." (Ibid, para. 11)

³³² "Since July 2013, Egyptian criminal courts have sentenced over 800 people to death. The Cassation Court, Egypt's highest appellate court, has overturned many of those sentences and ordered retrials. In 2017, the Cassation Court upheld death sentences of 22 persons at least, who remain on death row, while 103 more death sentences were awaiting final court decisions at time of writing. Military courts have issued over 60 death sentences of civilians since July 2013 and 19 of those sentences were confirmed by the Supreme Military Court of Appeals in 2017 raising the number of civilians executed in military courts to 25." (Ibid, para. 12)

in Egypt by both conflict parties' agreements and reconciliation, as specifically explained below.

4.3.2.3.2. Coercive Diplomacy and the Need for Foreign Mediation

As a hard-power-based-approach of conflict settlement, coercive diplomacy includes the use or/and threat of use limited military power and threatening means such as imposing sanctions, boycotts and embargos, or/and tariffs of imported vital products on the targeted aggressor (i.e., the state or non-state actor) during a conflict. That aims to bring the 'rogue' side into lines with a peace process trajectory or force it to self-constraint if unacceptable war behaviors are committed like the excessive use of unjustified limit of power or violence against another weak/civilian side. Comparingly, the coercive diplomacy strategy and the deterrence one play alternative roles meticulously. Deterrence is a security strategy used to maintain the (inter)national security applied by a nation-state or coalition of states to deter possible aggression *not* via wars (the past perspective) but coercively for preventing wars (the deterrence's present perspective). So, if war arose, the deterrence failed, and vice versa.

Coercive diplomacy, however, can be understood as being the other face of the deterrence coin, not in a peace-state (i.e., in a contemporary perspective-based deterrence situation); instead, it is employed in a state of conflict or war and before resorting to some peace operations. These operations involve military intervention in the battle zone, thus ending the violent situation via another internationally legitimate one for protecting almost a sovereignty-deprived nation-state in which the war/conflict ensued. Contradictorily, in the coercive diplomacy case, limited threatening hard power might be invested in pressurizing (or forcing) parties to the conflict to participate in peace talks, precluding the all-out conflict possibility and keeping the concerned conflict situation contained and limited to a far degree.³³³ Comprehensively, this approach may help restrain conflictual relations between both sides and develop cooperation, especially when these sides are

³³³ Efegil defined some policies taken during conflict settlement stage; these are:

"Political coordination, financial aid, mediation efforts, early elections and watching human rights, logistic services, economic and political projects' campaigns, civil governance establishment, human aids, protecting human rights, tackling environmental challenges, (non-official) political talks, political and cultural changes, non-official consultations, securing the nation-state borders (during the conflict witnessed and before escalating it), condemnation of international crimes (committed by the warlords), defending the press freedom, and organizing (democracy doctrine-directed-political and) cultural changes programs."

(Efegil, *Devlet-İçi Çatışmalar ve Çatışma Yönetimi (Intra-State Conflicts and Conflict Management)*, 57).

seen to be demonstrating less political power than a mediatory super or great power. For the Egyptian intra-state conflict, we argue that the coercive diplomacy method needed to find its way through external mediation or mediatory foreign actors' involvement, as illustrated next.

The need for foreign mediation: *First; capability and credibility of threats, by whom and how?* Both the coercive diplomacy and foreign mediation efforts can be exerted upon the Egyptian military institution and the (MB) for pressurizing each to negotiate in favor of ending this societal conflict. While the US is *capable* of threatening the military institution *credibly* by depriving it or cutting the annual monetary aids that the US provides _ until that regime initiates the negotiation with the (MB). The Turkish government, considering Turkey a primary host country of the (MB)'s 'fled' members/leaders after the July regime change 2013, can also *credibly* threaten withdrawing those members' asylum or residence right or/and the approval of (MB)'s news media channels broadcasted from Turkish lands unless it begins the negotiations.

Second: Rudimentary peace road? Assuming that the foreign mediator(s) succeeded in coercing the (MB) to sit down on the negotiation table with the military institution/Sisi, or vice versa _ the only assigned role of the US and Turkish government. This diplomatic mode most likely leads to progress ascertained towards building civic peace-oriented-dual political coordination, reconstructing the social body's social, political, and economic structures, paving the way to a state of protracted stability within, and reaching what we named "*para-negative peace*" in the Egyptian society. Some may see this described peace-state as a translation of mini-maximum equilibrium.

The mini-maximum equilibrium occurs here when one conflicting side (i.e., the powerful) takes *less than* its perceived or expected *maximum* utility in a conflict, allowing the other party (i.e., the weak) to have the *minimum* of its previously expected *maximum* utility from the same conflict. Giving the *de facto* stronger side a "minus-maximum (- maximum)" versus a "plus-minimum (+ minimum)" granted to the weaker party is, therefore, a '*rudimentary*' equilibrium for such up-down relations-based-prolonged political conflicts. These conflicts manifest particularly where one party (i.e., the civil side) *unpremeditatedly* violates the first rights (i.e., the military party's) in governing by committing the *revisionism* _ (say, the January 25 civil revolution, 2011; and the 2012

Morsi's post-election civil rule, in our case), as a way of achieving so far political ends (i.e., getting civil democracy, eliminating the 60 year-long military reigns). The last explanation justifies the climax of the "military vs. civil" binary division dominating the governance relations in Egypt. Ultimately, as an exit of zero-sum games, that *rudimentary* equilibrium accurately applies to the Egyptian intra-state conflict management.

Third: On the way to the negotiation table and reconciliation? Through internal, side-sessions, practiced mediation, each party must be informed and report the mediator(s) about "what concessions particularly the other side/it expects to make, in favor of the gains any may achieve" before conducting the negotiations. Since diplomacy is an art more than a science, the success of such a mediation and negotiation approach depends on how far the mediator is skillful, discreet, and prudent is. That is to say, determining the peace process' benefits for both versus the conflict or sharp crisis continuation's cost is the framework that distinguishes those approaches' success. Nevertheless, some warlords may *mistakenly* perceive that as long they *forcibly* enjoy the privileges of a military-protected political power, any other price the other 'weak' side pay cannot affect the continuity of such internationally legitimized authority. In this context, working on mutually maximizing the utility of all parties if they moved to a theoretically merged diplomatic approach altogether, we see as another exit of that dilemma.

Back to this analysis angles, the (MB)'s leaders, and before the negotiations, we assume, need to *reconcile* with the military institution/Sisi on three bases: i. accepting Sisi's presence in power, unconditionally (if he would remain when the time comes); ii. ceasing to exist the (MB)'s political campaigns abroad directed against Sisi/military institution; and iii. announcing their intentions, publicly, of being a strategic partner with the military-backed/shaped-governing regime in favor of national interests. On the other hand, the military institution/Sisi, to *guarantee* the peace process success, has to build the reconciliation based on: i. announcing dropping all judicial decisions against the political detainees _ either the (MB)'s members or other revolutionaries and releasing them sequentially; ii. removing the ban of the (MB) as a terrorist organization, dropping the political opponents' names from the terrorism lists, on the same trajectory; and iii. providing all conflict parties members, either previous detainees or not, with a *safe* and *secured* (civil and political) social-existence environment constructed peacefully for the post-conflict stage

4.3.2.3.3. Peace Talks: Towards Peacemaking

After resolving the conflict's challenging issues non-officially among both parties through (non-announced) negotiations, relying on coercive-diplomacy means, if necessitated, the peace talks' role is highlighted. That requires ignoring the crisis roots and initiating dialogues based on "*benefit versus cost calculations*" for all. Theoretically, the crucial moment for settling any conflict is assumed to be when all conflict parties lose their planned goals or interests of the conflict, even if temporarily, where every party perceives that whenever the conflict extent stretches more, whenever this party or that can never succeed, and no victory can be achieved for any in the future _ that is the so-called *mutually hurting stalemate* moment.³³⁴ One instance explaining that situation was the September 2019 mass protests,³³⁵ which erupted to overthrow Sisi's suppressive regime in Egypt, reflecting a mutually hurting stalemate moment when all conflict sides suffered, again, from political instability and predicament mutually. From another perspective, others consider the *ripeness* moment of conflict to represent a *matureness*-timing of would-be successful mediation. However, our suggested conflict management framework below tackles that issue, which can be employed outside the sphere of those predicted moments of *mature* mediation.

4.3.2.4. The Analysis Conclusion: Mapping the Egyptian Intra-state Conflict and Beyond

4.3.2.4.1. The Conflict Map

Considering that every shape in the conflict mapping model has a distinguished significance for conflict analysis, where the *circles* represent the conflict parties, the *semicircle* symbolizes the foreign actors, and the *rectangle* indicates the problems, conflict topics, or other factors relevant to the conflict parties _ according to Efegil's 2019 conflict mapping model. The other *geometrics* of the model we used to describe the following: i. "*Close*" relations between the Muslim Brotherhood (MB) and other

³³⁴ See, Butler, *International Conflict Management*.

³³⁵ "Almost 500 people have been detained in Egypt in the past few days after protests against alleged government corruption, human rights activists say. Demonstrations were reported in Cairo, Alexandria and several other cities on Friday night, and in the port city of Suez on Saturday evening" ("Egypt Protests: 'Hundreds Held' After Rare Anti-Government Unrest," BBC News, September 23, 2019. <https://www.bbc.com/news/world-middle-east-49800213>. "Access Date 06/15/2022").

moderate right-wing Islamic parties; ii. “*Very Close*” relations between the (MB) and El-Wasat party; iii. “*Weak*” relations between the military regime/Sisi and El-Wasat party; iv. the military regime/Sisi is the “*Pressure-Practicing Side*” on those right-wing Islamic parties; v. a “*(Political) Conflict*” between the (MB) and the military regime/Sisi; vi. an “*Isolation*” between the (MB) and anti-Morsi/(MB) movements or parties; vii. the key “*Foreign Actors*” of the Egyptian conflict who are assumed to mainly be: “US, Israel, and Saudi Arabia,” as pro-military regime/pro-Sisi parties, and anti-(MB), and “Turkey and Qatar” as the pro-Morsi/(MB) and anti-Sisi actors; see Figure 24.

4.3.2.4.2. Towards Settling the Egyptian Intra-state Conflict: Limitations, Risks, and Obstacles

From this analysis perspective, managing the Egyptian conflict reflects the political Realists’ agenda of the negative or victor’s peace. Simultaneously, achieving the ideal or liberal peace (i.e., the win-win peace) becomes more complicated in a post-conflict society if it was to necessitate transforming a nation-state controlled by overwhelming hold of the military regime, either directly or being military-backed, into another democratic one. This democratic path contradicts the military doctrine/stakeholders’ interests concerning the possibility of not re-capturing Egypt’s political authority in future democracy’s repercussions.

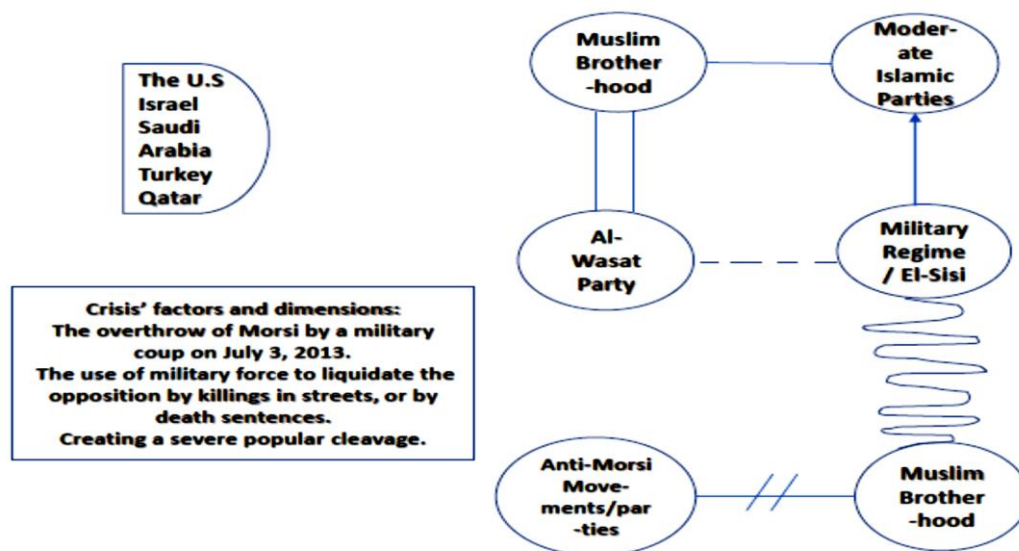


Figure 24: Mapping the 2013 Egyptian Intra-state Conflict

Source: Prepared by the author.

Strikingly, what we called *para-negative peace* between the conflict parties, might prevail considering the previous analysis dimensions. Meanwhile, a *semi-win-win peace* may occur by maintaining both the stakeholders' interests and some pressing demands of the other conflict party. Nevertheless, as long the structural and non-structural problems that caused the overthrow of Mubarak and Morsi exist without any significant progress made for tackling them, the conflict that has erupted in the aftermath of June 30 protesting events against Morsi and the sequential military coup, representing a phase of *ongoing* uprisings chain appearing firstly through the January revolution 2011 against Mubarak's regime, is *more likely* to re-erupt versus the current administration itself. Such re-eruption might be seen coinciding with the level reached of the "oppression, grievances, social injustice, (deep) state-corruption, cross-individuals/classes poor economic status, and suppression" factors, among others, inside society _ as it manifested *fundamentally* by the outbreak of September 2019 anti-regime protesting events.

In conclusion, the essential obstacle of managing the sharp crisis or conflict between the (MB) and Sisi/the Egyptian military institution is mirrored in the role played by the "*spoilers*" of any predicted peace process, as follows; i. Israeli diplomacy, which perceives the (MB)'s movement _ that established the Jihadist movement, Hamas, in the last century and still supports it, as a *credible* threat to the presence of the Israel state itself; so, it is an *existential* struggle. ii. Leaders of the (MB) abroad may be considered the peace spoilers' second category, too, who have a parallel life in the host countries and financial aids (unannounced), besides their success in building a new-integrated structure inside these states adopting the (MB)'s ideology and working on spreading/reinforcing it, worldwide. Thus, any reconciliation attempt with Sisi, specifically, may threaten the (MB)'s interests and global political objectives.

Sequentially, the second barrier for settling the conflict is seen internally rather than being regionally or globally. That is, the classification of the Egyptian political spectrums since the January revolution on these bases: i. the pro-Mubarak individuals are "traitors" being titled the name 'Fulol (remnants!),' and the January 25 revolutionaries are, therefore, "nationalists or loyalists." ii. After a severe *popular cleavage* occurred at the feet of the June 30 revolution 2013, and the ordinary citizens' division to either the protestors overthrowing Morsi on June 30, or others defending him in Rabia, Nahda, and other squares against the July coup, 2013, another binary opposition was reversed reflected in

the “pro-Morsi/(MB) versus pro-Sisi/military” formula. iii. In another advanced way of (*irrational*) reasoning, the pro-Morsi/(MB) individuals became “traitors,” the January 25 revolutionaries have also been shifted to be “traitors,” the pro-Sisi became either “far-nationalist” or “traitor,” and the opposition of the military reign has represented a “*national treason*” from a majority’s public eye and the state-discourse. Basically, these *stereotypes system* has been supported and reinforced by both mainstream and private media discourse in Egypt and the opposition media messages broadcasted abroad. Thus, the final societal consequence of such a conflict was that all Egyptian people’s spectrums and classes have become “traitors(!)” from comprehensively collective multi-perspective of the public opinion, the conflicting and fragmented elites, and the successive ruling regimes.

Finally, to achieve a state of positive peace in the Egyptian society, this necessitates managing such obstacles, re-cultivating an “*integration*” principle socially in the face of that “*betrayal stereotypes and mass discrimination*” barrier. The inclusiveness notion, we highlight here as a way of re-governing relations between the political regime and all classes of citizens on equal feet, from one hand, and between a nationwide diversity of individuals, groups, parties, movements, and organizations regardless of the political affiliation, class, gender, previous political position, economic status, and religion, inside the country, on the other.

4.3.3. Discussion: Suggested Theoretical Framework on How to Achieve Positive Peace in the Middle East

Through the Egyptian intra-state conflict analysis, it can be argued that the lack of foreign mediation efforts was a crucial cause of the conflict’s continuation and escalation in successive phases. At the same time, the Egyptian military institution has sought to accumulate absolute political power at the expense of severe losses faced by the other party (i.e., the political opponent). Thence, the conflict roots have not only been left unsolved, but these roots have also been given a (national) cause to be grown socially, ideologically, and politically for oppressed (or suppressed) liberal/religious-political spectrums of the society.

Moreover, we employ a *rudimentary* equilibrium (which is well-known as mini-maximum) of diplomatic resolution in our case as an exit, which reflects less than

maximum for Sisi's side and more than minimum for the (MB)'s party in sharing-power or the societal-co-existence itself, considering that the Egyptian intra-state conflict is a zero-sum game where one won (i.e., Sisi/military institution) at the expense of the other's losses (i.e., the (MB)'s).

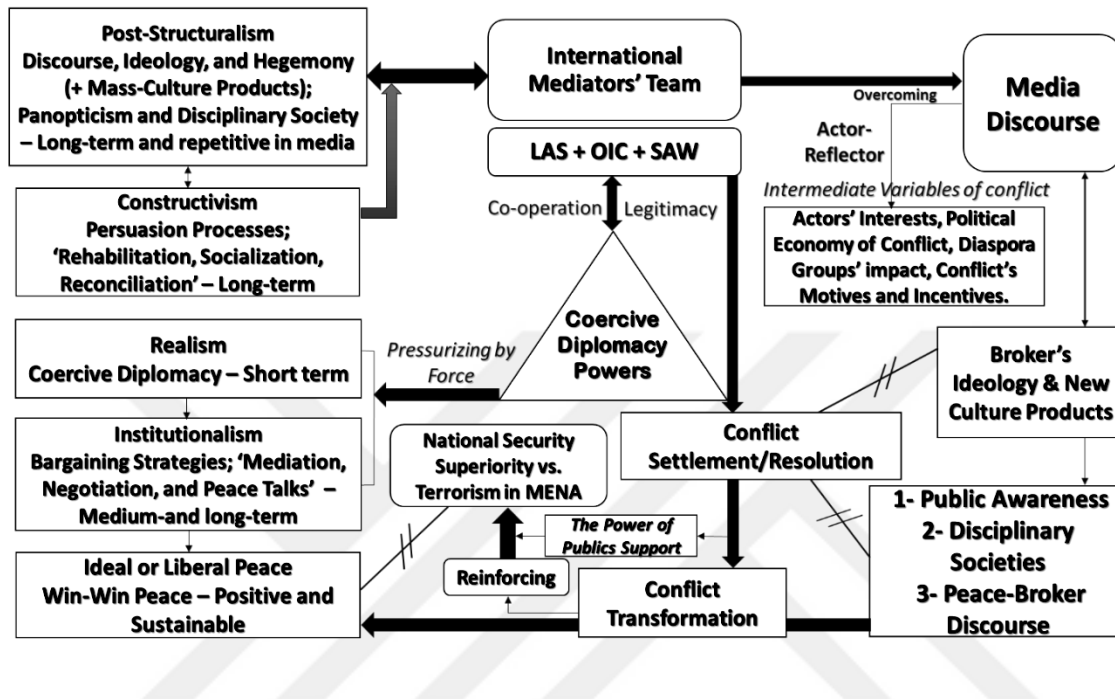


Figure 25: A Theoretical Framework on How to Achieve Positive Peace in the Middle East

Source: Prepared by the author.

Based on the conflict analysis and management case's findings, this study suggests a framework seeking to avoid similar shortcomings and weakness facets in settling/resolving conflicts in the Middle East, which theoretically leads to positive peace achieved *initially* in like cases. Our framework's mechanisms are explained as follows: First: The framework mechanisms are employed coherently through existing an (International Mediators Team "IMT"). The (IMT) represents a- the League of Arab Nations (LAS); b. the Organization of Islamic Cooperation (OIC); and c. the state(s)/entity affected by the war/conflict, abbreviated as (SAW). This (IMT) is supposed to work first on re-producing a media discourse that merges both the knowledge, norms, and values of convened/reached peace process(es) and the ideology of peace-mediators or the "peace broker's ideology," through a new and hegemonic discourse internalized consciously or unconsciously by the ordinary individuals.

Second: The (IMT)'s functions also include producing new culture products, converting consumers from the consumption standards of values and ideology of powerful capitalist classes, embedded in mass-culture commodities such films, music, and advertisements, to another culture consumption of new products in media _ that is assumed to occur in parallel with the conflict settlement/resolution stage. Namely, the aim is to change the "major" entertainment content in the Middle East's media to be in line with peace processes developments and conflict management dimensions. Also, the meant re-production of mass-culture products has a crucial role in internalizing or including marginalized sects, unlike group(s) of people and communities in conflict societies.

Third: Practicing discourse-based-overt surveillance techniques, targeting the conflict parties and their communities, besides managing the production of new mass-culture products to be in the conflict settlement and resolution course, the (IMT) is assumed to activate the idea of creating "disciplinary society/societies" achieved in the long-term. Therefore, it relies on cultivating a hegemony of peace-oriented ideology, complying with disseminating peaceful ideas, values, and norms about the region's previous/current convened peace arrangements.

Fourth: Consequently, supposed "public awareness" arises rationally as a (less, moderate, high, or immense) effect of the causes mentioned, that is to be followed by created disciplinary societies, with the hegemony of the peace-broker discourse manifesting regionally.

Fifth: The last outcomes of (public awareness; created disciplinary societies; and peace-broker discourse hegemony) reached through a media, and political discourse reflects the broker's ideology, and new mass-culture products exposing (hard) issues of politics, history, economy, peace, and war, are to be preserved continually for the long-term, paralleling with the conflict settlement/resolution efforts.

Sixth: Contextually, the media discourse during the conflict deals as "actor-reflector to intermediate variables of conflict" _ the factors that might spoil peace settlements, working on overcoming them. These variables mainly represent the "actors' interests; political economy of conflict; diaspora groups impact; and conflict's motives and incentives."

Seventh: The rehabilitation, socialization, and reconciliation processes are considered in this framework to be employed in conflict society by the (IMT)'s efforts, relying on joint roles of the pressure-practicing powers, media power, and civic engagement.

Eighth: Thence, the (IMT)'s course of action requires the use of coercive diplomacy by one/some super, great, or supranational power(s) (i.e., the deterrence-applying-powers) for initiating bargaining strategies such as mediation, negotiation, and peace talks between both conflicting parties.

Ninth: Simultaneously, reaching the phase of conflict transformation reinforces achieving national security priorities for every state in the confrontation of terrorism in the Middle East and North Africa (MENA), coinciding with a state of (liberal) peace reached as a comprehensive outcome of collective efforts exerted through the coordination among the "(IMT), peace ideology-oriented-media and political discourse, and coercive diplomacy-practicing powers."

At last, that general outcome does not contribute only to settling or resolving current conflicts but also to creating an appropriate atmosphere and bare ground for imposing peace processes trajectory's ideal-liberal norms and standards *popularly* through the applied post-structuralism and constructivism agendas before initiating the very diplomatic course of the Realism's coercive diplomacy or/and the institutionalism agenda; see Figure 25.

Accordingly, for tackling the Egyptian intra-state conflict or any similar one, the theoretical framework's mechanisms effectively foster the norms of ideal-liberal peace to exist in every structure of the Middle East's nation-states systems, during-and post-conflict phases. Therefore, the sustainability of the mentioned (collective) efforts is a primary factor in resolving current conflicts' roots as well as preventing/reducing the possibility of the outbreak of symmetrical conflicts in the future. However, a developed combined perspective of a theoretic-strategic lens provides further the most solid ground to stand on for conflict management intra-and inter-state significantly, which is highlighted in the next section.

4.4. The Developed (Positivity of Peace Hypergame Model) and (Balance of Peace-State Hypergame Model) for Theoretically-Strategically Managing Conflicts Within and Between Nations

4.4.1. Introduction and Methodology

The study aim: The key objective of this study is to employ developed models of the applied hypergame theory for the conflict settlement or/and resolution purpose within and between nations where complex world circumstances exist. Thence, under conditions of *uncertainty* regarding how the opponent reasons and how it perceives the game or the reality of conflict, we introduce two hypergame-models, describing the deception games in the first place and the misperception ones secondly. Therefore, this work contributes to bringing global, regional, and national security and peace into its proper status inter-nations and within them.

The built models: Based on using hypergame theory as a methodology, we present a multi-level conflict management approach's first model: the (Positivity of Peace Hypergame Model "PPHGM"), which is composed of strategic interactions occurring on regional, national, and global levels, first, reflecting the first entire hypergame of the model or (HG)₁. Then, the (PPHGM) addresses other strategic interactions on global, regional, and national levels, consecutively, representing its second entire hypergame or (HG)₂. That approach's second model, the (Balance of Peace-State Hypergame Model "BPSHM"), comes after, including two entire hypergames: the first or (HG)₁ resembles the case of intra-state conflicts, whereas the second or (HG)₂ simulates another of conflicts inter-state.

Hypotheses: 1. The (Positivity of Peace Hypergame Model)'s central hypothesis is: The binary formula of (Global Hegemony of Peace Versus Realist Hegemony of War's Inevitability) is the equilibrium or solution point of a positivity of peace developed relevant-hypergame model. 2. The (Balance of Peace State Hypergame Model)'s hypotheses are; a. A balance of peace-state within nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties socially, politically, and diplomatically at any phase during and post-intra-state conflicts. b. A balance of peace-state between nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties diplomatically, politically, and socially at any phase during and post-inter-state conflicts.

At last, this study is divided into five sections. In the parts to follow this introduction, the second section concentrates on relating applied theories of international relations and media fields to a method of practice strategically, representing the theoretical roots of the first hypergame-model (i.e., the “PPHGM”) mainly and of the second model (i.e., the “BPSHM”) partially. Consequently, the third and fourth sections discuss the multi-level conflict management approach’s first and second hypergame-models, respectively, and their (HG)₁ and (HG)₂. The last part comes sequentially, suggesting the general conclusion.

4.4.2. Theory and Application: The Developed Hypergame Models’ Theoretical Roots

Building a model of possible positivity of peace and another of the balance of peace state relying on the *hypergame theory* as a methodological foundation, we set the following theoretical application merging some IR peace agendas with other media approaches, aiming at achieving sustainable peace in any disputing region from a combined national, regional, and global scope. This section thus introduces the practice of some applied theories, representing the theoretical roots of the (Positivity of Peace Hypergame Model) essentially, and the (Balance of Peace State Hypergame Model) in part, where these models are the constituent pillars of the study’s multi-level conflict management approach.

4.4.2.1. First: An Applied Post-structuralism Peace Approach; Neo-Post-structurization of Truth

The post-structuralist agenda of peace imposes its inclusiveness on the peace discourse constructed within any attempt of building peace at all levels. Combining the “power, knowledge, elite, discourse, truth, discursive formations, ideology, and hegemony” concepts of Michel Foucault in his 1989 book *The Archaeology of Knowledge*, who is a leading figure of post-structuralism, with the “mass-culture products” conceptualization in the Theodor Adorno and Max Horkheimer’s culture industry theorization of the media’s political economy,³³⁶ we assume that a *comprehensive* peace agenda of our

³³⁶ See, Adorno, *The Culture Industry: Selected Essays on Mass Culture*; Garnham, “From Cultural to Creative Industries: An Analysis of the Implications of the “Creative Industries” Approach to Arts and

conflict management approach applies firstly through a “*neo-post-structurization of truth*,” shaped by these stages:

Stage I: Re-producing the (ongoing) *conflict-knowledge* within the elite or/and media discourse nationally/regionally to be in line with conflict *de-escalation*. This is the “*discourse seeds cultivation*” stage.

Stage II: The ideology of mediators in previously and present convened-peace processes is assumed to shift from its “*semi-covertness*” past positions into openly *dominant* ones in a neo-media discourse on national and regional levels, spreading both the *priority* and *inevitability* of peace exerted efforts, highlighting the successes achieved and ignoring the failure’s aspects. This is the “*fledgling positively peace-hegemony*” stage.

According to Gramsci’s hegemony theory,³³⁷ hegemony is a power achieved by force or coercion and consent. That occurs when the consensus over the political authority’s accumulated power, domestic and foreign politics, suppressive apparatuses (i.e., police and army), etc., are being agreed on *voluntarily* by the ordinary individuals in society. Thence, the Althusser’s mentioned *ideological state apparatuses* such as churches, schools, and media³³⁸ play a crucial role in getting that ‘*mass mandate*’ or the mass public consent for achieving an *expansive* hegemony for the political authority. The hegemony system that the ruling (dominant) class or political society disperses not only politically, but economically and culturally, allowing its *absolute* control over diverse structures of the state’s existing system, representing the subaltern groups’ views and aspirations so that getting the civil society’s individuals’ consent as a function of hegemony.

Based on that, under our modeling’s stages, the traditional conception of (expansive) hegemony is used alternatively to seek *not* a “*political power*” within a state but a “*peace-power*” in national and regional societies through the political elite(s)/authority efforts of “*soft coercion*” first and the civil society actions of “*consent/adoption*” publicly second.

Media Policymaking in the United Kingdom;” Horkheimer and Adorno, “The Culture Industry: Enlightenment as Mass Deception;” and, Laughey, *Key Themes in Media Theory*.

³³⁷ See, Steve Jones, *Routledge Critical Thinkers: Antonio Gramsci*, ed. Robert Eaglestone (The USA and Canada: Routledge, 2006).

³³⁸ Althusser, “Ideology and Ideological State Apparatuses (Notes Towards an Investigation),” 79-87.

Stage III: The notion of Foucault's disciplinary society³³⁹ in Panopticism³⁴⁰ plays a significant role here, but reversely, in changing the behavior of conflict sides. The change that occurs by employing the mass media power to create an all-seeing eye of a panopticon *public guardian* over conflicting parties *imprisoned* in a social circle only includes acceptable *peace* behaviors, excluding those unacceptable ones. That is being achieved in a usual manner of media functions mechanisms, by objectifying the subjects of peace processes in a peace-oriented-media discourse operated by the *elite(s)* (i.e., the ruling/dominant classes in society) and internalized by all individuals or the public eye of the region's societies, creating '*reinforcing*' knowledge about these subjects. The last express a phase of "*mass-publics-oriented-disciplinization of the conflict parties*" in a peace process. Also, it is considered the "*peace-public flak*" stage. Prominently, if it is one conflict party, political authority, besides being the *observer* in a panopticon (national/regional) society, becomes the *observed* with other conflict sides within peace process *cells* under an all-seeing eye's *peace-guardian* society. The conflict parties' behaviors thus are assumed to *meet* the expectations of a '*positively peace-hegemony*'-instilled-nation(s).

Stage IV: Transforming a "*fledgling positively peace-hegemony*" into an '*omnipotent hegemonic state*' reinforces the success of the previous stage, which is an aim of this extended phase. That is to say, under a global/regional governance mechanism, reproducing effectively "*peace process-directed-mass-cultural products*" (i.e., popular music, songs, films, and advertisements) is assumed to be facilitated on all levels for the production and exportation to nations/regions concerned. So, the consumers of this supposed "*neo-mass-culture industry*" of mass media become oriented towards adopting hard issues of politics, history, peace, and war _ instead of shifting the mass audiences to consumers occupied by the capitalist classes ideology-serving advertisements' products/commodities (e.g., the recent version of cellphones, or the new shampoo good), promoted through the mass-culture products industry. Furthermore, having the public eye

³³⁹ Foucault, *Discipline and Punish: The Birth of the Prison*; and see also, Jespersen, Albrechtslund, Øhrstrøm, Hasle and Albretsen, "Surveillance, Persuasion, and Panopticon," 109-120.

³⁴⁰ Foucault sees Panopticism as a general principle of political anatomy where the relations of discipline occur through an existing system of ordinary citizens being controlled and therefore governed by the political authority that makes them a subject of continuous *surveillance* (Foucault, *Discipline and Punish: The Birth of the Prison*, 208-216), simulating Jeremy Bentham's 1791 panopticon prison notion of an all-seeing eye, but rather in an open panopticon society.

to observe *peace trajectories* continuously, creating an *omnipotent peace-hegemonic state*, necessitates the *dependence* on that neo-mass-culture industry more than relying on a broadcasting bulletin or news shows.

Using many conventional and digital media outlets, the *peace-hegemony* message conveying supporting norms and values of conflict settlement/resolution/transformation to widespread classes of (conflict) regional societies could take the shape of any medium regardless of being contemporary modern, or future high tech-advanced. Since *the medium is the message* according to the Canadian philosopher Marshall McLuhan's main axiom of *media theory* developed in the 1960s, and the *message* here is *the peace-medium*, then *the "medium is the peace."* In sum, that is the "*omnipotent peace-hegemonic state*" stage of this applied post-structuralism peace approach.

Ultimately, the outcome of the production and re-production processes of the "discourse, truth, knowledge, power orientation, peace mediators' ideology, neo-mass-culture industry, and peace-hegemony" composes what we called "*peace-broker discourse.*" This stage is an accumulated output with a *repetitive* frame in traditional and digital media platforms actively politically and socially, and it is long-term. The following strategies-paradigm of the applied post-structuralism peace approach and culture industry summarizes the mentioned above stages:

{{Discourse seeds cultivation → Fledgling positively peace-hegemony → Conflict parties' disciplinization & peace-public flak → Omnipotent peace-hegemonic state → Peace-broker discourse (Total Outcome)}}

4.4.2.2. Second: From a Constructivist Peace Approach Perspective

The persuasion power practiced during a peace process course is crucial in this conflict management approach by employing well-known rehabilitation, socialization, and reconciliation strategies. The *rehabilitation* programs of *aggressive* non-state actors, such as terrorist groups/organizations, are *credibly* applicable here. These programs target a. the arrested members in prisons by influential characters, preachers, or/and previous-spiritual leaders of the same (terrorist) group/organization, working on changing a pro-conflict mentality or misguided labeled (terrorist) behaviors; or/and b. the concentration on dealing with the conflict parties' communities in a concerned society through some

oriented-media programs or other '*pacific*' (inter)state-policies formulated on the same lines. On the other hand, during and post-conflict stages, the socialization process focuses on integrating (non-) state actors of some/all conflict parties as partners or free persons within (national/regional) society, involving them in governmental and private institutions across/inter-state. Comparingly, the reconciliation process is achieved through signing a peace deal, pact, accords, agreement, etc., between conflicting sides, tackling significant causes of conflict partially or entirely, through convened peace talks officially or unofficially. Having this process (i.e., reconciliation) third, after the rehabilitation and socialization ones, consecutively, or initiating the constructivist trajectory by bringing it about firstly, depends *more likely* on how far every party of dispute may trust the other in future joint-political/diplomatic steps taken by each altogether. In general, the more the trust estimates' credibility and certainty among conflict parties are, the more that each prefers the reconciliation choice first to that of rehabilitation or/and socialization, and vice versa. This constructivist approach's phases are long-term.

At last, employing the precedent strategies tends to be ascertained regarding changing both conflict parties' behaviors coinciding with dispersing the peace process(es) norms and its comprehensive sustainability standards within/between nations. In this context, media discourse role as a mass persuasion power, considering the media one of the ideological state apparatuses,³⁴¹ is also significant in facilitating all/some parties' harmonious involvement in the (inter-)society's institutional structures during-and post-conflict stages, as well as providing them a popular acceptance in the pursuit of promoting the rehabilitation, socialization, or/and reconciliation process's efficiency.

4.4.2.3. Third: An Extended Peace Approach; Towards Mass-Ideological Rehabilitation & Neo-Constructivism

While implementing a peace process facilitated by the interference of third parties, some intermediate variables may intervene in an opposite line, spoiling a reached peace agreement, for instance, or this process course at any other stage. Those factors or

³⁴¹ Althusser, "Ideology and Ideological State Apparatuses," 79-87.

variables can mainly be the following:³⁴² i. The actors' interests (e.g., disputed territories, political ends, and natural resources supplies), where the conflict actors might represent state actors, (international/regional) foreign actors, or/and non-state actors like terrorist groups. ii. The political economy of conflict (i.e., the accessibility to natural resources such as water, oil and natural gas, diamond, and minerals). iii. The diaspora groups as peace spoilers or an international opposition to peace process arrangements, adopting anti-peace propaganda or/and providing financial support for the conflict continuity. iv. The conflict motives: these could be ethnic, religious, national, sectarian, ideological, or cultural. v. The conflict incentives (i.e., the war/conflict gains, or/and future utility).

Many counter-impact efforts of those peace-spoiling behaviors' intervening variables manifest increasingly for maintaining the conflict management path's achievements/successes, suggesting that:

Firstly: The media discourse roles within our 'applied post-structuralism and culture industry' peace approach entail the *capability to* neutralize those variables that cause/express the conflict settlement/resolution's spoiling behavior. Still, it is worth noticing that the benefits of the conflict/war continuation for the peace spoilers (e.g., individuals, private or public groups, (non)state-actors, or/and superpowers) sometimes become higher than the cost accumulated from initiating the conflict/war itself or those gains obtained by participating in or implementing a peace process.

Secondly: Media diplomacy³⁴³ operating through political and media discourse generally, and the discursive formations within the elites' spoken out discourse, in particular, practiced in favor of conflict settlement/resolution, is seen as an *expansionist* way in functions under this frame. It *reflects* obstacles to the masses raised by those intervening factors and *overcomes* them by attempting to achieve *breakthroughs* in the conflict trajectory. Furthermore, empowered by a 'positively peace-hegemony'-instilled-nation(s), the media diplomacy, in this context, can transform the war/conflict circle to run conversely by *directly/indirectly* forcing making concession(s) for the public interests

³⁴² See, Butler, *International Conflict Management*; Efegil, *Devlet-İçi Çatışmalar ve Çatışma Yönetimi (Intra-State Conflicts and Conflict Management)*; and, Newman and Richmond, "Obstacles to Peace Processes: Understanding Spoiling," 1-19.

³⁴³ See, Gavra and Savitskaya, "Mass Media in Interstate Conflicts: Typological Model "Peace-Conflict Journalism Multidimensional Approach"," 251-265; and, Gilboa, "Diplomacy in the Media Age: Three Models of Uses and Effects," 1-28.

(i.e., the common good) or what is best described as ‘*peace-hegemony-oriented-national interests*.’

Thirdly: If war served to achieve national interests of self-interested states according to Realism’s fundamental axiom, then it was the perception of the Realists that led them to imagine the international system actors (i.e., nation-states) as the system-competitors, self-helpers, and conflicting power-acquisitors, leading decision-makers to act in same lines for decades to come, excepting those liberal states that opt for the democratic *perpetual-peace* as a regional institution *dominating* their inter-relations in Europe in the aftermath of World War II by the 1950s through an economic unity first followed by a political one (i.e., European Union). So, constructing the *peace institution* at the core of every state-actor perception instead of that ‘*manufactured*’ war-based-conflictual reality of Realist thought about the international system is assumed to transform a chaotic structure of system defined by anarchical order into an organized structure of a semi-hierarchical system in which global “*hegemonic*” governance has both “*(future) power and force*” to impose consent *voluntarily* of peace rather than war, acquiring global mass-consensus over such a progressive advance.

Fourthly: The outcome of this extended approach is that such exerted efforts by global *hegemonic* governance combined with its media mechanisms and tools regionally and globally, which necessitate medium-and long-term periods, gradually achieve *breakthroughs* in conflicts around the globe, and then *global hegemony* of peace, coinciding with diffusing the *peace-broker ideology* within the relevant discourse and the global re-production of *neo-mass-culture products*. Here, this explained course predictably strategizes what we called the “*mass-ideological rehabilitation*” as total output, targeting *not* some/all conflict parties and their communities under this approach, but rather the ‘*global ordinary publics*.’

Fifthly: *Overcoming* a possible negative impact of those intermediate variables on the quality of a peace process resulted might further occur by employing the media discourse when operating in a state(s) affected by the war or conflict through these three processes: i. *re-interpreting* and representing any zero-productivity variable from positively peace process-focused-news framing eye; ii. providing *priority* of events satisfy the ‘*peace-broker ideology and discourse*’ purposes, as to be *perceived* approximately symmetrically

in a sequential process of agenda-setting within the publics' consciousness; and iii. activating *priming* effects through changing those publics' standards used to make political evaluations, rebuilding their judgments regarding the conflict/war and its parties, and future peace arrangements taken intra-or/and inter-state in a way to be inclusive of the other conflict sides. The last process plays a key role in getting the publics' support to a "neo-hegemony of peace versus current hegemony of war's inevitability" formula.

Sixthly: The "*inevitability of war*" notion traces its roots from the Realist thought, particularly from the first developed Classical Realism school to which Hans Morgenthau is a founding father through his 1948 book³⁴⁴ "*Politics Among Nations: The Struggle for Power and Peace*." Classical Realism considers war or conflict as a natural outcome or product of an aggressive and flawed human nature operating in an ungoverned and therefore insecure global environment³⁴⁵ entails suspicion-based-inter-state relations. On the other hand, Structural Realism which *Kenneth Waltz* founds through his book "*Theory of International Politics*," published in 1979,³⁴⁶ sees the war or conflict as the accumulated outcome of a security dilemma dominating the state-to-state relations in an international system defined by its anarchical structure due to existing no central authority. Here, each system's unit (i.e., the nation-state) seeking its own survival and self-interests in a self-help system based on mutual suspicion is forced to move to the rational choice of making alliances and building arming strategies aggregating power and acquiring more weapons for *declared* defensive reasons. However, that behavior threatens other states in the system, prompting them to act likewise, where the war or conflict occurs as a gradual outcome of such a domino effect.

In sum, if the war or conflict is not necessary, it is "inevitable" from both viewpoints, in terms of considering the flawed individual human nature in a world without government to restore security or impose peace, or the anarchical structure of a threatening international system. Under either argument, and mainly for the pretext of serving national/state-interests, the war's inevitability principle is seen cultivated in every individual's posture that became narrowed by the same narrowness of the nation-state

³⁴⁴ Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace* (The USA, New York: Alfred A. Knopf, 1948).

³⁴⁵ Michael Cox and R. Campanaro, *Introduction to International Relations* (London: University of London, 2016), 109.

³⁴⁶ Kenneth N. Waltz, *Theory of International Politics* (The USA: McGraw-Hill, 1979).

frontiers, under which this individual must be ceaselessly *obedient* to a *constant state of war/conflict* within a *no longer* Hobbesian state, and therefore, Hobbesian world.

Seventhly: Since Thomas Hobbes, in his 1651 book “*Leviathan*,” defined anarchy based on perceiving a world without government or hegemon ruler to restore order or achieve peace when a state of war of all against all dominates;³⁴⁷ at the same time, this perspective had prevailed during the seventeenth century when the nation-state’s notion was still fledgling after the peace of Westphalia achieved in 1648 among conflicting states and principalities of the European regional system, where the English Civil War was taking place along over one decade (1642-1651). That points out that Hobbes or any other like-minded philosopher of that era if witnesses our today’s *absolute* order of having hegemon ruler with sovereignty (still) maintained by a way or another for preserving the Enlightenment thinker John Locke’s (1632-1704) individual liberal rights of life, property, and liberty of a state of human nature (i.e., human rights), would be wondering the reason why the war is judged as a *necessity* – if not a *means* of achieving peace intra- or-inter-state, as long global diplomacy institution and collective security organizations composed of nationally-hegemon state-actors became the alternative of Hobbes’s perceived global hegemon (one) ruler/government. That is to say, the *singularity* of the Hobbesian world’s ruler/government is contemporarily translated into a *multiplicity* of the same imagined hegemon one with like functions as well, in each nation-state within the global system. As an outcome, a “neo-constructivism vision” of a ‘universal/global peace-hegemony’ for conflict management might strategically be substitutional to a current (national/regional) hegemony of war institution as a means for achieving national interests, integrating Europe’s liberal democratic peace-built-regional system as a piece of an analogical whole.

Ultimately, these strategies outline a paradigm of our “extended peace approach and neo-constructivism” as the following:

{ { *Capable* neutralization of peace spoiling behavior → Media diplomacy of ‘*peace-hegemony*’-oriented-national interests → Constructed *peace* institution, perceptions, and reality & Imposed peace-global mass consensus by global *hegemonic* governance

³⁴⁷ See Thomas Hobbes, *Leviathan*, ed. J. C. A. Gaskin (USA: Oxford University Press, (1651, 1996)).

—→ *Mass-ideological rehabilitation* of global publics (total output) —→ Neo-constructivism of a “*global hegemony of peace vs. Realist hegemony of war’s inevitability*” binary formula (extended output)}}}

4.4.2.4. Fourth: Coercive Diplomacy and Bargaining Conventional Approach

Succeeding in previous phases does not ensure initiating the bargaining strategies’ course without using ‘*force*’ by some powers (e.g., the UN, US, and EU) first for coercing one or both conflict parties to accept mediation efforts and the diplomatic resolution. Although the Realism agenda of peace represents what so-called survival or victor peace³⁴⁸ in which one wins at the expense of the other, using the coercive diplomacy means (e.g., imposing sanctions/tariffs, and threats), which lies in the Realism realm, by one or more coercion-practicing power in the short term, is seen indispensable for subjugating some/all conflicting sides to take part in a peace process. Moreover, the journalists as mediators may play a role in a pre-negotiation phase expressing *media-broker diplomacy*³⁴⁹ during a conflict. Also, a conflict knowledge-based-debriefing process assumingly improves the performance of peacemakers and conflict resolution practice³⁵⁰ on the one hand and the diplomatic resolve on the other.

Accordingly, the bargaining strategies such as; mediation, negotiation, and peace talks³⁵¹ are initiated once pressure is practiced over conflicting parties distinguished by committing peace spoiling behaviors³⁵² by mediatory deterrence-applying powers. Again, the co-optation and integration of all, rather the exclusion of some in peace talks, are considered social tactics followed for a sustainable peace process results at the end of the day. Here, power-sharing in a post-conflict stage³⁵³ might appear as an exit for some intra-state conflict resolution tracks under these advantages; i. it is a security guarantee for all

³⁴⁸ See, Richmond, *Peace in International Relations*.

³⁴⁹ Gilboa, “Diplomacy in the Media Age: Three Models of Uses and Effects,” 1-28.

³⁵⁰ Greiff, Bricker, Gamaghelyan, Tadevosyan and Deng, “Debriefing in Peacemaking and Conflict Resolution Practice: Models of Emergent Learning and Practitioner Support,” 254-268.

³⁵¹ See, Butler, *International Conflict Management*; Efegil, *Devlet-İçi Çatışmalar ve Çatışma Yönetimi*; Hofmann and Schneekener, “Engaging Non-state Armed Actors in State and Peace-Building: Options and Strategies,” 603-621; and, Richmond, *Peace in International Relations*.

³⁵² See, Newman and Richmond, “Obstacles to Peace Processes: Understanding Spoiling,” 1-19; and, Zahar, “Understanding the Violence of Insiders: Loyalty, Custodians of Peace, and the Sustainability of Conflict Settlement,” 40-58.

³⁵³ See, Butler, *International Conflict Management*; Efegil, *Devlet-İçi Çatışmalar ve Çatışma Yönetimi*; and, Richmond, *Peace in International Relations*.”

parties to commit an agreed-on peace settlement's terms after the conflict ends; and ii. it works on eliminating the peace spoilers' behaviors directed against a convened or implemented peace process. Furthermore, the power sharing mechanism taking the shape of participating in domestic constituencies, constituting political parties, or governmental coalition after internal conflict, is a core part of de-escalating the conflict intensifying level _ necessarily but *not* sufficiently for a peace trajectory's success, achieving each party's conflict interests through *absolute* gains depending on making the peace process benefits exceed the conflict/war's continuation cost for both. The last formula is applicable among conflicting sides in interstate conflicts as well. Agreeing with Hofmann and Schneckener,³⁵⁴ employing the bargaining strategies necessitates medium-and long-terms.

The expected equilibrium (solution) of witnessed conflicts occurs through our modeling coinciding with achieving the previous paradigms' strategies and combined approaches in alternately sequential roles, transforming any disputing region into a state of positive or win-win peace. Namely, it achieves an ideal-liberal peace in its abstract norms spread across political, economic, or/and social structures of a state-system and the inter-state one. Nevertheless, a complementary element is needed to effectively restore such civil peace, embodying the idea of an "International Mediators Team (IMT)."

4.4.2.5. Fifth: The (IMT) & Collective Diplomacy Principle

Towards conflict resolution exerted efforts' accomplishment, functions made by an (*International Mediators Team*) inarguably take place within our modeling. The (IMT), we assume, comprises *neutral mediation*³⁵⁵ representatives of intergovernmental organizations (e.g., the UN, and EU); inter-state regional organizations (e.g., the League of Arab States (LAS), the African Union (AU), and the Organization of Islamic Cooperation (OIC)); and the nation-state(s) or entity affected by the war/conflict (SAW) _ which is the substantial theme of assigned peace missions.

The (IMT)'s peace missions are assumed to be ascertained with dependence on precedent phases' strategies through these mechanisms: i. *Examination and debriefing*: focuses on

³⁵⁴ Hofmann and Schneckener, "Engaging Non-state Armed Actors in State and Peace-Building: Options and Strategies," 603-621.

³⁵⁵ See, Svensson, "Who Brings Which Peace? Neutral Versus Biased Mediation and Institutional Peace Arrangements in Civil Wars," 446-469.

examining the conflict's nature through interactive connectedness with representatives of (SAW), where the (IMT) pursues a debriefing process of previous/ongoing conflicts, accumulating further experience in peacemaking and conflict resolution practice. ii. *Publicization of the 'peace-broker discourse'* regionally within the conflict settlement/resolution context. iii. *Legitimacy and cooperation*: the (IMT) does not have the political power authorization means for coercing any conflict party for initiating negotiation or recognizing their presence as official mediators unless a majority votes do legitimize it in the UN's general assembly, while being suggested by one or more Permanent Five (i.e., the U.S, Russia, China, the United Kingdom, France) member, cooperating with any for the coercive diplomacy purposes. iv. *Bargaining initiation*: the (IMT) begins its mediation efforts following the legitimacy and cooperation's fulfillment tasks, down to conducting negotiations and peace talks between given conflict parties. v. *Non-militarization*: the (IMT) is not concerned with taking any military decisions or actions regarding one side or both parties of the war/conflict.

At last, vi. the (IMT) performs (or reinforces) a '*monitoring function*' or '*surveillance*' mechanism upon the conflict parties overtly. It indicates that if any side deviated from the drawn course of a peace process, the (IMT) takes necessary (coercive) actions or issues acts, cooperating with some coercion-applying powers and employing mutually '*deterrence*' practices for getting an aggressor into discipline or repelling a *violating* behavior from affecting others. So, the very Panopticism scope of the "all-seeing-eye" generates not a manufactured disciplinary society only but above that a 'disciplinary region or disciplinary societies.' Thence, the (IMT) idea is an *amended* translation of the *collective security* principle _ if the latter meant a common security effort or war ensued by an inter-state coalition for deterring *undeterrable* aggressor or/and repelling a devastating international violation(s) made against others in the system. That is, the (IMT) reflects a notion of "diplomacy versus war-based-*collective* conflict management" on global, regional, and national levels, which we call the "*collective diplomacy*" principle.

4.4.3. The Multi-Level Conflict Management Strategic Approach's First

Hypergame Model: A Positivity of Peace Hypergame Model (PPHGM)

Under a multiple-games-based-hypergame model, each player in the game makes the strategy choices while a misunderstanding or incorrect information about the game's

players, their strategic preference vectors, or/and their decisions made could exist. All players consider how other players reason, available information, and each one's beliefs and perceptions of reality for making those actions (decisions) of an *expected maximized utility's* perceived outcomes. So, what a player reasons about an opponent or the other(s)'s strategies and moves might be an effect of misperception or deception practiced by another. Accordingly, this part explains our developed (PPHGM)'s two entire hypergames first and then outlines their equilibrium equations sequentially.

4.4.3.1. First: The Positivity of Peace Hypergame Model's Multiple Games

4.4.3.1.1. The (PPHGM)'s Main Assumptions and Hypothesis

The (PPHGM) is a second-level hypergame composed of two main hypergames. In a second-level hypergame, one player or more knows that a hypergame is being played, where at least one player perceives that another player (or more) has misperceptions about the game. Including two second-level hypergames within this model, which are $\{(HG)_1, (HG)_2\}$, each entire hypergame contains those separate hypergames perceived by both players.

A given player's hypergame, in this context, is constituted out of this player's perceptions of what the other player(s)'s played game(s) is/are. Containing multiple different games, the (PPHGM) as an *unbalanced* hypergame-model emerge, representing different perceptions and views of each player about the game and the reality of conflict while being *rebalanced* to shape two spheres of strategic interactions where the entire $(HG)_1$ and $(HG)_2$ are being played with all players' views overlap when common knowledge of the conflict exists among them.

In the (PPHGM), any equilibria that could exist within each player's perceived hypergame are not needed in our model. Still, the players' strategic preference vectors, which appear by analyzing each one's own hypergame separately, provide stable information for this modeling. That information is useful in determining how each actor reasons and what it believes about the game and reality, thus reasoning what the *entire* hypergames, $\{(HG)_1, (HG)_2\}$, equilibriums are. Accordingly, this stability analysis became a way of reaching a Positivity of Peace Equilibrium (PPE) of the entire (PPHGM), specifying how any may make decisions for acquiring *expected maximized utility* of

perceived outcomes _ given that the strategic interactions of *rebalanced* models at an *overlap point* of common knowledge in either the (HG)₁ or the (HG)₂ determine those outcomes or the resulted equilibriums of each entire hypergame.

Within this model, there are two players in the (Strategic Interactions)¹, which is the first played entire hypergame or the (HG)₁, and four players in the (Strategic Interactions)² that represent the second played hypergame or the (HG)₂. Actor I in both hypergames is the most *dominant* and *important* player, who has the advantage to play simultaneously or sequentially, taking one action (decision) or more at the same move, relying on having Actor II unknowledgeable, misperceived, or/and deceived about its strategic preferences, its played-game, and made actions. At the same time, Actor II in both hypergames, unknowing that a hypergame is being played, has misperceptions about the game and reality while playing in a sequential move as a reactor. So, the model is built on simultaneous-sequential move's nature. Furthermore, Actor I has different preference vectors for each hypergame, playing those strategies of expected utility only after reasoning how Actor II or any other actor reasons, and their beliefs and perceptions or misperceptions of the reality and the game. At last, this model is a *reductionist* one that dismisses equilibriums resulting within each player's perceived hypergame, utilizing analyzed theoretical approaches in IR and media discourse to achieve a Positivity of Peace Equilibrium (PPE). Through a process of including strategy-input and output, we outline some equations describing each entire hypergame's interactions at an overlap point of all players' views on one hand and the expected utility of *known perceived-or/and unknown*-resulted outcomes on the other, reaching the (PPE) consequently. In sum, through this modeling, we seek to prove the validity of this hypothesis: "The binary formula of "Global Hegemony of Peace Versus Realist Hegemony of War's Inevitability (GHP vs. RHW)" is the equilibrium or solution point of a positivity of peace developed relevant-hypergame model."

4.4.3.1.2. The (Strategic Interactions)¹ Hypergame: (HG)₁

4.4.3.1.2.1. Firstly: The (HG)₁ Description; Misperception and Deception Games

In (HG)₁, there are two hypergames: (HG_{1.1}) and (HG_{1.2}). The HG_{1.1} (i.e., Actor I's perceived hypergame) includes i. the knowledge of a hypergame being played; ii. the strategic preference vector of Actor I (i.e., the Elite and Discourse), which is composed

of: {(Cultivation); (Disciplinization); and (Conventional Constructivist strategies: Rehabilitation, Socialization, and Reconciliation)} mixed strategies. The $HG_{1.1}$ contains $\{G_{1.2}\}$ which is the game played by the other player, Actor II (i.e., Publics), as it is perceived by Actor I. Here, Actor I is aware of Actor II and perceives $\{G_{1.2}\}$ as i. a game of incomplete information where Actor II has misperceptions about the game, or/and reality; ii. Actor II's preference vector includes overt strategies such as "obedience, compliance, and subordination;" iii. a game in which Actor II is a subject of Actor I's authority influence and a reaction to its taken moves. On the other hand, the $HG_{1.2}$ (i.e., Actor II's perceived hypergame) includes i. unknowledge of existing a hypergame being played; ii. uncertainty about who the other player is, its strategic preference vector, and the moves or actions (decisions) made; iii. strategic preference vector composed of: {(Peace-Public flak); and (Omnipotent Peace Hegemony)} mixed strategies. In the $HG_{1.2}$, Actor II does *not* perceive the $\{G_{1.1}\}$ or the game played by Actor I, who is the sole player with Actor II in the $(HG)_1$. At last, the (Strategic Interactions)¹ hypergame or the $(HG)_1$, merging the perceived hypergames of Actors I and II, where: i. $HG_{1.1} = \{G_{1.2}\}$, and $HG_{1.2} \neq \{G_{1.1}\}$; ii. $\{(HG)_1 = (HG_{1.1} + HG_{1.2})\}$, is being played at an *overlap point* of all players' views and perceptions where a common knowledge of intra-and inter-state conflicts exists, constituting a *rebalanced* model of equilibrium positions of the entire $(HG)_1$ _ while not considering any equilibriums reached within each player's separately perceived hypergame.

4.4.3.1.2.2. Secondly: The $(HG)_1$ Overlap Point's Strategic Interactions; a (Rebalanced Model)₁

Building the (PPHGM) upon real-world circumstances, the (Strategic Interactions)¹ hypergame begins with Actor I, which is the (Elite) (i.e., ruling/dominant classes) having the (Discourse) power, activating our applied post-structuralism and culture industry peace agenda by moving to the "(Cultivation) of media, political, and academia peace-discourse seeds" action. The $(HG)_1$'s moves are taken regionally, nationally, and globally, consecutively.

Within the cultivated elite's discourse, the '*mass-publics-oriented-disciplinization of the conflict parties*' strategy *first* occurs with Actor I's moving to the (Disciplinization) choice. Here, the Panopticism idea's inversion by achieving the *observer society* principle

to be an alternative, in this given context, to the notion of individually *observed society* or the panopticon society as an ordinary citizens' open prison, does not occur but when a society's existing superior watcher (i.e., ruling/dominant class(es), or political authority) allows for such relation's shifting to be internalized within the discourse and translated into active social participation in digital outlets nationwide and zero-violence mass protests publicly.

In that case, Actor I made both the first and second moves depending on Actor II's lack of information about its strategic preferences deceiving this actor of whether those were its picked actions or unintentionally made by another (e.g., the media gates guards such as the content-producers, and editors).

Misperceiving Actor I's precedent actions and moving according to its beliefs and perceptions of reality which are built on that *deception* of the (Disciplinization) strategy, Actor II (i.e., regional, national, and global Publics) choosing to be the all-seeing eye public guardian of the conflicting parties, and as a rationality-guided-actor and subject to Actor I, moves to the (Peace-Public Flak "PPF") strategic alternative, sequentially.

An (Elite-Publics' Mutually Impact Realm, "EP-MIR") outcome arises when using in a sequential move the {(Disciplinization); (Peace-Public flak)} pair of strategies by Actor I and Actor II, respectively.

Meanwhile, Actor I moves to the (Conventional Constructivist Strategies: Rehabilitation, Socialization, and Reconciliation, "CC(Re-So-Rec)") choice, in a simultaneous-move to that of picking the (PPF) action by Actor II, with the (Fledgling Peace Hegemony "FPH") results as an outcome of using both the {(Cultivation), (Disciplinization), and (CC(Re-So-Rec))} strategies by Actor I and the (Peace-Public Flak) strategy by Actor II within the (EP-MIR) initial outcome.

As an extension of its deception and misperception-directed-previous strategic preference _ the (PPF), the (Omnipotent Peace Hegemony "OPH") choice is now the second strategic move of Actor II, coinciding with the latter's *own* understanding and interpretation of Actor I's all precedent actions. Consequently, the (OPH) becomes an outcome for both in (HG)₁, with a strategic payoff/utility of Actor I (*the deceiver*) only.

The (HG)₁ ends by the (Peace-Broker Discourse “PBD”) resulting as an ‘*accumulated output*’ of Actors I and II’s strategic interactions, constituted out of aggregating the two outcomes: {(FPH); (OPH)} as input-shifted-output strategies (ISOS); see Figure 26.

Based on that, the (HG)₁’s equilibriums are these four outcomes, which are all output strategies of expected maximized utility – as come later, considering that we determine, in this study, each resulted equilibrium when picking a number of strategies by two players or more as an outcome while the expected utility refers to a player’s payoffs of those resulted outcomes: i. The (Elite-Publics’ Mutually Impact Realm) equilibrium, an unperceived and unknown outcome for both actors. ii. The (Fledgling Peace Hegemony) equilibrium, a perceived and known outcome for both players – where the (FPH) is the first of (ISOS) within the (PBD) accumulated output. iii. The (Omnipotent Peace Hegemony) equilibrium, a perceived and known outcome for Actor I (i.e., the deceiver) and unperceived and unknown outcome for Actor II (i.e., the deceived) – where the (OPH) is the second of (ISOS) within the (PBD) accumulated output. iv. The (Peace-Broker Discourse) equilibrium, an outcome unknown for the misperceiving Actor II and a known and perceived for the correctly perceiving Actor I.

4.4.3.1.3. The (Strategic Interactions)² Hypergame: (HG)₂

4.4.3.1.3.1. Firstly: The (HG)₂ Description; Misperception and Deception Games

Including multiplied actors and interactions compared to the (HG)₁, the (HG)₂, or the second played entire hypergame of the (PPHGM) we named the (Strategic Interactions)². In the (HG)₂, there is one perceived hypergame by each player; these players are: Actor I (i.e., the Global Hegemonic Governance & Discourse “GHG-D”), Actor II (i.e., the Global Publics & State-Actors “GP&SA”), Actor III (i.e., the Pressure-Practicing Powers “3P”), and Actor IV (i.e., the International Mediation Institution “IMI,” or the International Mediators Team “IMT”). The (HG)₂’s four hypergames are:

The HG_{2.1}: The (HG_{2.1}) is Actor I’s perceived hypergame within the entire “HG₂,” which includes a. the knowledge of a hypergame being played; b. a strategic preference vector composed of {(± PSB); (MD-PHNI); (IPC); and (B-MNP)}³⁵⁶ mixed strategies; c. the

³⁵⁶ All strategies’ abbreviations mentioned in this part are explained in the next one to come.

awareness of the other players (i.e., Actors II, III, and IV) in the game; and d. the belief that it (i.e., Actor I) is the most *influential* and *important* player of the (HG)₂.

The (HG_{2.1}) contains the {G_{2.2}, G_{2.3}, and G_{2.4}} which are the games played by Actor II, Actor III, and Actor IV, respectively, in the (HG)₂, where these games are perceived by Actor I, as follows: i. Actor I perceives the {G_{2.2}} as a. a game of incomplete information in which Actor II has misperceptions about the game, or/and reality; b. a deception/misperception-based game, directed by collective diplomacy means and effective deterrence mechanisms; c. Actor II's preference vector includes overt strategies such as "obedience, compliance, subordination, or/and deterrable revisionism;" d. Actor II is a deceived subject, receiver, or/and reactor of Actor I's made moves _ where both actors' views and perceptions overlap at a conflict management-related-common knowledge strategic focal point. ii. Actor I understands the {G_{2.3}} as a. a game of incomplete information in which Actor III does not have complete knowledge about Actor I's preference vector, beliefs, or perceptions of the game/reality; b. Actor III is the deterrence applying party within the entire (HG)₂; c. the preference vector of Actor III includes (COD) pure strategy means; d. Actor III has joint leverage with Actor I, acting multilaterally with it in some cases; e. Actor II is Actor III's targeted subject in the (HG)₂. iii. The {G_{2.4}} is perceived by Actor I according to this context: a. a game of incomplete information where Actor I's preference vector is unknown to Actor IV; b. Actor IV is another diplomacy practicing party beside Actor I within the (HG)₂; c. Actor IV's preference vector includes the (CL-D) pure strategy; d. Actor IV is a subject or informal organ of Actor I, acting multilaterally with it. Those {G_{2.2}, G_{2.3}, and G_{2.4}} games are based on Actor I's beliefs and perceptions of the game and reality, which may be true or not.

The HG_{2.2}: The HG_{2.2} is Actor II's perceived hypergame within the (HG)₂ that includes a. unknowledge of a hypergame being played; b. uncertainty about who the hypergame's Actor I is, its strategic preferences, and moves or actions (i.e., decisions) made; c. awareness of the third and fourth actors/players (i.e., the 3P; and IMI/IMT), their preference vectors, and actions/moves; and d. strategic preference vector composed of: {(RCP); and (AD-G)} mixed strategies.

In the HG_{2.2}, Actor II does not perceive Actor I's played game, the {G_{2.1}}, whereas it perceives these {G_{2.3}, and G_{2.4}} _ which are the games played by Actor III, and Actor IV,

consecutively: i. Actor II understands that the $\{G_{2.3}\}$ is a game in which: a. deterrence-based-game is played by the international system's *hegemons*; b. the strategic preference vector of Actor III includes: (Imposing Sanctions, Boycott/Embargo, or/and Import Tariffs; Threats; Use of Hard Power; Declaring (unjustified) Wars) against aggressors or revisionists of the system; and c. Actor III is a hegemon seeks building (counter-)alliances and the accumulation of power at the expense of others, threatening both units of the system (i.e., state-actors) and their subjects (i.e., Publics). ii. Actor II views the $\{G_{2.4}\}$, considering it played by *mediators* intervening for resolving conflicts, and that this actor's (i.e., Actor IV) strategic preference vector is composed of toothless or ineffective means for conflict management activating mediation and negotiation strategies with having no influence or apparent achievements in return.

The $HG_{2.3}$: The $HG_{2.3}$ is Actor III's perceived hypergame within the $(HG)_2$ containing a. a knowledge that a hypergame is being played and awareness of all other players of the game (i.e., Actors I, II, and IV); b. certainty about who the hypergame's Actor II is, but uncertainty about its strategic preferences and actions made; d. strategic preference vector composed of: $\{(COD); \text{ and } (B-MNP)\}$ mixed strategies; e. Actor III's beliefs and perceptions over Actor II of being an *active* receiver-subject of an effective deterrence's global sphere of influence; and f. the belief that it (i.e., Actor III) might make its moves unilaterally or multilaterally.

In the $HG_{2.3}$, Actor III does not perceive the game of Actor II, the $\{G_{2.2}\}$, while it perceives the games of Actor I and Actor IV, the $\{G_{2.1}$, and $G_{2.4}\}$, as follows: i. Actor III understands the $\{G_{2.1}\}$ or the game played by Actor I in the $(HG)_2$ as global security maintaining and reinforcing-oriented game, in which Actor I's preference vector includes: (Conventional Conflict Management Strategies of Conflict-De-escalation; Bargaining; and Conflict Zones-Dispatched Collective Forces/Missions of Peacemaking and Peacebuilding/Peace enforcement). ii. Actor III perceives the $\{G_{2.4}\}$ as a *mission game* operated by Actor I, in which neither Actor I nor Actor IV _ who has (Conventional Bargaining and Diplomacy Strategies) within its preference vector as understood by Actor III, has *capable* or *credible* threats or deterrence means for accomplishing such a mission; and that Actor IV is the structure-agent or the international system *hegemons'* client.

The HG_{2.4}: The HG_{2.4} is Actor IV's perceived hypergame within the (HG)₂ that includes a. knowledge of a hypergame being played and who the other players of the game are; b. certainty about the hypergame's Actor II, while existing uncertainty about its preference vector and moves; d. strategic preference vector composed of {(CL-D)} pure strategy; e. beliefs over Actor II that it is the receiver-subject of a *collective* diplomacy's global spheres of influence; and f. perceiving Actor III as a capably and credibly *deterrent*-third party who might make its actions or decisions unilaterally or multilaterally.

Within the HG_{2.4}, Actor IV perceives the games of Actor I and Actor III, the {G_{2.1}, and G_{2.3}}, but it does not perceive Actor II's _ the {G_{2.2}}, as to follow: i. Actor IV understands that the {G_{2.1}} is a conflict management game directed towards restoring global peace and security aim, in which Actor I's preference vector includes (Mediation, Negotiation, Peacemaking, and Peacebuilding/Peace-Enforcement Strategies), perceiving that Actor I's perceptions of reality are based on multilateralism beliefs. ii. Actor IV perceives the {G_{2.3}} as a *power-showing game*, considering Actor III as Actor I's '*masculine*' mechanism, and a global security's maintaining side operating as the deterrence means-applying party; as well as understanding that Actor III's preference vector contains (Coercive Diplomacy, and Preventive/Collective Security-War Initiation Strategies).

Based on that, firstly, either HG_{2.1}, HG_{2.2}, HG_{2.3}, or HG_{2.4}, is a hypergame based on an actor's own understanding and interpretations of the game, perceptions of reality, available information, and reasoning of the other players' beliefs and perceptions, which all may be true or not. Also, those hypergames might be built upon misleading, inaccuracy, fault and defect, misperceiving, or/and misunderstanding. Secondly, the (HG)₂ includes those perceived four hypergames _ that are composed of other players' games, which we denote as: (HG_{2.1} = {G_{2.2}, G_{2.3}, G_{2.4}}; HG_{2.2} = {G_{2.3}, G_{2.4}}; HG_{2.3} = {G_{2.1}, G_{2.4}}; HG_{2.4} = {G_{2.1}, G_{2.3}}). Merging the (Strategic Interactions)² (entire) hypergame's perceived hypergames of Actors I, II, III, and IV altogether, where {(HG)₂ = (HG_{2.1} + HG_{2.2} + HG_{2.3} + HG_{2.4})} while having an *overlap point* where a common knowledge of the conflict exists, the (HG)₂ is being played reaching equilibrium positions of this entire hypergame _ with dismissing any equilibria occurred within each player's separately perceived hypergame, rebalancing a would-be unbalanced hypergame model, which is explained below. Given the (HG)₁ and (HG)₂ entire hypergames, and each rebalanced model at an overlap point within the "*Positivity of Peace Hypergame Model*," the latter

can be denoted as: $\{(PPHGM) = (HG)_1 (HG_{1.1}, HG_{1.2}) + (HG)_2 (HG_{2.1}, HG_{2.2}, HG_{2.3}, HG_{2.4})\}$.

4.4.3.1.3.2. Secondly: The (HG)₂ Overlap Point's Strategic Interactions; a (Rebalanced Model)₂

These strategic interactions resemble a neo-constructivism-institutionalism's transformation trajectory, in which the interactions tracks begin on global, regional, and national levels, respectively. Actor I, here, enhanced its sphere of influence to represent (Global Hegemonic Governance & Discourse, "(GHG-D)")³⁵⁷. Likewise, Actor II extended in leverage, representing (Global Publics & State-Actors "(GP&SA)").

Actor I, as a rational player and observer to the (HG)₁, begins the interactions, moving to the (Neutralization of Peace Spoiling Behaviors "(±PSB)") strategic preference; an action made implicitly, thus deceiving Actor II in the (HG)₂ as to act in a similar course of action without having (complete) knowledge that it was Actor I's decision or move. In this context, Actor II has misperceptions about the hypergame or possible future actions of Actor I.

Simultaneously, Actor I activates the (Media Diplomacy of Peace-Hegemony-Oriented-(re-perceived) National Interests, "(MD-PHNI)") strategy. Given the equilibriums of the precedent (HG)₁, Actor I, again, relies on Actor II's misperceiving of its made moves, stimulating the latter to behave within its preferred interactions realm.

Sequentially, Actor II absorbing a peace state as a "Hegemonic Institution, Perceptions, and Predispositions, and Re-perceived Reality, (H-IPR)," globally, regionally, and nationally, within the (MD-PHNI) strategy's effects domain, prefers as a rational player

³⁵⁷ If economic inputs determine political and social outcomes according to the Marxism or structuralism main axiom, and that hegemony is a power accumulated by both force of the most powerful (i.e., ruling capitalist classes) and consent of its subjects considering Gramscian theory of hegemony; then if Actor I or the global governance or government is *hegemonic* – where being political and economic global hegemon is a condition here, this equals having a "sufficient" economic and political *capability* and *credibility* for repelling social attacks targeting social and conventional media outlets utilized as main means for this actor in achieving multi-level leverage and change of the global system within the given context applied to our model. That is to say; economic and political capability and credibility resulted from merging both the economic power and the generated political one with an internalized hegemony coined by the global governance/government actor, results in an *extended* outcome of another "social capability and credibility" of this actor after the latter's political and media discourse becomes such an integration's activated mechanism to be used within this model's context. Therefore, Actor I of the (HG)₂ is set as the (Global Hegemonic Governance & Discourse); and, using approximately the same reasoning, Actor 1 of the (HG)₁ was the (Elite/ruling classes & Discourse).

and a (still) subject of Actor I, the (Re-constructed Peace “(RCP)”) strategic choice with excepted maximized utility of a perceived outcome to result.

In a simultaneous move of Actor II’s action, Actor I, based on the rationality arguments of how the other reasons seeking an expected utility, moves to the (Imposed Peace-Consensus “IPC”) action _ as a hegemonic actor accumulating power of both force capabilities it owns and consent of the publics.

A (Global Transformation Initial Realm, “(GTIR)”) outcome arises, here, as the output of choosing the {(Neutralization); (Media Diplomacy + PH-NI)} strategies simultaneously by Actor I firstly; and secondly, using the {(Re-constructed Peace); (Imposed Peace-Consensus)} pair of strategies by Actor II, and Actor I, respectively, in a sequential move by the former, and a simultaneous one by the last.

Indeed, Actor I’s dependence on existing a misperceived game or reality of how it reasons or what its preferences or actions (decisions) are, allows this player to randomize its choices while having unavailable information to Actor II, playing *simultaneously* in a basically extensive form game distinguished by its sequential-move nature, and enjoying a two-moving sequences advantage at the same move as well; while considering Actor II its deceived subject who, unknowing that a hypergame is being played, may not _ or mistakenly, reason(s) what Actor I’s *actual* strategic preference vectors or actions/decisions are.

Another outcome results in the (HG)₂ at the overlap point, that is, the (Adoption and Gratification (AD-G) Sphere), with Actor II’s using of the (Adoption and Gratification) strategy sequentially to Actor I’s choice of the (Imposed Peace-Consensus) one _ where the misperceiving Actor II is a subject of this strategy’s effects domain (i.e., the IPC’s) re-acting upon it.

An actor, “Actor IV” in the (HG)₂, mediates the strategic interactions circle, playing a central conflict-mediation role. This actor constitutes “Collective Diplomacy Spheres” using the (Collective Diplomacy “(CL-D)”) pure strategy _ which is the only strategy it has in the game, simultaneously with Actor I’s (Neutralization) move. Actor IV is the (International Mediators Team “IMT”) or another *symmetrically* constituted (International Mediation Institution “IMI”). Therefore, the (Strategic Interactions)²

begins with a simultaneous-move initial play by Actor I and Actor IV as observers to the precedent (HG)₁ and the previous *unbalanced* model of (HG)₂.

Another player interferes here, which is the “Pressure-Practicing Powers (3P),” or the “Actor III” in (HG)₂. Meanwhile, the “Coercive Diplomacy Sphere” constitutes by the (3P)’s intervention, choosing the (Coercive Diplomacy “COD”) strategic alternative in a sequential move after Actor I’s moving to the (Neutralization) action and Actor IV’s using of (CL-D) strategy.

By the end of the (Strategic Interactions)², both Actor I and Actor III move to the (Bargaining Strategies: Mediation, Negotiation, and Peace Talks, “(B-MNP)”) same strategic choice simultaneously, sequentially after the “(AD-G) Sphere” outcome results, and under (Interference Effects “IEs”) of Actor IV’s (CL-D) strategy _ considering how those actors (i.e., Actor I and Actor III) perceive this strategy.

The accumulated output of all (HG)₂’s interactions, at the overlap point, is the (Peace-Hegemony-Oriented-Mass-Ideological Rehabilitation, “(MIR)”) strategy outcome. That is to say, rehabilitation as one of the (Conventional Constructivist Strategies) diffused and internalized first regionally and nationally within the (Strategic Interactions)¹ hypergame was to target the conflicting parties and their communities only. However, the (MIR) within the (HG)₂ is a “*mixed strategy-outcome*,” distinguishably resulting from the previously used strategies of Actors I, IV, III, and II, collectively, which is also an *extended* output on global, regional, and national levels, respectively, including the whole global publics.

Based on that, *the (HG)₂’s equilibriums* are these three strategy-outcomes of expected maximized utility: i. Firstly, the (Global Transformation Initial Realm) equilibrium as a known and perceived outcome for Actor I and Actor II. ii. Secondly, the (Adoption and Gratification Sphere) and the (Peace-Hegemony-Oriented-Mass-Ideological Rehabilitation) equilibriums, which are perceived and known outcomes for Actor I (i.e., the deceiver) and unperceived and unknown outcomes for Actor II (i.e., the deceived). Furthermore, Actor IV and Actor III _ who is the (COD) strategy applying party, are assumed to make their {(CL-D), and (B-MNP)} moves, consecutively, “*multilaterally*” with Actor I, which we referred to as “*simultaneous-move plays*” in the (Strategic Interactions)². So, an expected utility acquired by that player (i.e., Actor I) in the given

context entails that those players (i.e., Actors IV and III) obtain *absolute* gains or shares within this utility's related payoffs in real-world circumstances as in the (HG)₂, which is explained below.

Out of the $\{(HG)_1 + (HG)_2\}$ two entire-hypergames equilibriums, the (*Positivity of Peace Equilibrium* “PPE”) of the (PPHGM) results, expressing this binary formula, see Figure 26: “Global Hegemony of Peace Versus Realist Hegemony of War’s Inevitability, (GHP vs. RHW).” The last is an active, feasible, and viable translation of transforming the international system into a state of durable, sustainable, and positive (win-win) *peace* globally, regionally, and nationally, as proven through the (PPE) equation illustrated in the following section.

4.4.3.2. Second: The Positivity of Peace Hypergame Model’s Equilibrium Equations

In the (PPHGM), either Actors I and II in the (HG)₁, or Actors I, II, III, and IV in the (HG)₂ may *not* perceive all outcomes reached of the entire hypergame since each player chooses a strategy depending on its own interpretations and perceptions of the game and the reality of intra-or/and inter-state conflicts. Still, a known outcome, or unknown one to an actor or more which is a strategic surprise in this case, within our hypergame model, is considered “*stable*” given that the player cannot change from a perceived outcome unilaterally. The (PPHGM) is thus seen as a hypergame played by all, with all, versus all. In this section, using the strategic preference vector of every actor as stability information, we show how equilibriums, determined above, of the entire (HG)₁ and (HG)₂ at the overlap point might be proven through some input-output relations equations. Also, each player may perceive an expected maximized utility correctly or incorrectly when using a given strategy within this context.

4.4.3.2.1. The (Strategic Interactions)¹ Equilibrium Equation: (SI¹EE)

$$\begin{array}{l} \xrightarrow{\text{Input}} \square A^1 ((C) + (D) + (CC)) + A^2 ((PPF) + (OPH)) \xrightarrow{\text{Output}} \square \{ (EP-MIR)^{U(1+2)} + \\ (PBD)^{U(1+2) + U(1)} ((FPH)^{U(1+2)} + (OPH)^{U(1)}) \} \end{array}$$

The (SI¹EE) Assumptions: i. (A¹) is Actor I, and (A²) is Actor II of the (Strategic Interactions)¹; ii. the $\{(C) + (D) + (CC)\}$ are (A¹)’s chosen strategies of (Cultivation;

Disciplinization; Conventional Constructivist approaches) respectively, within this interactions' equation; iii. the $\{(PPF) + (OPH)\}$ are (A^2) 's used strategies of (Peace-Public Flak; Omnipotent Peace Hegemony) _ where the second strategy is an extension of the first.

The (SI^1EE) 's outputs: i. first; the (Elite-Publics' Mutually Impact Realm "EP-MIR") strategy (unknown) outcome with U (Utility) of (A^1) and (A^2) , denoted in the equation as $\{U(1+2)\}$ where (1; and 2) numbers refer to Actor I, and Actor II, respectively. ii. Second, the (Peace-Broker Discourse "PBD") *extended* strategy-outcome that is composed of a. the (Fledgling Peace-Hegemony "FPH") first "input-shifted-output strategy" with a utility of both, $\{U(1+2)\}$, perceived by (A^1) and (A^2) . Moreover, b. the (Omnipotent Peace Hegemony "OPH"), which is the second "input-shifted-output strategy" with an expected utility of (A^1) only, denoted as " $U(1)$ " _ where the (OPH) is an unknown outcome for (A^2) due to the incomplete/misled information it has about the game and reality. Nevertheless, the accumulated or "Collective Utility (CU)" of both actors' strategic actions results within the (PPE) equation, including aggregative payoffs for all. Still, choosing the (OPH) strategy as extended input of its first used strategic choice, (A^2) was perceiving an increase in its utility within the $(SI)^1$ while reasonably raising the (A^1) 's instead, given who the latter is and what a perceived hypergame it has. So, the misperception and deception practiced by (A^1) versus (A^2) became a way of balance achieved either in future utility's payoffs or stable positions reached at the $(SI)^2$'s end.

4.4.3.2.2. The (Strategic Interactions)² Equilibrium Equation: (SI^2EE)

$$\begin{aligned} \text{Input} \rightarrow \square & A^1 \left((\pm PSB) + (MD-PHNI) + (IPC) \right) + IMI (CL-D) + 3P (COD) + \\ & A^2 \left((RCP) + (AD-G) \right) + IEs \left((A^1 + 3P) (B-MNP) \right) \xrightarrow{\text{Output}} \square \left\{ (GTIR)^{U(1+2)} \right. \\ & \left. + (AD-G)^{U(1)} + (MIR)^{U(1+ag(3+4))} \right\} \end{aligned}$$

The (SI^2EE) Assumptions: i. (A^1) is Actor I, and (A^2) is Actor II of the (Strategic Interactions)²; ii. the $\{(\pm PSB) + (MD-PHNI) + (IPC)\}$ are the used strategies of {(Neutralization of Peace Spoiling Behaviors); (Media Diplomacy of Peace Hegemony-Oriented-(re-perceived) National Interests); (Imposed Peace-Consensus)} consecutively, by (A^1) within this interactions' equation; iii. the (IMI) is Actor IV in the $(HG)_2$ or the

“International Mediation Institution (or the “IMT”),” having the (Collective Diplomacy “CL-D”) pure strategy; iv. (3P) is Actor III or the (Pressure-Practicing Powers), while the (COD) is the (Coercive Diplomacy) strategy it uses; v. the {(RCP) + (AD-G)} are the chosen strategies of {(Re-Constructed Peace); (Adoption and Gratification)} by (A²) in the (SI)²; vi. both (A¹) and (3P) move to the (Bargaining Strategies of Mediation, Negotiation, and Peace Talks, “B-MNP”) strategy multilaterally by the (SI)²’s end, under (Interference Effects “IEs”) of Actor IV’s (CL-D) strategy.

The (SI²EE) outputs: the (Strategic Interactions)² equation output is assumed to be: i. the (Global Transformation Initial Realm “GTIR”) strategy outcome with mixed utility (U) of (A¹) and (A²), denoted as {U (1+2)}, which is an outcome known and perceived by both. ii. The (Adoption and Gratification Sphere “AD-G”) strategy outcome that is perceived and known for (A¹) and unperceived and unknown for (A²), with an expected utility of (A¹) only, {U (1)}. In that case, being a misperceiving player and subject to (A¹) under the (IPC) strategy effects’ domain, (A²) made a choice (i.e., “AD-G” strategy) that raises (A¹) utility within the (SI)², however, maintaining a (Collective Utility) for both in the (PPE) equation. iii. The (Peace-Hegemony-Oriented-Mass-Ideological Rehabilitation, “MIR”) strategy outcome. Since the last is a mixed strategy-outcome standing directly in Actor I’s interests’ realm, perceived and known for (A¹) while being unknown for the other players in the (SI)², the expected utility of this outcome (if resulted) is assumed to be obtained by (A¹) _ given who this player is and its perceived hypergame. In this context, Actor III and Actor IV playing their {(B-MNP); (CL-D)} strategies multilaterally with (A¹), obtain “*Absolute Gains* (ag)” out of the Actor I’s received utility here. This utility’s interrelation is denoted in the (SI²EE) as: {U (1 + ag (3+4))} where (1; 3; and 4) numbers refer to Actor I, Actor III, and Actor IV, respectively.

4.4.3.2.3. The Positivity of Peace Equilibrium Equation (PPEE): The (PPHGM)’s Solution Point

$$\begin{aligned} \frac{\text{Outputs}}{\text{Input}} &\square \left\{ \left((\text{EP-MIR}) + (\text{PBD}) \right)^{\text{CU}} (U^2 (1+2) + U (1)) + \left((\text{GTIR}) + (\text{AD-G}) \right. \right. \\ &\quad \left. \left. + (\text{MIR}) \right)^{\text{CU}} (U (1+2) + U (1) + U (1 + \text{ag} (3+4))) \right\} \\ \frac{\text{Total}}{\text{Output}} &\square \left\{ (\text{GHP})^{\text{CU}} (U^3 (1+2) + U^2 (1) + U (1 + \text{ag} (3+4))) - (\text{RHW})^{-\text{CU}} \right\} \end{aligned}$$

$$\begin{aligned}
PPE &\simeq \left\{ \left((EP-MIR) + (PBD) \right)^{CU (U^2 (1+2) + U (1))} + \left((GTIR) + (AD-G) \right. \right. \\
&\quad \left. \left. + (MIR) \right)^{CU (U (1+2) + U (1) + U (1 + ag (3+4)))} \right\} \\
&\simeq \left\{ (GHP)^{CU (U^3 (1+2) + U^2 (1) + U (1 + ag (3+4)))} - (RHW)^{-CU} \right\}
\end{aligned}$$

In the (PPHGM), the *Positivity of Peace Equilibrium* (PPE) refers to the *highest utility point* reached by all actors when using their strategies simultaneously within an *unlimited* domain of strategic interactions occurring over more than one entire hypergame. Under the (HG)₁ or the (HG)₂, not all actors, having their own perceived hypergames, perceive or know (exactly) the other's/opponent's strategic preference vector, the game's (all) players, or the others' (actual) games. Substituting the standard rationality arguments of game theory, reaching the (PPE) conditions that each player calculates an expected utility of its chosen strategy depending on the belief of how the other reasons, what perceptions the other player/opponent has about the game and reality, and the available information. Therefore, in multiple games-based-hypergame models, misperception and deception can occur, and an outcome may be unknown for one player or more, rationally resulting in a utility or payoffs received by both. Nevertheless, as no player can deviate unilaterally from an equilibrium's reached position, such an unknown outcome is seen *stable* as well as the received payoffs or the maximized utility relevant to it.

Since some equilibriums illustrated above do achieve utility for some players without others, those stable positions are considered aggregately outputs-input for having the most stable point of the whole model as total output, which is the "Positivity of Peace Equilibrium." Here, no player would have the incentive to deviate from that stability point with the highest payoffs received by all – not equally but equivalently coinciding with each one's actual position in a real world-circumstances within this equilibrium domain. So, in the (PPHGM), all actors accumulate *absolute* gains by which both win; however, unequivocally given the difference in distributing the payoffs achieved. Simultaneously, this equilibrium or (PPE) entails that the international system's aggressors are *deterred* or/and *detractable* through the input strategies used by the (HG)₂'s third and fourth actors (i.e., the "3P," and "IMI/IMT") within the (SI²EE).

Accordingly, based on the (SI¹EE) and (SI²EE) assumptions, the (Positivity of Peace Equilibrium Equation) is reached through the integration of accumulated-“outputs and utility” of the (SI)¹ and (SI)²’s equilibrium equations, proving the following:

Firstly: The central premise equation. The outputs’ input of {(EP-MIR) + (PBD) ((FPH) + (OPH))} strategy outcomes in the (SI¹EE), and the{(GTIR) + (AD-G) + (MIR)} strategy outcomes in the (SI²EE), leads to this total output: (Global Hegemony of Peace “GHP”), eliminating the (Realist Hegemony of War’s Inevitability, “RHW”) strategy outcome if the latter’s related (Collective Utility “CU”) for both (A¹) and (A²), *primarily*, is less than zero.

Secondly: The (PPE) is approximately or equivalently equals: First: the dual-output of {(EP-MIR) + (PBD)} in the (SI¹EE), where this output’s (Collective Utility “CU”) is the sum of a. (A¹) and (A²)’s doubled-maximized utility; and b. (A¹)’s own maximized utility. This is denoted as: {CU (U² (1+2) + U (1))}. Second: the triple-output of the (SI²EE), containing the {(GTIR) + (AD-G) + (MIR)} strategy outcomes, with (CU) representing the sum of a. (A¹) and (A²)’s maximized utility; b. (A¹)’s own maximized utility; and c. (A¹)’s *extra* maximized utility including absolute gains/shares (ag) within for the (HG)₂’s Actor III and Actor IV. This is expressed in the (PPEE) through this formula: {CU (U (1+2) + U (1) + U (1 + ag (3+4)))}.

Thirdly: The conditionality of the (PPE). This equilibrium is assumed to occur when the last strategy outcome of (SI)¹, which is the (PBD), and that of the (SI)², which is the (MIR), become parallel with each other in *real-world circumstances* while having internal parallel relations of some “*transformational strategies*” in the (SI)² used by: a. (A¹) or the (Global Hegemonic Governance & Discourse “GHG-D”) actor for all its chosen strategies; b. Actor IV (i.e., “IMI/IMT”) for its (Collective Diplomacy “CL-D”) pure strategy; c. Actor III (i.e., the “3P”) for Its (Coercive Diplomacy “COD”) strategy; and d. Actor II or the (Global Publics and State-Actors) for its (Adoption and Gratification “AD-G”) strategy. Those are “*Conditional Parallel Relations (CPRs)*” of the (Positivity of Peace Equilibrium “PPE”), which we can denote as follows _ where the (So; Sn; S) are the abbreviations of (Strategy Outcome, Strategy Numbers, and Strategy) consecutively:

$$(\text{CPRs})^{\text{PPE}} \simeq \{(\text{GHP} - (\text{RHW})^{-\text{CU}})\} \parallel \{(\text{PBD})_{\text{So}} \parallel (\text{GHG-D})_{\text{Sn}} \parallel (\text{CL-D})_{\text{S}} \parallel (\text{COD})_{\text{S}} \parallel (\text{AD-G})_{\text{S}} \parallel (\text{MIR})_{\text{So}} \}$$

Fourthly: The (PPE) and the extended output. Constituting out of the (SI¹EE) and (SI²EE)'s outputs, which are shifted to be input in the first (PPEE), the (Positivity of Peace Equilibrium) thus is also *equivalent* to the resulted total output, or the (GHP – (RHW)^{–CU}) in this given context. That is an extended output with a *total* Collective Utility (CU), which reflects the sum of a. (A¹) and (A²)'s tripled (accumulated) utility; b. (A¹)'s own doubled (accumulated) utility; and c. (A¹)'s extra utility with Actors III and IV's absolute gains/shares. The total (CU) mentioned is denoted in the (PPE)'s equation as: **$\{(CU (U^3 (1+2) + U^2 (1) + U (1 + ag (3+4))\}$** , conditioning the elimination of the (Realist Hegemony of War's Inevitability, "RHW") *opposite* strategy-outcome, if existed, and the value of its related (Collective Utility) was minus, (– CU), or less than zero, mainly for (A¹) and (A²) collectively.

Ultimately, the last condition is the justification term of a *limited* zone of a collective diplomacy-or/and deterrence's failure-generated-necessitated collective security war(s) initiated by the (HG)₂'s Actor I. That is if this war serves the "*common good or virtue*" of (HG)₁ and (HG)₂'s Actor I and Actor II altogether with a (CU)'s value for both higher than zero _ provided that "zero" is a value refers to the possible elimination of any or some of those actors in favor of the other(s). Based on that, the deterrence field will still have leverage over aggressors in the system who are demanded to be constrained but for the '*collective*' human good/interest maintaining purposes. Finally, we prove the validity of this model's hypothesis: "The binary formula of "Global Hegemony of Peace Versus Realist Hegemony of War's Inevitability (GHP vs. RHW)" is the equilibrium or solution point of a positivity of peace developed relevant-hypergame model."

4.4.4. The Multi-Level Conflict Management Strategic Approach's Second Hypergame Model: A Balance of Peace-State Hypergame Model (BPSHM)

4.4.4.1. Preliminary: The (BPSHM)'s Main Assumptions

Within this model, there are two essential hypergames; one resembles an intra-state conflict case and the other of an inter-state conflict one, in a dynamic sequential-move game based on misperception and incomplete information. The key focus is on modeling

a conflict through developing an applicable reconciliation and mutually utility-maximization-oriented-merged diplomacy hypergame-approach. Accordingly, this model applies to a specific context of application where the major conflicting parties represent the political authority and non-fighting dissident (artificially branded as terrorist) group(s)/movement(s) in the first model (intra-state). At the same time, those parties refer to the most powerful state and the less powerful one, or equally powerful two states, in the second model (inter-state). The basic definition of (reconciliation) within this model's context is that; it is a grand strategy reflected through these intra-and inter-state strategies: i. the (Social, Political, and Diplomatic Integration) cross-state-structures, and the (Limited Power-Sharing), intra-state; and ii. the (Peace-Process Initiation/Implementation), and the (Integration) diplomatically, politically, economically, and socially, cross-societies.

In the (BPSHM), other assumptions exist; these are: First: The (BPSHM) is a first-level hypergame model based on incomplete information where all actors are rational players, reasoning about the other's beliefs and perceptions of the game and reality. In this hypergame model, some players are not aware of other players in the game or/and their moves and actions (i.e., decisions). So, the players may have misperceptions about the game. At the same time, each has its own view of the conflict intra-or inter-state depending on their perspectives, interpretation, and understanding of the reality of conflict and how the other players reason about the game. Furthermore, any may have some equilibriums in its perceived game relying on its beliefs that these positions represent the game's solution(s). Still, mapping the model through matching equilibria (i.e., outcomes/solutions) reached by players at given positions _ even if some do not perceive that, contributes to reflecting stable outcomes of the entire hypergame, dismissing those perceived separately in every player's game. So that choosing the strategic actions of an expected high utility, excepting those of zero-or less-utility values seeking the most stable positions of best utility obtained by all players when using their strategies simultaneously, mirrors *Nash equilibrium* positions within this model's two hypergames' mapping function of relating outcomes between the players' individual games.

Second: The (BPSHM) is a dynamic hypergame resembling a *future* second play of a previously played (hyper)game of intra-and inter-state conflicts under real-world

circumstances. So, after observing other players' moves/actions in a precedent play in the past and previous action(s) in a sequential-move current (future) hypergame, each actor randomizes its choices, depending on what other(s) chose first within a *reductionist* model focusing on relating outcomes between individual games. Thus, each uses newly chosen strategies or/and enhances previously used ones to reach a balance point of stable and higher utility for all simultaneously _ which any could not have achieved in that first play or the past (hyper)game. In sum, this model's two hypergames do not represent sub-games that emerged from nodes of extensive-form games (i.e., sequential-move games); instead, they are entirely replayed hypergames.

Third: The payoffs or utility value: Instead of referring to the utility achieved of a reached position when picking a pair(s) of strategies by some players in numbers or symbols, we assumed that the players' payoffs/gains at those positions occurred in the two hypergames are best described by providing a value of each player's payoffs at an equilibrium, averages between $\{(-) \text{ to } (0) \text{ to } (1)\}$ of a utility (U), dividing these values into six categories as follows: a. The $\{U_{-u}\}$ or (*minus-utility value*) when the player becomes "severely worse off" in the game. b. The $\{U_Z\}$, which represents the (*zero-utility value*) with the player being "worse off." c. The $\{U_{0.1}, U_{0.2}, U_{0.3}\}$ category: that describes the (*low-utility value*) or the (U_L) when the player is "slightly better off." d. The $\{U_{0.4}, U_{0.5}, U_{0.6}\}$ category of a (*mid-utility value*) or the (U_M), for the player who is "moderately/adequately better off." e. The $\{U_{0.7}, U_{0.8}, U_{0.9}\}$ category of a (*high-utility value*) or the (U_H), if the player is "highly better off" by making an action. Where the $\{(U_{-u}) < (U_Z) < (U_{0.1}) < (U_{0.2}) < (U_{0.3}) < (U_{0.4}) < (U_{0.5}) < (U_{0.6}) < (U_{0.7}) < (U_{0.8}) < (U_{0.9})\}$. f. The $\{U_1\}$: this is the (*highest-utility value*) absolutely in the hypergame or the (*perfect-utility value*), where the $(U_1) > (U_{0.9})$.

Fourth: At last, *comprehensiveness* is the primary basis of modeling intra-and inter-state conflicts within this model's specific context. Namely, the model does not deal with only the given domain of actions and reactions between each hypergame's players but also considers those *intermediate* variables/factors that could exist along with the analyzed strategic interactions.

4.4.4.2. First: The Balance of Peace-State Hypergame Model's Intra-State Hypergame “(HG)₁”

4.4.4.2.1. The (HG)₁'s Description: Assumptions and Hypothesis

In this first-level hypergame model, we have four players who are: {(Political Authority “PA”); (Dissident Group(s)/Movement(s))³⁵⁸ “DG”); (Mediation Power “MP”); and (Coercive-Diplomacy Power “CP”)}. The (HG)₁ is considered the future (second) play of a previously played (hyper)game in the past. This current (future) hypergame is composed of the game understood by every actor, where each comprises perceived preference vectors of other players. This can be denoted as: $(HG)_1 = \{G_{1.1}, G_{1.2}, G_{1.3}, G_{1.4}\}$; and $G_{1.1} = \{V_{1.2}, V_{1.3}\}$, $G_{1.2} = \{V_{1.1}\}$, $G_{1.3} = \{V_{1.1}, V_{1.2}\}$, and $G_{1.4} = \{V_{1.1}, V_{1.2}, V_{1.3}\}$, as we explain below. Where $\{(HG)_1; (G_{1.1}); (G_{1.2}); (G_{1.3}); (G_{1.4})\}$ abbreviations refer to $\{(the (BPSHM)'s first hypergame); (the game perceived by player I or “PA”); (the game perceived by player II or “DG”); (the game perceived by player III or “MP”); (the game perceived by player IV or “CP”)\}$. Comparingly, the $\{V_{1.1}; V_{1.2}; V_{1.3}; V_{1.4}\}$ refer respectively to the strategic preference vectors of the $\{(PA); (DG); (MP); and (CP)\}$ players considering how the other actors in the game perceive one player's vector.

The central premise of the (BPSHM)'s (HG)₁ is: Initiating a peace process between major conflicting parties by the political authority in intra-state conflicts reaching a balance of peace-state does not necessarily depend on opting for a mature mediation's conflict ripeness moment or the mutually-hurting stalemate one. Accordingly, this model's first hypothesis is: A balance of peace-state within nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties socially, politically, and diplomatically at any phase during and post-intra-state conflicts.

4.4.4.2.2. The (HG)₁'s Perceived Games

The G_{1.1}: Political Authority's. In an incomplete information hypergame either played in the past or future, the (PA) who is the most influential and important participant of the

³⁵⁸ In this model, the (Dissident Group(s)/Movement(s)) player represents those groups of people who are branded as a terrorist group(s)/organization(s) nationally artificially for some political purposes without committing actual-terrorist acts/behaviors identified legally. So, dealing with terrorist groups does not lie within this model's limits.

game, has a strategic preference vector (i.e., the $V_{1.1}$), contains these actions: a. (Branding and Naming “BN”); b. (Systematic Persecution “SP”); c. (Social, Political, and Diplomatic Integration “GR”); d. (Limited Power-Sharing “LPS”); e. (Imposed Disciplinary Doctrine “IDD”). In this model, the (PA) randomizes its choices between the last three strategic moves, reasoning about other players’ beliefs and perceptions of the game and reality. Where the probability (p) of every strategic preference in the *future* (second) play (i.e., the (BPSHM)’s $(HG)_1$) is: i. $(p \leq 0)$ for the {(BN); and (SP)}; and ii. $\{(0 < p \leq 1)\}$ for the {(GR); (LPS); and (IDD)} _ given that the (PA) cannot activate the {(GR); and (LPS)} actions if it did not deactivate first the {(BN), and (SP)} strategies if used. In contrast, the (p) in the *past* (first) play were: i. $\{(0 < p \leq 1)\}$ for the {(BN); (SP); and (IDD)} strategic preferences; and ii. $\{(p \leq 0)\}$ for the {(GR); and (LPS)} actions.

In the $G_{1.1}$, the (PA) perceives the $(V_{1.2})$ as a preference vector of these actions: a. (Terrorism); b. (Social Disorder and Chaos Creation); c. (National Treason or/and Foreign Agenda Adoption). So, from its own perspective of the conflict and interpretation of the game, moving to the {(GR); and (LPS)} preferences means making decisions upon a risk taken, under a level of uncertainty about how actually the (DG) actor reasons. Also, the (PA) player understands that the $(V_{1.3})$ includes a. (Biased-Mediation); and b. (Foreign Powers Interests Serving) actions. Comparingly, in the $(G_{1.1})$, the (PA) actor has a lack of information about the $(V_{1.4})$, since it is not aware of the (CP) player _ given that it is a modeling of intra-state conflicts in real-world circumstances without addressing ‘fighting’ dissident groups. Thus, the (PA) makes its moves and actions (decisions) depending on its beliefs of “state sovereignty,” excluding the possibility of the (CP)’s interference until it occurs explicitly in the hypergame. In sum, those preference vectors included in the $(G_{1.1})$ refer to how the (PA) perceives the hypergame, which may be built on a misled understanding or incorrect interpretation. This game is denoted as: $G_{1.1} = \{V_{1.2}, V_{1.3}\}$.

The $G_{1.2}$: Dissident Group(s)/Movement(s)’s. The (DG) player has a preference vector (i.e., the $V_{1.2}$) along with the entire hypergame, including these strategic moves: a. (Rebellion/Revolution “RR”); b. (Regime Change “RC”); c. (Maintenance of State-System’s Existing Political Structures “MSSEPS”); d. (Existing Regime’s Mass-Legitimization and Consensus “ERMLC”). Where the probability (p) of those strategic actions in the *past* (first) play were: i. $\{(0 < p \leq 1)\}$ for the {(RR); and (RC)}; and ii. $\{(p$

≤ 0)} for the {(MSSEPS); and (ERMLC)}. On the other hand, the probabilities in the *future* (second) play are: i. $\{(0 \leq p < 0.5)\}$ for the {(RR); and (RC)} strategic actions; and ii. $\{(0 < p < 1)\}$ for the {(MSSEPS); and (ERMLC)} _ given that the (PA) actor's strategies used in the first play are the {(BN); and (SP)}, and the (DG) is aware of the (PA) either in the past or a current (future) game, while the former is the reaction to the last's actions in this sequential-move second play. Within ($G_{1.2}$), the (DG) player understands that the ($V_{1.1}$) entails this set of actions along with the conflict course: a. (State-Terrorism); b. (Suppression and Injustice); c. (Political Authoritarianism/Dictatorship). In contrast, the (DG) actor is not aware of the {(MP); and (CP)} players in the (HG)₁. Therefore, there is a lack of information in the ($G_{1.2}$) about the $\{V_{1.3}$; and $V_{1.4}\}$ where that player does not perceive them. This is denoted as: $G_{1.2} = \{V_{1.1}\}$.

The $G_{1.3}$: Mediation Power's. The (MP) was not a player in the past play but only in the second one. It has a (Neutral-Positive Mediation "N-PM") strategic move within its preference vector (i.e., the $V_{1.3}$) _ which is a pure strategy, of this probability: $\{(0 < p \leq 1)\}$ in the game. In the $G_{1.3}$, the (MP) player perceives that the ($V_{1.1}$) contains a. (Nation-State-Stabilization); b. (Security and Order Imposing); and c. (Maintaining and Reinforcing the Political Regime's Pillars) strategic actions. The same actor understands that the ($V_{1.2}$) includes two preferences: a. (Rebellion/Revolution); and b. (Regime Change). The (MP) is not aware of the (CP) player and does not perceive its ($V_{1.4}$), therefore. So, this game is denoted as: $G_{1.3} = \{V_{1.1}, V_{1.2}\}$.

The $G_{1.4}$: Coercive-Diplomacy Power's. The (CP) was also not a player in the past play but an actor of the second one only. It has a strategic preference vector (i.e., the $V_{1.4}$) including a. (Active-Coercive Diplomacy "A-COD"); b. (Pro-Conflict Settlement/Resolution Policy-Making Participation, "P-CS/R-PP"), where the probability of the first is: $(0 < p < 1)$, and of the second is: $(0 < p < 0.5)$. In $G_{1.4}$, the (CP) player perceives all other players' preference vectors in the (HG)₁. It understands the $\{V_{1.1}$; and $V_{1.2}\}$ from the same perspective of the (MP) within the ($G_{1.3}$). However, the (CP) is aware of the (MP) player, perceiving that the ($V_{1.3}$) contains a (Biased-Mediation) strategic move, relying on its interpretation of the conflict. This game is denoted as: $G_{1.4} = \{V_{1.1}, V_{1.2}, V_{1.3}\}$.

4.4.4.2.3. The (HG)₁'s Strategic Interactions, Equilibria, and Expected Utility: Relating Outcomes Between Individual Games in a Mapping Function

4.4.4.2.3.1. Firstly: A Mini-Maximum Equilibrium & Conflict Settlement; Zero-Mediation Stage

Within the state-system structure, the (PA) player (i.e., Political Authority) having the first-move advantage, in the (HG)₁, initiates (In) the game, choosing the (Social, Political, and Diplomatic Integration “GR”) strategic action. In a misperception game where the players may misunderstand or not perceive others’ moves/actions, the (PA) makes a second move which is the (Imposed Disciplinary Doctrine “IDD”), simultaneously with its chosen first one. This (IDD) strategic preference includes the (Surveillance & State-Disciplinary Power) mechanisms. The last is a significant factor that distinguishes authoritarian regimes as well as (some) liberal-democrat ones.

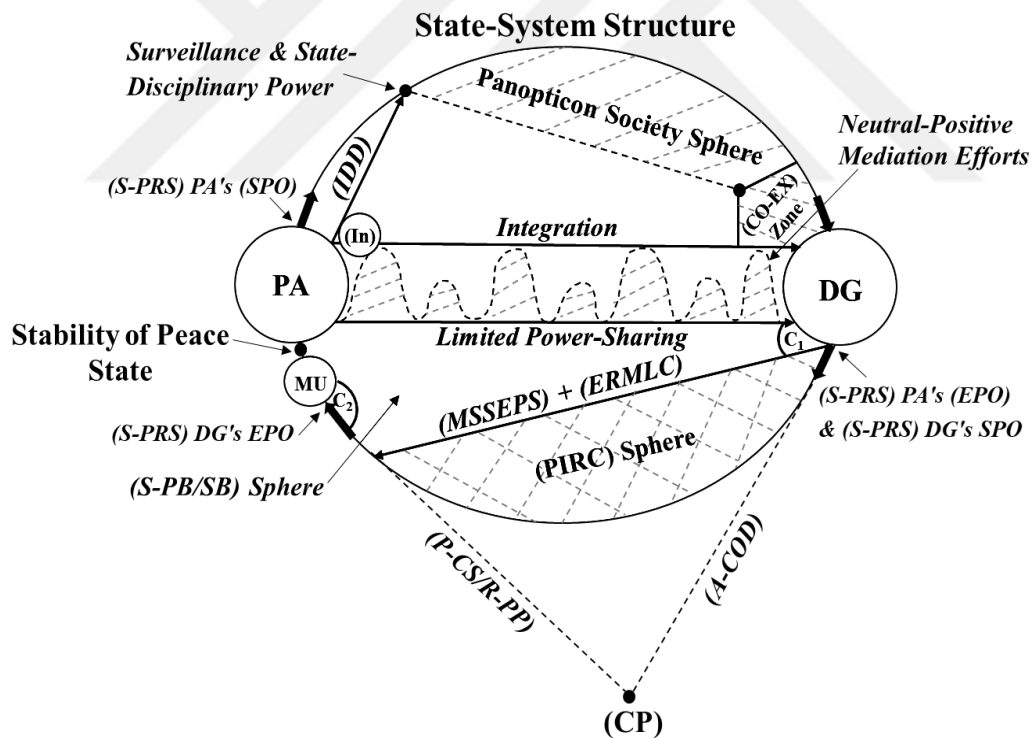


Figure 27: The Balance of Peace-State Hypergame Model; the Intra-state Hypergame “(HG)₁”

Source: Prepared by the author.

Also, under the (IDD) action, the (PA) employs the (*state-discourse*) practices across all state-structures to be both “*pro-integration*” and an “*all-seeing eye*” of the whole society’s (individual) behaviors. Namely, instead of excluding unacceptable behaviors that ran against the (PA) and naming, shaming, or/and branding them, within the realm of that (IDD) move of the (HG)₁, this player contains those behaviors under a pro-(not anti)-still existing-disciplinary power, directing them toward this new course of action.

Thence, the political-social integration becomes the coin of the day versus the branding and naming, under an *amended* inclusive not exclusive (Imposed Disciplinary Doctrine) strategy applied within both the nation-state structures’ all-seeing-eye or surveillance mechanisms and the political, media, religious, and academia mainstream discourse’s discursive formations, as well.

Given that this is a comprehensive hypergame that considers some interference factors, the last picked actions of the (PA) player preserve a (Conditionality of Existence Zone “(CO-EX) Zone”) factor. Since this actor perceives that the Dissident Group(s) or (DG) player may resume the (Rebellion/Revolution) action chosen in the hypergame’s first (past) play.

Within this “(CO-EX) Zone,” the (DG) becomes a “*contained subject*” of the (PA), imprisoned ‘*freely*’ in an open panopticon society, instead of undergoing *actual* imprisonment conditions that more likely create future chaos or social disorder out of revenge tactics due to (harsh) oppression and social suppression methods followed under the domain of the (Systematic Persecution “SP”) (PA)’s strategic move of the first play. That would occur if the (DG) actor preferred its {(RR); or/and (RC)} strategic actions over the others, whose probability is: $\{(0 \leq p < 0.5)\}$ in this stage.

The (PA) as a rational player chose the “negative with vs. devastating without” formula _ given the expected chaotic social and political positions in the mentioned probabilities. Based on that, an outcome arises, which is not only an equilibrium within the (PA)’s perceived game, but also it became an equilibrium of the entire (HG)₁. It is the (Panopticon Society Sphere), which is resulted from using the {(GR); (IDD)} strategies under the (CO-EX) Zone, with the (DG) player choosing to *neutralize* the possibility of picking the {(RR); and (RC)} strategies at this position of the game.

This can be denoted as: $\{PA ((GR), (IDD) + (CO-EX)); DG (\pm \{(RR + RC)\})\}$ _ where the $(RR + RC)$ actions' probability is $(p = 0)$ at this equilibrium position. This reached outcome is the *Mini-Maximum Equilibrium* of our (BPSHM)'s $(HG)_1$, which is the exit of a previous “zero-sum game” of this hypergame's past first-play.

The payoffs or expected utility resulted when reaching the $(HG)_1$'s (Mini-Maximum Equilibrium) is: $\{(U_{M-l}, U_{L-l})\}$ for the (PA), and (DG) players respectively _ where the (M-l) is a “mid-level” utility, representing the $(U_{0.6})$ value gained by the (AP). Moreover, the (L-l) indicates “low-level,” reflecting the $(U_{0.3})$ utility value obtained by the (DG) at the same position in the game. In this context, the (U_{L-l}) value is close to being a mid-level utility that starts by the $(U_{0.4})$ value _ according to our categories of the hypergame's expected utilities mentioned above.

Likewise, the (U_{M-l}) value is near the high-level utility's first estimate, the $(U_{0.7})$. So, for settling the conflict and under this exact equilibrium, the (PA) player who is the most potent conflicting party could achieve ‘*less than higher*,’ which is the “minimum of the payoffs’ maximum.” At the same time, the (DG) actor gains ‘*more than less*’ in return, which is the maximum of the minimum. This outcome, known for the (PA) only while being unknown for the (DG), is *stable* since both become better off receiving higher payoffs than before at a stable position of the hypergame.

Accordingly, using sequentially these strategies: $\{PA ((GR), (IDD) + (CO-EX)); DG (\pm \{(RR + RC)\})\}$ is the Mini-Maximum Equilibrium, which is stable even if the game ends by this stage, since playing backward may have caused the $\{(U_{-u}, U_{-u}); (U_z, U_z); (U_z, U_{-u}); (U_{-u}, U_z); (U_M, U_{-u}); (U_{-u}, U_M); (U_M, U_z); (U_z, U_M)\}$ eight utility's cases for the (PA), and (DG) players consecutively, in a possible *repeated* zero-sum game. In this case, either one or both become(s) (*severely*) worse off (i.e., the first four cases); or one player *adequately* wins _ when getting the $\{U_M\}$, at the expense of the other (i.e., the last four cases), under this hypergame's given context.

Within this stage, a (Socio-Political Reconciliation Sphere's (PA)'s Starting Point, “(S-PRS) PA's SPO”) occurs, like a circle in a chain for other points to come, see Figure 27.

4.4.4.2.3.2. Secondly: The Nash Equilibrium & Conflict Resolution; a Mediatory Non-state Actors' Stage

The (Mediation Power) or the (MP) player who is a non-state actor in this *intra-state* hypergame, being aware of the (PA) and (DG) players and that the (Rebellion/Revolution or/and Regime Change) are strategic preferences for the (DG) in the (HG)₁, chooses to pick its (Neutral-Positive Mediation “N-PM”) strategic move. The (MP) employs the (N-PM) efforts officially or/unofficially, regularly or/and irregularly, and in simultaneous or/and sequential mediatory interactions.

Also, being aware of all players, and that the (DG) actor, if not deterred, may prefer the (Rebellion/Revolution or/and Regime Change) strategic action in a future play, perceiving the (Possible-Instability and Resuming Conflict, “PIRC,” Sphere) as an outcome of a possible zero-sum game to arise, the (Coercive Diplomacy Power) or the (CP) player – as another non-state actor in the (HG)₁, plays the (Active-Coercive Diplomacy “A-COD”) strategic move, in sequence to the (MP)’s (N-PM) one. So, depending on its understanding of the hypergame and perceptions of the other players’ preferences, which may be true or not, the (CP) picked its action.

Sequentially, the (PA) reasoning about how the (DG) actor believes about the game and reality, and in terms of the ‘*minimum*’ stability achieved at first reached equilibrium’s position, while being a subject of the (CP)’s deterrence domain, prefers as a rational player to move to the (Limited Power-Sharing “LPS”) strategic action, expecting higher utility to result.

Observing the (PA)’s (LPS) previous move, and being a subject of the (CP)’s deterrence realm and aware of the zero-sum game played in the past, the (DG) player as a rational actor and sequentially to the precedent chosen actions of {(N-PM); (A-COD); and (LPS)} by the (MP), (CP), and (PA) players respectively, moves to the (Maintenance of the State-System’s Existing Political Structures “MSSEPS”) strategic action. Here, this position represents the (Socio-Political Reconciliation Sphere’s (PA)’s Ending Point, “(S-PRS) PA’s EPO”), and the (Socio-Political Reconciliation Sphere’s (DG)’s Starting Point “(S-PRS) DG’s SPO”).

In a dynamic game where each condition their actions on what the other(s) picked first, the (CP) actor, observing the (DG)’s (MSSEPS) move, chooses the (Pro-Conflict Settlement/Resolution Policy-Making Participation, “P-CS/R-PP”) strategic preference from its set of actions, in a sequential-move.

Symmetrically, perceiving that a. the (PA) played first the (GR) move and also the (LPS) strategic action preferring them to the past play's strategy choices of the {(BN), and (SP)}, b. the (MP) actor's moving to the (N-PM) action, and c. the (CP) chose the (A-COD) action and then the (P-CS/R-PP) one, the (DG) as a rational player and depending on its interpretation of the game, calculating an expected high utility, chooses the (Existing Regime's Mass-Legitimization and Consensus "ERMLC") action. Given that the (DG)'s security and participation in political and social life in post-conflict society became *de facto* guaranteed through the chosen strategies of those players collectively, as well as its capability to avoid '*credibly*' the (SP) strategy's practices used by the (PA) in the first play. Based on that, the regime's legitimacy and consensus are no longer restricted between specific social borders of the "pro-regime versus anti-regime" formula. Instead, a nationwide legitimacy and consensus become *dispersed* across all state structures, diverse mass classes, and every individual posture in society.

The (Societally-Peacebuilding and State-building, "S-PB/SB," Sphere) arises in which the (Socio-Political Reconciliation Sphere's (DG)'s Ending Point, "(S-PRS) DG's EPO") occurs when reaching a mutual utility (MU) position. The "(S-PB/SB) Sphere" is a *known* outcome for all players, occurring reversing the (*Stability of Peace State*) equilibrium, which is the *Nash equilibrium* of the entire (HG)₁ resulted by using: a. The {PA ((GR), (IDD) + (CO-EX)); DG ($\pm$ {(RR + RC))} strategies by the (PA) and (DG) players sequentially, in the first stage _ where the (RR + RC) actions probability becomes ($p = 0$) at this position. b. And the second stage's strategies of {MP (N-PM); CP (A-COD); PA (LPS); DG (MSSEPS); CP (P-CS/R-PP); DG (ERMLC)} in a sequential-move; see Figure 27.

The payoffs or the mutual utility achieved at the (HG)₁'s Nash equilibrium position is: {(U₁), (U_{H-1}), (U_{H-1}), (U_{H-1})} for the {(PA), (DG), (MP), and (CP)} players, respectively, where the (U₁) is the '*perfect utility*' value, which is the highest utility can be achieved ever in the hypergame. At the same time, the (U_{H-1}) is a '*high utility* (U_H)' that ranges here between the {U_{0.7}, and U_{0.8}} high-level (H-1) values obtained by the (DG) at the reached position. So, under Nash equilibrium, the (PA) who is the most influential conflicting side raised its (U_{M-1}) payoff of the settlement's equilibrium in the first (zero-mediation) stage, while the (DG) or the less influential conflict party increased its (U_{L-1}) one. In this context, the payoffs of the (MP) and (CP) players are: {(U_{H-1}), (U_{H-1})}, where each represents high-

level utility values equal to those of the (DG) player. Thus, all players become better off, simultaneously playing their strategies, achieving the *best* response to each other's strategic choice _ where no one may have the incentive to deviate from this *stable* position of the *highest* payoffs yielded for all in the entire (HG)₁.

4.4.4.2.4. The (HG)₁'s Cost and Utility Assumptions & Equations:

4.4.4.2.4.1. Firstly: Abbreviations

The abbreviations here are: a. The cost of the (PA)'s strategies used in the (HG)₁ (i.e., "C₁"), is the "CA_R," where (C) is the (Cost), (A) refers to the (PA) player, and (R) indicates the (HG)₁'s (Reconciliation) between the (PA) and (DG) as the main conflicting parties _ considering (R) the strategic objective of this hypergame's interactions. b. Likewise, the cost of the (DG)'s strategies used in the (HG)₁ (i.e., "C₂"), is the "CB_R," where the {(C); (B); and (R)} refers to the {(Cost); (DG) player; (HG)₁'s (Reconciliation) strategic objective}, respectively. c. The {(U_{A-Cf}); (C_{A-Cf}); (U_{B-Cf}); (C_{B-Cf}); (U_{MR(A-B)}); (U_{NE(A-B)}); (U_{NE(A)}); {(U_{NE(B)}); (CS_{A-R}); (CS_{B-R})}} abbreviations refer consecutively to the: {(utility "U" for "A" (i.e., the "PA") by conflict "Cf"); (cost "C" for (PA) by conflict); (utility for "B" (i.e., the "DG") by conflict "Cf"); (the cost "C" for (DG) by conflict); (utility of the (HG)₁'s (Mutual Reconciliation) "MR" for both "A and B" (i.e., the (PA) and (DG) players); (utility "U" at the (HG)₁'s Nash equilibrium "NE" position for both "A and B" players); (utility at the (HG)₁'s "NE" position for the "A" player only); (utility at the (HG)₁'s "NE" position for the "B" player only); (concession(s) "CS" made by the "A" player at the (Reconciliation "R") position of (HG)₁'s Nash equilibrium "NE"); (concession(s) "CS" made by the "B" player at the (Reconciliation "R") position of "NE")}.}

4.4.4.2.4.2. Secondly: The Cost and Utility Assumptions & Equations

a. If: $\{CA_R \simeq (U_{A-Cf}) + (C_{A-Cf})\}$, where the $\{(U_{A-Cf}) = (C_{A-Cf})\}$

$$\text{Then: } \{CA_R \simeq (U_{A-Cf})^2 = (C_{A-Cf})^2\}$$

b. And if: $\{CB_R \simeq (U_{B-Cf}) + (C_{A-Cf})\}$, where the $\{(U_{B-Cf}) = (C_{A-Cf})\}$

$$\text{Then: } \{CB_R \simeq (U_{B-Cf})^2 = (C_{B-Cf})^2\}$$

- c. If: $\{(U_{MR(A-B)}) \simeq (CA_R + CB_R) + (U_{A-Cf} + U_{B-Cf})\}$, where $\{CA_R \simeq (U_{A-Cf})^2$ and $CB_R \simeq (U_{B-Cf})^2\}$ and that $\{R \simeq (U_{A-Cf} + U_{B-Cf}) - (CA_{Cf} + CB_{Cf})\}$

Then: $(U_{MR(A-B)}) \simeq ((U_{A-Cf})^2 + (U_{B-Cf})^2) + (U_{A-Cf} + U_{B-Cf})$

$$\simeq (U_{A-Cf})^3 + (U_{B-Cf})^3$$

- d. If: $\{(U_{MR(A-B)}) \simeq (CA_R + CB_R) - (CA_{Cf} + CB_{Cf})\}$, where $\{CA_R \simeq (CA_{Cf})^2$ and $CB_R \simeq (CB_{Cf})^2\}$ and that $\{R \simeq (U_{A-Cf} + U_{B-Cf}) - (CA_{Cf} + CB_{Cf})\}$

Then: $(U_{MR(A-B)}) \simeq ((CA_{Cf})^2 + (CB_{Cf})^2) - (CA_{Cf} + CB_{Cf})$

$$\simeq (CA_{Cf} + CB_{Cf})$$

- e. Based on the previous assumptions, where the $\{(U_{NE(A-B)}) \simeq (U_{MR(A-B)})\}$, then:

$$\{(U_{NE(A-B)}) \simeq ((U_{A-Cf})^3 + (U_{B-Cf})^3) + (CA_{Cf} + CB_{Cf})\}$$

$$\{(U_{NE(A)}) \simeq (U_{A-Cf})^3 + (CA_{Cf})\}, \text{ where } \{(CA_{Cf}) \simeq (CS_{A-R})\}$$

$$\{(U_{NE(B)}) \simeq (U_{B-Cf})^3 + (CB_{Cf})\}, \text{ where } \{(CB_{Cf}) \simeq (CS_{B-R})\}$$

And given that: $p \{(U_{A-Cf}) \geq (U_{B-Cf})\} > p\{(U_{A-Cf}) < (U_{B-Cf})\}$; and that: $p \{(CA_{Cf}) < (CB_{Cf})\} > p \{(CA_{Cf}) > (CB_{Cf})\}$ _ where the probability (p) is: $(0 \leq p \leq 1)$.

Then, based on the *highest probabilities* assumptions of:

- i. $\{(U_{A-Cf}) \geq (U_{B-Cf})\}$; ii. $\{(CA_{Cf}) < (CB_{Cf})\}$, we prove that: the $(U_{NE(A-B)}) = \{U_1 (A); U_{H-1} (B)\}$ _ where a. the *less* cost paid in conflict “(C_{Cf})” reverses a *higher* utility “(U_{Cf})” in return for a given player, and vice versa; and b. the $\{(CS_{A-R}) < (CS_{B-R})\}$ if the $\{(CA_{Cf}) < (CB_{Cf})\}$. It is an *opposite* relation, therefore, existing between the $\{(C_{Cf}) \& (U_{Cf})\}$ within this hypergame. Also, the “(C_{Cf})” or the “cost of conflict” in an ongoing intra-state conflict approximately *equals* the (CS_R) or the “concession(s) at the (NE)’s (Reconciliation) position,” made in a balance of peace state’s conflict settlement/resolution interactions.

So, the (U_1) is the (NE)’s ‘perfect’ utility value gained by the (PA) who paid less (CA_{Cf}) , making less (CS_{A-R}) at the $(HG)_1$ ’s (NE) position. While the (U_{H-1}) is a ‘high’ utility value for the (DG) at the (NE), simultaneously, the actor who paid higher (CB_{Cf}) , thus making higher (CS_{B-R}) , under the given context.

Lastly: The hypothesis' validity. Based on the reached Nash equilibrium of the $(HG)_1$ and the cost and utility assumptions and equations of the $(U_{MR(A-B)})$ and $(U_{NE(A-B)})$, we prove the model's first hypothesis' validity: A balance of peace-state within nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties socially, politically, and diplomatically at any phase during and post-intra-state conflicts.

4.4.4.3. Second: The Balance of Peace-State Hypergame Model's Inter-State Hypergame “ $(HG)_2$ ”

4.4.4.3.1. The $(HG)_2$'s Description: Assumptions and Hypothesis

In another first-level hypergame, we have five players who are: {(State A); (State B); (Mediation Power); (Coercive Diplomacy Power); and the (Global Hegemonic Governance and Discourse)}. We refer to them by {(SA); (SB); (MP); (CP); (GHG-D)} respectively. The $(HG)_2$ is the future (second) play of a previously played (hyper)game in the past. Also, this $(HG)_2$ is composed of every player's perceived game, and each game includes realized preference vectors of other players. This can be denoted as: $(HG)_2 = \{G_{2.1}, G_{2.2}, G_{2.3}, G_{2.4}, G_{2.5}\}$; and $G_{2.1} = \{V_{2.2}, V_{2.3}, V_{2.4}\}$, $G_{2.2} = \{V_{2.1}, V_{2.3}, V_{2.4}\}$, $G_{2.3} = \{V_{2.1}, V_{2.2}, V_{2.4}\}$, $G_{2.4} = \{V_{2.1}, V_{2.2}, V_{2.3}\}$, and $G_{2.5} = \{V_{2.1}, V_{2.2}, V_{2.3}, V_{2.4}\}$. Where $\{(HG)_2$; $(G_{2.1})$; $(G_{2.2})$; $(G_{2.3})$; $(G_{2.4})$; $(G_{2.5})\}$ abbreviations refer to $\{(the\ model's\ second\ hypergame); (the\ game\ perceived\ by\ player\ I\ or\ “SA”); (the\ game\ perceived\ by\ player\ II\ or\ “SB”); (the\ game\ perceived\ by\ player\ III\ or\ “MP”); (the\ game\ perceived\ by\ player\ IV\ or\ “CP”); (the\ game\ perceived\ by\ player\ V\ or\ “GHG-D”)\}$. At the same time, the $\{V_{2.1}; V_{2.2}; V_{2.3}; V_{2.4}; V_{2.5}\}$ indicates the strategic preference vectors of the $\{(SA); (SB); (MP); (CP); and (GHG-D)\}$ actors, consecutively, also considering how any player may perceive one or more of the others' vectors. In the $(HG)_2$, either the (SA) and (SB) players are *equal* in power (i.e., military, economic, and political power), or that the (SA) actor is *more* powerful than the (SB). As well, the (SA) actor plays first before the (SB) in a sequential-move dynamic game, while both the (SA) and (GHG-D) actors are the most *influential* and *important* participants in this hypergame.

The central premise of the (BPSHM)'s $(HG)_2$ is: “Initiating a peace process between major conflicting parties by the most-powerful state, or one of the power-equal two-states in inter-state conflicts reaching a balance of peace-state does not necessarily depend on

opting for a mature mediation's conflict ripeness moment or the mutually-hurting stalemate one." Therefore, this study's second hypothesis is: "A balance of peace-state between nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties diplomatically, politically, and socially at any phase during and post-inter-state conflicts."

4.4.4.3.2. The (HG)₂'s Perceived Games

The G_{2.1}: The (State A)'s. The (State A) or (SA) player has this set of actions within its strategic preference vector (i.e., the $V_{2.1}$) along with the hypergame's course either in the past play or a replayed current 'future' one: a. (Activation of Conflict/War "A-C/W"); b. (Territorial/Political/Economic Non-Recognition/Non-Legitimization "N-R/L"); c. (Initiation of a Peace-Process "In-PP"); d. (Diplomatic, Political, Economic, and Social Integration "GR"). Where the probability (p) of those strategic preferences in the *past* (first) play were: i. ($0 < p \leq 1$) for the (A-C/W) and (N-R/L); ii. ($0 \leq p < 0.25$) for the (In-PP); iii. ($p = 0$) for the (GR). In a comparison, the probability in the *future* (second) play (i.e., the "HG₂") is: i. ($0 \leq p < 0.25$) for the (A-C/W) strategic action; ii. ($0 < p \leq 0.5$) for the (N-R/L); iii. ($0.5 < p \leq 1$) for the (In-PP); iv. ($0 < p < 1$) for the (GR).

In a misperception-based-hypergame, the ($G_{2.1}$) includes the $\{(V_{2.2}); \text{ and } (V_{2.3})\}$ where the (SA) player understands that the ($V_{2.2}$) includes a. (Continuation of Conflict/War), b. (Peace-Process Participation), and c. (Non-Recognition/Non-Legitimization) strategic actions. Simultaneously, the (SA) perceives that the (MP) has a (Neutral-Mediation) action in its ($V_{2.3}$). As well, within the ($G_{2.1}$), the (SA) perceives the ($V_{2.4}$), realizing that the (CP) has these deterrence means/actions: a. (Imposing Sanctions, Boycotts/Embargos, or/and Trade Tariffs); b. (Use of (Credible/Capable) Threats); or/and c. (Use of Physical Power for Initiating Preventive/Collective Security-War(s) _ should the deterrence failed). The (SA) is not aware of the (GHG-D) actor in the game, and therefore, does not perceive its ($V_{2.5}$). The game is denoted as: $G_{2.1} = \{V_{2.2}, V_{2.3}, V_{2.4}\}$.

The G_{2.2}: The (State B)'s. The (State B) or (SB) player has a strategic preference vector (i.e., the $V_{2.2}$) in the entire hypergame that is approximately analogical with that of the (SA), containing these actions: a. (Activation of Conflict/War "A-C/W"); b. (Territorial/Political/Economic Non-Recognition/Non-Legitimization "N-R/L"); c.

(Implementation of a Peace-Process “Im-PP”) _ in terms of moving second sequentially to the (SA)’s first move; d. (Diplomatic, Political, Economic, and Social Integration “GR”). The (p) of the (SB)’s strategic preferences in the *past* (first) play were: i. ($0 < p \leq 1$) for the (A-C/W) and (N-R/L) moves; ii. ($0 \leq p < 0.25$) for the (Im-PP); iii. ($p = 0$) for the (GR). In this *future* (second) play, the probability is: i. ($0 \leq p < 0.25$) for the (A-C/W) strategic move; ii. ($0 < p \leq 0.5$) for the (N-R/L); iii. ($0 < p < 1$) for the (Im-PP); iv. ($0 < p \leq 0.5$) for the (GR) _ given that the (SB)’s actions represent the *reaction* of the (SA)’s and that there are three players (i.e., the (MP); (CP); and (GHG-D)) interfere in this (second) play, who did not participate in the first one.

In the $G_{2.2}$, the (SB) actor perceives the $\{(V_{2.1}); (V_{2.3}); \text{ and } (V_{2.4})\}$ while not perceiving the $(V_{2.5})$ because it is not aware of the (GHG-D) player in the $(HG)_2$. The (SB) understands that the (SA) has a preference vector (i.e., $V_{2.1}$) composed of a. (Peace-Process Initiation); b. (Peace-Process Spoiling); c. (Continuation of the War/Conflict); and (Non-Recognition/Legitimization). On the contrary to the (SA)’s perception of the $(V_{2.3})$, the (SB) realizes the (Biased-Mediation) as the (MP) vector’s included action. Nevertheless, the (SA) and (SB) perceive the $(V_{2.4})$ symmetrically. This game is denoted as: $G_{2.2} = \{V_{2.1}, V_{2.3}, V_{2.4}\}$.

The $G_{2.3}$: The (Mediation Power)’s. As its role in the $(HG)_1$, the (MP) player is a participant in the second (future) play only of the hypergame, having the $\{(\text{Neutral-Positive Mediation}); \text{ and } (\text{Face-Saving Diplomatic Tactics})\}$ moves within its preference vector (i.e., the $V_{2.3}$), which are of this probability: ($0 < p \leq 1$) in the game. In the $(HG)_2$ ’s $G_{2.3}$, the (MP) actor perceives the other players’ preference vectors as follows: first, it understands that both the $(V_{2.1})$ and $(V_{2.2})$ include: a. (National Security Preserving-Oriented-Military Engagement), b. (Homeland/Nation-State Borders Protection), c. (National/Natural Resources Supplies Maintaining/Securitization), and d. (Activation of Conflict/War) strategic moves. Second, the (MP) has the same perceptions over the (CP)’s $(V_{2.4})$ as the (SA) and (SB), while not being aware of the (GHG-D) in the game so that not perceiving its $(V_{2.5})$. This is denoted as: $G_{2.3} = \{V_{2.1}, V_{2.2}, V_{2.4}\}$.

The $G_{2.4}$: The (Coercive Diplomacy Power)’s. The (CP) player also participates in this future play solely or the $(HG)_2$. It has a preference vector (i.e., the $V_{2.4}$) indicating one strategic action that is the (Active-Coercive Diplomacy “A-COD”), which is considered

a pure strategy it uses in the hypergame of this probability: ($0 < p \leq 1$). The (CP) player, in the $G_{2.4}$, understands both ($V_{2.1}$) and ($V_{2.2}$) precisely as the (MP) does while perceiving that the latter's preference vector (i.e., $V_{2.3}$) comprises the (Neutral-Mediation) strategic action, with not realizing the (GHG-D) player's existence in the game. We denote this as: $G_{2.4} = \{V_{2.1}, V_{2.2}, V_{2.3}\}$.

The $G_{2.5}$: The (Global Hegemonic Governance & Discourse)'s. The (GHG-D) player is the $(HG)_2$'s third actor who participates in this second (future) play without existing in the first (past) one. It has a preference vector (i.e., the $V_{2.5}$) composed of these strategic preferences: a. (Peace-Broker Discourse "PBD"), which is one strategy outcome of the (Positivity of Peace Hypergame Model)'s first hypergame and a possible strategy choice within this model; b. (Pro-Conflict Settlement/Resolution State-Building "PCS/R-SB"); and c. (the (PBD)'s Reinforcing Cultivation "D-RC"). The (p) of each of those strategic actions is: ($0 < p \leq 1$). In the $G_{2.5}$, the (GHG-D) perceives the other players' preference vectors since this actor is aware of them all in the hypergame. It understands the ($V_{2.1}$) and ($V_{2.2}$) as the (MP) and (CP) players do while realizing that the ($V_{2.3}$) includes the (Collective Diplomacy) strategic move and that the ($V_{2.4}$) contains the (Coercive Diplomacy) one. This game can be denoted as: $G_{2.5} = \{V_{2.1}, V_{2.2}, V_{2.3}, V_{2.4}\}$. Ultimately, all explained preference vectors perceived by players about others depend on those players' understanding and interpretation of the game and reality and how the others reason, which may be true or not.

4.4.4.3.3. The $(HG)_2$'s Strategic Interactions, Equilibria, and Expected Utility:

Relating Outcomes Between Individual Games in a Mapping Function

4.4.4.3.3.1. Firstly: The $(HG)_2$'s Strategic Interactions

Within the international system structure, the (Global Hegemonic Governance and Discourse) or the (GHG-D) player initiates the $(HG)_2$, having a first play advantage and moving to the (Peace-Broker Discourse "PBD") strategic preference. The (PBD) is now an action to be picked after resulting as an accumulated output in the (Positivity of Peace Hypergame Model "PPHGM")'s (Strategic Interactions)¹, the action that we refer to as the $((PBD)_{(SI)1})$. Given that a cross-region "peace-hegemony-oriented-mass-disciplinary power" results out of the $\{(Fledgling\ Peace\ Hegemony),\ and\ (Omnipotent\ Peace\ Hegemony)\}$ strategy outcomes _ that are the input-shifted-output strategies of the (PBD)

output in the (PPHGM), a “(PBD) Sphere” constitutes here. This outcome is an equilibrium within the (GHG-D)’s perceived game but not for the entire (BPSHM)’s (HG)₂.

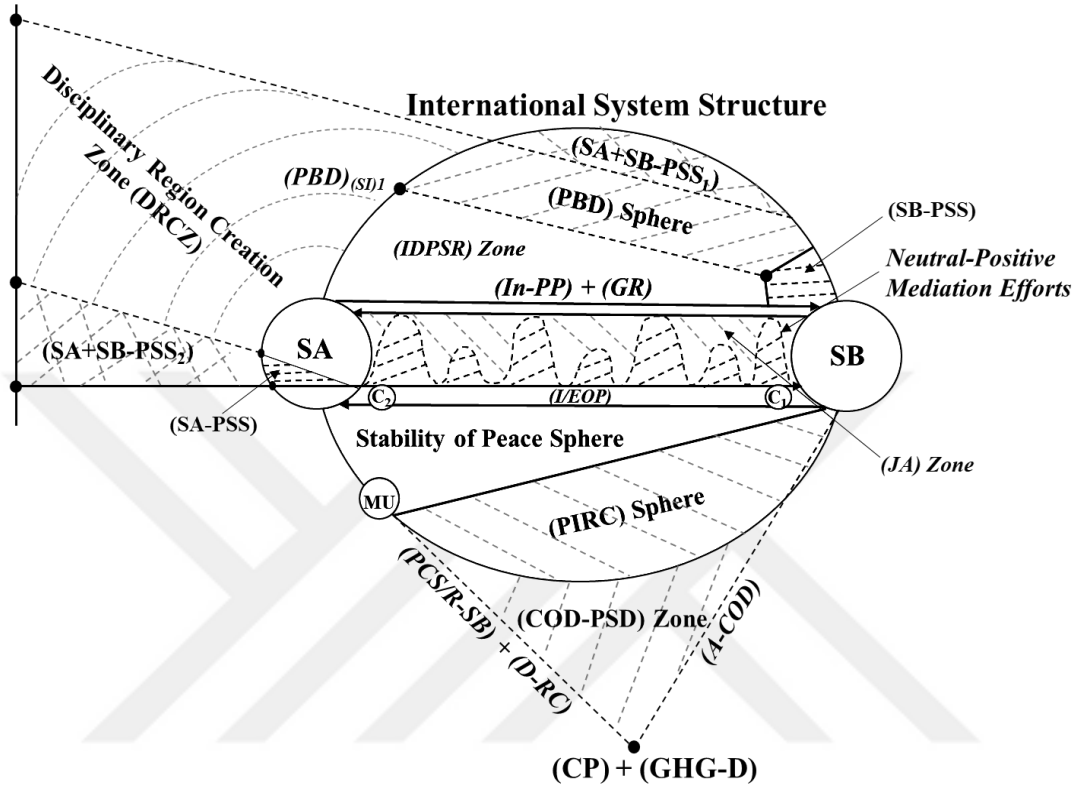


Figure 28: The Balance of Peace-State Hypergame Model; the Inter-state Hypergame “(HG)₂”

Source: Prepared by the author.

Sequentially to the (GHG-D)’s ((PBD)_{(SI)1}) move and its resulted sphere of influence regionally, nationally, and globally, with being not aware of the (GHG-D) player in the game, the (MP) actor moves to the (Neutral-Positive Mediation “N-PM”) strategic action. Perceiving the (SB)’s (V_{2.2}) in its (G_{2.1}) as a preference vector includes the {(Continuation of Conflict/War); and (Peace-Process Participation)} actions, whereas the probability of the (SA)’s (Activation of Conflict/War “A-C/W”) strategic choice _ if made (i.e., “p ≠ zero”), is: (0 < p < 0.25), the State A or (SA) player as a rational actor and a *subject* to the “(PBD) Sphere” _ while not being aware of the (GHG-D) actor or its game, moves to the (Initiation of a Peace-Process “In-PP”) strategic preference. Here, the (SA) expects a

maximized utility to result, according to its own interpretation and understanding of the game and perceptions of reality.

With the (SA)'s choosing of the (In-PP) action, the “*first*” of this hypergame's “*interruption factors*” appears, which is the (Peace Spoiling Behaviors Spheres “PSBS”). This factor's circle begins by the “(SA) player-directed-peace spoiling sphere,” or the (SA-PSS).

Given that it understands that: a. the (SA)'s ($V_{2.1}$) and (SB)'s ($V_{2.2}$) include the (Activation of Conflict/War) action, and b. there is a (Possible-Instability and Resuming Conflict, “PIRC,” Sphere) as a probable outcome in the $(HG)_2$, the (Coercive Diplomacy Power) or the (CP) player chooses to make its (Active-Coercive Diplomacy “A-COD”) move sequentially to the (SA)'s (In-PP) one. Therefore, this actor brings major conflicting parties (i.e., the “SA, and SB”) into line, as well as overcoming possible (*high*) leverage of the constituted (PSBS) factor over one, or all, of those parties.

The (SB) player (i.e., the State B) moves, sequentially, to the (Implementation of a Peace-Process “Im-PP”) action, thus, taking place in an initiated peace process, relying on its available information and perceptions about the (SA)'s ($V_{2.1}$) within its ($G_{2.2}$), and being a subject to possible deterrence means applied by the (CP). Since the (SB) also understands that the (SA) initiates a peace process while seeking to practice a spoiling behavior implicitly (i.e., the “Peace-Process Spoiling” perceived action of ($V_{2.1}$) in the “ $G_{2.2}$ ”), acquiring benefits through the initiation, the (SB)'s (A-C/W) strategic move's probability is still ($0 \leq p < 0.25$) at this stage of the $(HG)_2$.

Consequently, the “(SB) player-directed-peace spoiling sphere,” abbreviated as (SB-PSS), arises with the (SB)'s choosing of the (Im-PP) action.

Out of the previous interactions and when using these strategies sequentially: {(PBD)_{(SI)1} by (GHG-D); (N-PM) by (MP); (In-PP) by (SA); (A-COD) by (CP); and (Im-PP) by (SB)}, an outcome arises that is an *equilibrium* within the (SA) and (SB)'s perceived ($G_{2.1}$) and ($G_{2.2}$) only. This equilibrium is the (Joint-Agreements/Accords/Pacts Zone) or the “(JA) Zone,” which refers to how the two players understand that such an outcome can resolve the conflict or believe what will happen in the future. At this position, the payoffs accumulated by the (SA) and (SB) players respectively are: $\{(U_{M-1}), (U_{M-1})\}$ representing the mid-level utility value of ($U_{0.5}$) for both. Thence, no player is worse off,

but also none is *sustainably* better off, where the probability of the (A-C/W) is still ($0 \leq p < 0.25$) at this position. So, this outcome is *not* stable, and therefore, *not* needed as equilibrium for the entire (HG)₂.

The (SA) player, expecting an extended maximized utility by the diplomatic resolution given the reached “(JA) Zone” equilibrium, chooses the (Diplomatic, Political, Economic, and Social Integration, “GR”) strategic action in a sequential move to the (SB)’s (Im-PP) preference. However, the “*second*” interruption factor occurs as an interference variable, which is the (Internal or/and External Opposition “I/EOP”). This (I/EOP) factor represents the cost (C_1) of the (SA)’s strategic choices in the (HG)₂.

Sequentially to the (SA)’s (GR) choice, the (MP) moves to the (Face-Saving Diplomatic Tactics “FS-DT”) preference.

Consequently, the (SB) player, having like-perceptions as the (SA)’s regarding an expected maximized utility while also considering the “(JA) Zone” equilibrium, acts likewise preferring the (Diplomatic, Political, Economic, and Social Integration, “GR”) same strategic choice. Symmetrically, the (SB) player coups with the cost (C_2) of its strategic choices in the hypergame for having the (I/EOP) similar interference factor.

Simultaneously with aggregating the (C_1) and (C_2), the “(SA) and (SB)-directed-peace-spoiling sphere (1)” constitutes, as well as the “(SA) and (SB)-directed-peace-spoiling sphere (2).” Both are abbreviated as (SA+SB-PSS₁) and (SA+SB-PSS₂); see Figure 28.

4.4.4.3.3.2. Secondly: The (HG)₂’s Equilibria and Expected Utility

With the (SB)’s choosing of the (GR) action, the (Initial Diplomatic-Political-Social Reconciliation Zone) or the “(IDPSR) Zone” arises as an outcome for the entire (HG)₂ when using the {(GR), (FS-DT), (GR)} strategies in a sequential move by the {(SA), (MP), and (SB)} players, respectively. Being *known* outcome for those players, the “(IDPSR) Zone” equilibrium is also stable, given the stability of payoffs or utility accumulated at this position, which is: $\{(U_{H-1}), (U_{M-1}), \text{ and } (U_{H-1})\}$ of each consecutively. In this context, the (U_{H-1}) is a high-level utility in the ($U_{0.7}$) value gained equally by the (SA) and (SB) players, and the (U_{M-1}) is a mid-level utility in the ($U_{0.6}$) value, where the probability (p) of choosing the (A-C/W) strategic choice at this position by either (SA), or (SB), is ($p = 0$). So, using these strategies sequentially: {(GR), (FS-DT), (GR)} is the

“*Nash Equilibrium (1)*” of the $(HG)_2$. Moreover, if the hypergame ends by this stage, no player would have the impulse to deviate from this stable position of higher payoffs achieved for all by simultaneously making their *best* reply to each other’s strategy.

When using these strategies sequentially: $\{(PBD)_{(SI)1}$ by (GHG-D); (N-PM) by (MP); (In-PP) by (SA); (A-COD) by (CP); (Im-PP) by (SB); (GR) by (SA); (FS-DT) by (MP); and (GR) by (SB) $\}$, an *unknown* accumulated outcome arises, which is the (Disciplinary Region Creation Zone “DRCZ”). Under this equilibrium, the payoff becomes: (U_{H-1}) , for the $\{(SA), (SB), \text{ and } (GHG-D)\}$ players in this high-level utility value: $(U_{0.7})$, equivocally. As well, the $\{(MP) \text{ and } (CP)\}$ players’ utility value at the same position is $(U_{0.6})$ – that is a mid-level utility (U_{M-1}) close to being high. Given that the (A-C/W) strategic choice’s probability when using the $\{(GR), (FS-DT), (GR)\}$ strategies by the $\{(SA), (MP) \text{ and } (SB)\}$ players, sequentially, is $(p = 0)$, the (DRCZ) outcome becomes stable, which is the “*Nash equilibrium (2)*” of the $(HG)_2$. Again, once this position is reached, no player may have the incentive to deviate since each achieved higher and stable payoffs in the hypergame, simultaneously making the *best* response to the others’ used strategies.

Considering the previous equilibria of the “(IDPSR) Zone” and the “(DRCZ),” the hypergame’s yielded payoffs for all players at both positions are higher and stable. However, in the $(HG)_2$, and sequentially to the (SB)’s (GR) action, the (GHG-D) player as a rational actor perceiving a possible ‘*perfect*’ equilibrium position, is assumed to prefer picking the (Pro-Conflict Settlement/Resolution State-Building, “PCS/R-SB”) strategic choice, as well as the “(PBD)’s Reinforcing Cultivation, (D-RC),” at the same move. We denote both the $\{(PCS/R-SB) \text{ and } (D-RC)\}$ actions as the (PSD). Given that the other players are not aware of the (GHG-D) in the hypergame, then making those two choices is more likely *not* perceived within the other players’ (individual) games unless they obtain information about this player’s game or/and made choices (i.e., decisions). In other words, the accuracy of the $(HG)_2$ is dependent on available information.

Nevertheless, that dual-action or the (PSD) made in a sequential move to the other chosen strategic preferences results in: First: The $\{(COD-PSD) \text{ Zone}\}$ equilibrium: that occurs when sequentially using these strategies: $\{(PBD)_{(SI)1}$ by (GHG-D); (A-COD) by (CP); and then, the (PCS/R-SB), and (D-RC), or (PSD), by (GHG-D) $\}$. The utility value achieved

for the (CP) and (GHG-D) players, respectively, at this position, is: $\{(U_{0.7}), (U_{0.8})\}$, which both lie in the high-level utility “ (U_{H-1}) ” category, where the (p) of the (SA) and (SB)’s (A-C/W) strategic preference is $(p = 0)$. Despite being stable, this equilibrium is *only* perceived within the individual game of the (GHG-D), conveying this player’s perceptions of how the conflict can be resolved. It is *not* needed as equilibrium for the entire hypergame, therefore.

Second: The (Stability of Peace Sphere) outcome: that is the “*Nash equilibrium (3)*” of the $(HG)_2$, which occurs when picking these strategies in a sequential move: $\{(PBD)_{(SI)1}$ by (GHG-D); (N-PM) by (MP); (In-PP) by (SA); (A-COD) by (CP); (Im-PP) by (SB); (GR) by (SA); (FS-DT) by (MP); (GR) by (SB); (PCS/R-SB), and (D-RC) by (GHG-D)). Here, the hypergame extends based on the previously achieved “*Nash equilibrium (2)*” so that no player deviated, but only *unilaterally*, the (GHG-D) actor develops the precedent equilibrium’s position. Similarly, each makes the *best* response to the other players’ strategies simultaneously, where the probability of the (SA) and (SB)’s (A-C/W) action is $(p = 0)$. Accordingly, the payoffs result as a total “*mutual utility (MU)*,” whose values are: $\{(U_1), (U_1), (U_{0.8}), (U_{0.8}), (U_1)\}$ for the $\{(SA), (SB), (MP), (CP), (GHG-D)\}$ players, respectively. So, the *perfect* utility value (U_1) is yielded for the $\{(SA), (SB), \text{ and } (GHG-D)\}$ actors, which is *absolutely* the highest value the players can receive ever either in the $(HG)_1$ or the $(HG)_2$ of the (BPSHM). Comparingly, the $\{(MP) \text{ and } (CP)\}$ players achieve high-level utility “ (U_{H-1}) ” values (i.e., “ $U_{0.8}$ ”), also raising their gains in the $(HG)_2$ under this equilibrium. Ultimately, the (Stability of Peace Sphere) outcome is *stable* – given its relevant position’s stability with the highest payoffs received by all players if reached, despite being *known* for the (GHG-D) player solely and *unknown* for the other players in the hypergame.

4.4.4.3.4. The $(HG)_2$ ’s Balance of Peace-State: The (BPS)’s Equations of Inter-State Conflicts

4.4.4.3.4.1. Firstly: The Equations’ Assumptions

- a. Main premise: If $p \{SA (In-PP)\} \approx \{p (N-PM) + p (In_{SA}) + p (GR_{SA}) + p (C_1)\}$, where (p) is the probability, and that:

$$\{p (N-PM) \geq p (In_{SA}) > p (GR_{SA}) \geq p (C_1)\} \text{ where } (0 < p \leq 1).$$

- b. If $N(\text{SB-PSS}) \geq N(\text{SA-PSS})$, where (N) is the (Total Influence), given that the (SA) is the initiator to a peace process (PP). And that:
- $N(\text{SA+SB-PSS}_1) < N(\text{SA+SB-PSS}_2)$, where the (PSS_1) arises outside the (DRCZ) while the (PSS_2) occurs inside this zone.
 - $N(\text{SA+SB-PSS}_2) < N(\text{DRCZ})$.
- c. If $N^2(\text{DRCZ}) \simeq N(\text{COD-PSD})$ Zone, where (N^2) is the (Overwhelming/Doubled Total Influence N).
- d. And that: $\{(\text{DCS} \equiv \text{MS}); \text{ but } (\text{MS} \nparallel \text{DCS})\}$, where the (DCS) is the “Diplomatic Convention(s) Signing;” the $(\equiv)$ is the *equivalency* relation; the (MS) is the “Mediation Success;” and the $(\nparallel)$ is the *unparallel* relation.

4.4.4.3.4.2. Secondly: The $(\text{HG})_2$'s Balance of Peace-State (BPS) Equations

Based on the previous assumptions and configurations, there are three cases of the “Success of Peace Process” or the $\{S(\text{PP})\}$ inter-state under the $(\text{HG})_2$'s given context; these are:

Case 1: The “Multiplied $\{S(\text{PP})\}$ ” or the $\{S^2(\text{PP})\}$ that occurs when:

$S^2(\text{PP}) \simeq \{((\text{SA}(\text{In-PP})) + N^2(\text{DRCZ})) - (N(\text{SA+SB-PSS}_2))\}$, where

$\{N^2(\text{DRCZ}) \simeq N(\text{COD-PSD})\}$. In this case, the $\{S^2(\text{PP}) \parallel (\text{MS})^2\}$.

Case 2: The “Limited $\{S(\text{PP})\}$,” occurring when:

$\text{LS}(\text{PP}) \simeq \{(\text{SA}(\text{In-PP})) + (n(\text{DRCZ})) + (n(\text{COD-PSD}))\}$, where the (L) refers to (Limited), and the (n) is the (Partial Influence).

Then: $\{\text{LS}(\text{PP}) \parallel (\text{MS}) + \frac{1}{2}(N(\text{SA+SB-PSS}_2))\}$; or:

$\{\text{LS}(\text{PP}) \parallel (\text{MS}) - \frac{1}{2}(N(\text{SA+SB-PSS}_2))\}$. Then: $\{\text{LS}(\text{PP}) \parallel \text{L}(\text{MS})\}$.

Case 3: The “Normality of $\{S(\text{PP})\}$,” which occurs when:

$\text{RS}(\text{PP}) \simeq \{(\text{SA}(\text{In-PP})) + (N(\text{DRCZ})) + (n(\text{COD-PSD}))\}$, where the (R) here refers to (Normality) _ given that if there is (n) of the (COD-PSD), then there cannot be (N^2) of (DRCZ).

Then: $\{\text{RS}(\text{PP}) \parallel (\text{MS})^2 + \frac{1}{2}(N(\text{SA+SB-PSS}_2))\}$; or:

$\{RS (PP) \parallel (MS)^2 - \frac{1}{2} (N (SA+SB-PSS_2))\}$. Then: $\{RS (PP) \parallel R (MS)\}$.

Thence, we explain the cases probabilities as follows:

Based on the previous equations: $\{N (S^2 (PP)) > N (RS (PP)) > N (LS (PP))\}$, given that:

a. $\{p (S^2 (PP)) > p (RS (PP))\}$; b. $\{p (LS (PP)) > p (RS (PP))\}$ where $(0 < p < 1)$.

Nevertheless, the $\{p (S^2 (PP)) > p (LS (PP))\}$ if $\{PPE \simeq GHP - RHW^{-CU}\}$ as proven above in the (Positivity of Peace Hypergame Model)'s (Positivity of Peace Equilibrium "PPE") equation.

Finally, depending on the (Balance of Peace-State Hypergame Model)'s $(HG)_2$'s reached Nash equilibria, and the balance of peace-state equations of inter-state conflicts, we prove the validity of this model's second hypothesis: A balance of peace-state between nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties diplomatically, politically, and socially at any phase during and post-inter-state conflicts.

CONCLUSION

In the **general conclusion I** of this research, we address the developed (Conflict or War Impediment Strategic Approach), Part I, which focuses on a Deception Hypergame Model of Interstate Conflict (DHMIC) and the Initial Stability in the System-Powers' Conflict and Deterrence Relation (ISPCDR).

Following the development of the (DHMIC), two general conclusions have been set, paving one way among many others that can be provided in further research for stabilizing the international system's structure. Whether or not the deception exists in multiple games of an unbalanced hypergame model played by and between states, the aim was not to reveal a new facet of reality insofar as it was to set the facts (more) solid, avoiding the occurrence of potentially similar conflicts in the future. So, we introduced two equations inferred from our built model and its application, which are applicable under certainty and uncertainty conditions. In this part, we highlight what we called the *Conditionality of (ISPCDR)*, upon which our next development of a (Deterrence Entanglement Law) took place.

First of all, the Initial Stability in (the system) Powers' Conflict and Deterrence Relation or the (ISPCDR) can be specified, based on the previously given Equations I and II's outputs, where the "Bipolarity or Multipolarity, (B-MP)" defines the international system's structure, as follows:

$$\begin{aligned} (ISPCDR)_{(B-MP)} &\cong \{(E_a)^{+1} + (E_b)^{+1} + (B_{A1})^{(CC)F1} + (B_{A2})^{(CC)F2}\} \\ &\cong \{(E_{a+b})^{+2} + (B_{A1+A2})^{(CC)F1+F2}\} \end{aligned}$$

Given that: i. $(E_a)^{+1}$ is the "Equilibrium (E) achieved for (A_1) or (a)," which is a "stable outcome," denoting the stability as $(+1)$." ii. $(E_b)^{+1}$ is the "Equilibrium (E) achieved for (A_2) or (b)," which is a "stable outcome: $(+1)$." iii. $\{(CC)F\}$ is the (Capability and Credibility Factor of Threat T), $\{(CC)F1\}$ is the (Capability and Credibility Factor of Threat T) for (A_1) , and $\{(CC)F2\}$ is the (Capability and Credibility Factor of Threat T) for (A_2) . iv. $\{B_{A1}\}$ is the "Balance of Powers Relations" achieved for (A_1) in the international system, and $\{B_{A2}\}$ is the "Balance of Powers Relations" achieved for (A_2) in the international system. v. $\{(E_{a+b})^{+2}\}$ is " (A_1) and (A_2) 's Equilibrium," simultaneously occurring in interstate conflict or deterrence relation within a bipolar or multipolar

international system, which is “stable for both,” denoting this dual stability as: (+2). vi. $\{(B_{A1+A2})^{(CC)F1+F2}\}$ is the “Mutually Balance of Powers Relations” achieved for (A₁) and (A₂) simultaneously within a bipolar or multipolar international system, where the $\{(CC)F\}$ takes place by both (A₁) and (A₂).

Supposing that: a. each element mentioned in the above equation has a numerical, denoting, or indicating value, where we refer to this value as (v);” b. both system’s powers, either (A₁) or (A₂), have capable and credible threats versus each other _ in a *mutual deterrence relationship* _ which might be active and in use or non-active and in non-use by any or all under an observed context. So, the Conditionality of (ISPCDR) can be formulated through these three cases:

Case I: The Relatively-Balanced (ISPCDR) _ where there is a mutual deterrence relationship with a one-sided extreme or limited-threat state activated. If $\{(E_{va})^{\pm 1}\} \neq \{(E_{vb})^{\pm 1}\}$, where: $\{(E_{va})^{\pm 1}\} > \{(E_{vb})^{\pm 1}\}$, or $\{(E_{va})^{\pm 1}\} < \{(E_{vb})^{\pm 1}\}$; then: $\{(B_{v(A1)})^{(CC)F1}\} \neq \{(B_{v(A2)})^{(CC)F2}\}$, where: $\{(B_{v(A1)})^{(CC)F1}\} > \{(B_{v(A2)})^{(CC)F2}\}$, or $\{(B_{v(A1)})^{(CC)F1}\} < \{(B_{v(A2)})^{(CC)F2}\}$.

Under this case, (A₁)’s capable and credible threat becomes *active and in use* while (A₂)’s capable and credible threat is *non-active and in non-use*, when $\{(E_{va})^{\pm 1}\} > \{(E_{vb})^{\pm 1}\}$; or vice versa when $\{(E_{va})^{\pm 1}\} < \{(E_{vb})^{\pm 1}\}$. Based on that, the equilibrium occurring might be permanently stable or not. The $\{(E_{va})^{+1}$; or $(E_{vb})^{+1}\}$ is a permanently *stable* equilibrium for Actor I or Actor II, respectively, under the (Relatively-Balanced (ISPCDR)), occurring in *perception* and (complete/incomplete) certainty conditions. In contrast, the $\{(E_{va})^{-1}$; or $(E_{vb})^{-1}\}$ is a permanently *unstable* equilibrium, namely, a temporarily *stable* one, for both under the (Relatively-Balanced (ISPCDR)), taking place in *deception* and misperception or certain uncertainty conditions.

Case II: The Outrightly-Balanced (ISPCDR) _ where there is a mutual deterrence relationship with an equally or equivalently non-activated dual threat-state. If $\{(E_{va})^{+1}\} = \{(E_{vb})^{+1}\}$, and then $\{(B_{v(A1)})^{(CC)F1}\} = \{(B_{v(A2)})^{(CC)F2}\}$, where the equilibrium is *stable*, referring to that by (+1), under whatever conditions (i.e., perception/certainty, or deception/uncertainty). Within that case, both actors’ capable and credible threats are *non-active and in non-use*.

Case III: The Incompletely-Balanced (ISPCDR) _ where there is a mutual deterrence relationship with a mutually extreme or limited-threat state activated. If $\{(E_{va})^{-1}\} \geq \{(E_{vb})^{-1}\}$, or $\{(E_{va})^{-1}\} \leq \{(E_{vb})^{-1}\}$, and then $\{(B_{v(A1)})^{(CC)F1}\} \geq \{(B_{v(A2)})^{(CC)F2}\}$, or $\{(B_{v(A1)})^{(CC)F1}\} \leq \{(B_{v(A2)})^{(CC)F2}\}$, where the equilibrium occurring in this case is permanently *unstable*, that is, temporarily *stable* only, referring to that by (-1), under perception or deception conditions. In that case, both actors' capable and credible threats become *active and in use*. Accordingly, we proved the validity of this study's (Deception Hypergame Model of Interstate Conflict) hypothesis: The initial stability in the system powers' conflict and deterrence relation is achieved through joint equilibria simultaneously occurring and the opponent-directed-capable and credible threat-existing in a mutual deterrence relationship, under certainty and perception, or uncertainty and deception conditions.

In the **general conclusion II** of this research, the second part of our (Conflict or War Impediment Strategic Approach), the Deterrence Entanglement Law (DEL) in global politics, is outlined.

The Deterrence Entanglement Law includes three rules, considering these assumptions:

- The $\{(Tn), (UT), (NT), (Td)\}$ are the abbreviations to the $\{(Threaten); (Unthreatened); (Not Threaten); (Threatened)\}$ moves/countermoves, respectively.
- The (B_{ab}) is the "Balance of Deterrence (B)" for Power I/Actor I or (a/A1) and Power II/Actor II or (b/A2) in the previously explained (Threat-for-Deterrence) modeling, where both sides are *opponents* in the international system.
- The (+D) indicates a (deception (D) case of inter-state conflict situations, or an intentional misperception employed by one opponent versus the other, and certain uncertainty) factor. At the same time, the (-D) points out a (perception (or non-deception/D) case, of inter-state conflict situations, and complete/incomplete certainty) factor.
- The $\{(CC)F1\}$ and $\{(CC)F2\}$ are the (Threat-Capability and Credibility Factor 1) of (A1) and the (Threat-Capability and Credibility Factor 2) of (A2), consecutively. Thence, the Deterrence Entanglement Law rules are the Relative-Balance Rule, which is expressed in these equations:

$$\begin{aligned} ((Tn)^{(CC)F1} + (UT))_{A1} + ((Td)^{(CC)F1} + (NT))_{A2} &= B_{ab} ((E_{va}) > (E_{vb}))^{+1} + (-D) \\ &= B_{ab} ((E_{va}) > (E_{vb}))^{-1} + (+D) \end{aligned}$$

$$((Tn)^{(CC)F2} + (UT))_{A2} + ((Td)^{(CC)F2} + (NT))_{A1} = B_{ab} ((E_{va}) < (E_{vb}))^{+1} + (-D)$$

$$= B_{ab} ((E_{va}) < (E_{vb}))^{-1} + (+D)$$

Also, the Outright-Balance Rule comes second, explained as follows:

$$((NT) + (UT))_{(A1)} + ((UT) + (NT))_{(A2)} = B_{ab} ((E_{va}) \approx (E_{vb}))^{+1} + (\pm D).$$

Lastly, it is the Incomplete-Balance Rule, which is denoted in this equation:

$$((Tn)^{(CC)F1} + (Td)^{(CC)F2})_{(A1)} + ((Td)^{(CC)F1} + (Tn)^{(CC)F2})_{(A2)}$$

$$= B_{ab} ((E_{va}) \geq (E_{vb}))^{-1} + (\pm D)$$

$$= B_{ab} ((E_{va}) \leq (E_{vb}))^{-1} + (\pm D)$$

In the **general conclusion III** of this research, a restoration of the developed-Deterrence Entanglement Law (DEL) rules within an actual state of all-out war, takes place under a (Mutual-Grand Strategy Modeling of the Russia-Ukraine War 2022).

By strategizing four waves of the Russo-Ukrainian War 2022, we developed modeling anticipating what might occur in this war in assumingly its first, second, third, and fourth stages. Depending on a game and hypergame-theoretic analysis, such built modeling focuses on revealing the weakness- points in the second actor's interactions by providing a (Counter-Wave) in each War Wave besides the (Wave) of the first actor, where (Russia) is a (Wave Player "WP"), and (Ukraine and NATO under the US leadership) are a (Counter-Wave Player "CWP"). When concluding this work, which we called a "Mutual-Grand Strategy Modeling of the Russia-Ukraine War," we assume that this study's developed Deterrence Entanglement Law (DEL) can be restored and maintained to precluding this war re-initiation possibility in the future under an (Outright Balance Rule). There are two crucial relationships are defined and used to reach the balance points out of this war by each wave, which are:

First: a (WL), (SWO), and {DU (FA-V)} relationship. It is derived from this theoretical assumption: The "War Length (WL)" factor for the (Wave Player, "WP") or (Counter-Wave Player, "CWP"), if added to the "Stabilization of War Objectives (SWO)" factor for the same player, both result in giving an indication to the "Distance Unit (DU)" of the player from its "Future Advance Towards Victory (FA-V)," which is the third factor, in

this context, interacting with the first two. We denoted this relationship in symbols within this applicable equation:

$$\{ (WL) + (SWO)_{(WP/CWP)} \simeq DU (FA-V)_{(WP/CWP)} \}$$

Based on that relationship, we could calculate the level of moving toward (Victory) or (Defeat) at the end of every wave for a player, where the less the Distance Unit number is, the higher value it reflects for the (WP) or (CWP) since any becomes closer to its (FA-V).

Second: A war-zero-sum game's victory-defeat relationship. Theoretically assuming that in a *war-zero-sum game*, a *victory* for one conflicting party reverses the *defeat* for the other (i.e., the enemy), and vice versa, where (P_x) is Player x and (P_y) is Player y . Thus, the $\{DU (FA-V)\}$ in relation to victory-defeat outcomes in a war-zero-sum-game is denoted as the following:

$$\begin{array}{ccc} \{- DU (FA-V)_{P_x}\} & \longleftrightarrow & \{+ DU (FA-V)_{P_y}\} \\ \text{(Victory for One/Per Wave)} & & \text{(Defeat for the Other/Per Wave)} \end{array}$$

And therefore:

$$\begin{array}{ccc} \{- \infty DU (FA-V)_{P_x}\} & \longleftrightarrow & \{+ \infty DU (FA-V)_{P_y}\} \\ \text{(Final War-Victory for One)} & & \text{(Final War-Defeat for the Other)} \end{array}$$

Given that: The $(+ \infty DU)$ of (FA-V) reflects the least value ever with the (Distance) is infinite; comparingly, the $(- \infty DU)$ represents the highest value ever for a (Distance Unit) to (Future Advance Towards Victory) for a (Wave Player) or (Counter-Wave Player) where the (Distance) to (FA-V) ceases to exist with being translated into the decisive, ultimate victory of war.

In the **general conclusion IV** of this research, we highlight our theoretical contribution of a ('Non-Chance Space' Reduced War-Hexagon) for the war (hyper)game-modeling and counter-modeling.

After accomplishing a game and hypergame-theoretic analysis of the Russian-Ukrainian War dynamics during the specified period of wartime (mid-May and early June 2022) considered for this analysis purpose, we proved this study hypothesis: With the second

war actor having access to the first war actor's war (hyper)game under uncertainty, misperception, and intentional deception conditions created by the second war actor, the last could deliberately camouflage its first-used war stratagems achieving its war objectives and inflicting its enemy, the first war actor, politically, economically, and militarily, if this deceived in the war situation could not reveal the uncertainty and counter deception ultimately, while the war-termination process' spoilers become better off by accelerating a realist war-end tearing war-affected societies into parts.

Such an advance enabled us to move next to developing what we called a ('Non-Chance Space' Reduced War-Hexagon) to find the remedy out of extremely complicated and complex war-situation and bring about strategically a future *security balance* regionally as well as internationally. Under applying it to the war-(hyper)game modeling and counter-modeling regarding the concerned case, Actor I is (Ukraine, NATO, the EU, and the USA; or Ukraine and NATO mainly), and Actor II is Russia. Here, the following elements summarize the mentioned War Hexagon and its application.

First: The ('Non-Chance Space' Reduced War-Hexagon)'s dynamics. In the ('Non-Chance Space' Reduced War-Hexagon), there are six angles expressing integrated dynamics of any *inter-state war* case, as follows: First, the Military Dynamic; second, the Economy Dynamic; third, the Alliance Dynamic; fourth, the Media, War Propaganda, and Public Opinion Dynamic; fifth, the War Objective/Territorial Expansion Dynamic; sixth, the War Retreat/War Repelled Dynamic. In this context, the last two (i.e., the fifth and sixth dynamics) result in the "*War Outcomes I and II, (O1 + O2)*," whereas the first four, which are the "*Input Dynamics*," generate the "*Output Dynamics*" of the fifth and sixth elements.

Second: The ('Non-Chance Space' Reduced War-Hexagon)'s inferred equations. Within the built ('Non-Chance Space' Reduced War-Hexagon), there is a direct relationship between a. Surrounding-War Factors (WFs), b. Player (x)'s War-Hexagon Dynamics {(HDs)_x}, confronting Player (y), and c. War Outcomes I and II, (O₁ + O₂), for players (x and y). This relationship can be denoted as:

$$\{(WFs) + (HDs)_x = (O_1 + O_2)_{(x,y)}\}$$

Based on that, the (change in the surrounding war factors in relation to an actor's War Hexagon dynamics) is the independent variable that causes the (change in this War Hexagon's relevant war outcomes) as a dependent variable, which results in "the initiation of another stage of the war" as the dependent variable's dependent variable after the first dependent variable converted to be an independent one.

Symmetrically, the generated, *new* war stage's outcomes last if, and only if, the surrounding war factors and the sequentially re-playing actor's War Hexagon dynamics remain static, which confirms the invariability of these war factors and War Hexagon dynamics for this actor (i.e., Player (y), P_y). So, theoretically, if we refer to the (Invariability Factors) by (vf) while assuming that this (vf) doubles a positively resulted (Outcome "O") in (Utility "U") for (P_y), then the new war stage initiated by this counter-Player (y) is denoted as:

$$\{(vf) ((WFs) + (HDs)_y) = (vf) ((O_1 + O_2)_{(x,y)} + (O_y)^{+2U})\}$$

Third: The sequentially applied War-Hexagon's counter-modeling outcomes possibilities' equations. That aims at reversing the enemy's war balance and changing existing war factors via other unchangeable, but adjustable, future war factors

According to the above equation, we sought to maintain the (Invariability Factors) within a counter-modeling for Actor I, considering that the last is (P_y). In other words, we assumed a "4 Qs of What If Not" method for Actor I-War Hexagon's first four dynamics. Within this method, if the opponent, Actor II, attempts to reverse any perception-based dynamic of those provided in the (previously introduced) counter-modeling, it will be puzzled and navigated to where the war course must be, whether or not it reveals the information of Actor I's war game here.

Based on that counter-modeling, there were two total outcomes resulted: a. (Actor I's Gradual Victory After a Stretched War), and b. ("Actor I's Irresistibility" Future Total Output), where each outcome's probability is ($p = 1$), conditioning that all surrounding war factors remain static, meaning that no counter-modeling by Actor II must *theoretically* come in sequence in order to allow these outcomes' sustainability. Nevertheless, the provided Actor I's counter-modeling operated on activating all war factors that are, in fact, unchangeable while being adjustable and available to be widened,

whether or not Actor II moves to its counter-modeling. Thence, those two outcomes are achieved under these three possibilities:

The first: The possibility of maintaining the (Invariability Factors “vf”) exactly as they are in this war stage, with Actor I, who is Player (y), counter-modeling the previous applied-War Hexagon of Actor II’s war hypergame. Basically, the probability of this possibility is ($0 < p < 0.5$), where Actor I’s positively-resulted outcome (O) is doubled in utility (U) according to this above-mentioned equation:

$$\{(vf) ((WFs) + (HDs)_y) = (vf) ((O_1 + O_2)_{(x,y)} + (O_y)^{+2U})\}$$

The second: The possibility of adjusting to reducing the (Invariability Factors) by Actor II’s counter-modeling in the next war stage, where ($0.5 < p \leq 1$), given a condition of *{(50%) unchangeable-stability}* kept at first, concerning the war factors within Actor I’s War Hexagon. Then, Actor I’s positively-resulted outcome is decreased in the doubled utility into half till its re-counter-modeling takes place sequentially. It is denoted by:

$$\{(vf)^{1/2} ((WFs) + (HDs)_y) = (vf)^{1/2} ((O_1 + O_2)_{(x,y)} + 1/2 (O_y)^{+2U})\}$$

The third: The possibility of adjusting to widening the (Invariability Factors) into a double by Actor I’s re-counter-modeling in the next war stage of the next war stage, where ($0.5 < p \leq 1$). It is the phase of Actor I’s decisive and final victory militarily and diplomatically that ends the war, where this player obtains a multiplied positively-resulted outcome in the doubled utility, as follows:

$$\{(vf)^2 ((WFs) + (HDs)_y) = (vf)^2 ((O_1 + O_2)_{(x,y)} + 2 (O_y)^{+2U})\}$$

Based on all results mentioned above and relying on the development of (‘Non-Chance Space’ Reduced War-Hexagon) modeling, we proved this study hypothesis: The war outcome is predictable, and the military chance room almost ceases to exist, coinciding with developing a predictability-reduced war hexagon for the war-(hyper)game modeling and counter-modeling of any party to a given conflict.

In the **general conclusion V** of this research, our (Multi-Level Conflict Management Strategic Approach) is discussed by shedding light on its first part of managing the so-called clash of civilizations.

Under the developed Conflict Management Strategic Approach in its first part, we examined a neo-construction of media representation within global, regional, and national media discourse by applying game theory. The main aim was to reveal how politics-based-media representations might be utilized on all levels to settle the clash of civilizations' violent or non-violent (present or future) aspects by using game theory as a methodological tool. So, we depended on news framing theory, Orientalism and media representation, and game theory as the main theoretical approaches. Besides, the clash of civilizations thesis and Realism were complementary theoretical debates that contributed to accomplishing the study's purpose. Seeking the equilibrium, we built a game-theoretic model composed of various strategic preferences for two players in a game on three-level analysis. Using the normal form representation of game theory and that of the extensive form, we analyzed the strategic behavior of the players in a Clash of Civilizations Game (CCG). It can be argued that there are binary equilibria for the (CCG) in normal form; and that a subgame perfect Nash equilibrium can be reached for this game in extensive form. Ultimately, the study addresses how to counter-cultural conflict-generated terrorism; and develops a theoretical approach called "Media-Liberalized Discursive Realism," representing a new convergence between theory and application. The Equilibria of the Clash of Civilizations Game can be explained as follows:

First: This study revealed that the equilibria for the Clash of Civilizations Game (CCG) in the normal form representation of game theory occur in two cases, given that the game is of a simultaneous-move nature, although each player might condition his actions on what the other chose previously in the first play of this game. Here, the equilibria cases are: The first one is an actual case; when Player I (Occident on the global level; Israelis on the regional level; Turks on the national level) moves to the (Cultural Conflict 'CC') strategic preference, and Player II (Orient vs. Occident; Arabs vs. Israelis; Kurds vs. Turks) picks, in a simultaneous move, the (Cultural Conflict 'CC' Irrespective of What Player I Does) choice. The second case is when Payer I prefers the (Cultural Understanding 'CU') strategic alternative to the (CC) one, while Player II chooses the (Cultural Understanding 'CU' Irrespective of What Player I Does) action simultaneously.

We argued, therefore, that using these two pairs of strategies: a- {(CC), (CC Irrespective of What Player I Does)}; and b- {(CU), (CU Irrespective of What Player I Does)} by

Player I and Player II, consecutively, are the equilibria for the (CCG) in the normal form _ where no player may have the incentive to deviate from any of these positions once reached, achieving *stable* outcomes in the game. Accordingly, we proved the validity of this study hypothesis: A game-theoretic model built on the normal form representation of game theory and based on media discourse and politics contributes to settling violent or non-violent (present/future) aspects of the clash of civilizations, coinciding with reaching the equilibrium/solution to this game.

Second: The equilibrium for the Clash of Civilizations Dynamic Game in the extensive form representation of game theory does occur when Player I, in a subgame emerging from the (Threat/Terrorism) node of the whole game, changes his (mixed) strategy. In that case, Player I uses the (Cultural Understanding + Balance of Culture with an Equivalent Representation of the Other 'CU + BCERO') (pure) strategy, and Player II, as a rational actor, moves to the (Cultural Reciprocation 'CR') strategic preference, in a sequential move.

Based on that, we reached that using the $\{(CU + BCERO), (CR)\}$ pair of strategies is the *subgame perfect Nash equilibrium* for the (CCG) in the extensive form. That represents the *best response* for each player when using their strategies simultaneously in this sequential-move game, depending on each other's rationality and obtaining the highest payoffs they can ever receive in the game. Namely, there is no strictly better strategy to be used instead.

Based on the results of the game-theoretic model built, we also proved the validity of the second research hypothesis in this context, which is: A game-theoretic model built on the *extensive form representation* of game theory and based on media discourse and politics contributes to settling violent or non-violent (present/future) aspects of the clash of civilizations, coinciding with reaching the equilibrium/solution to this game.

In the **general conclusion VI** of this research, we outline the modality of managing intra- and inter-state conflicts strategically within our (Multi-Level Conflict Management Strategic Approach)'s confines.

Under this study's developed Conflict Management Strategic Approach in its second part, we built two hypergame-models of intra-and inter-state conflicts, modeling conflicts

while considering the complexity of real-world circumstances. The aim was to apply theories of IR and media fields, composing a merged diplomatic-strategic approach for achieving peace rather than war within and inter-nations. Using the hypergame theory as a theoretical-methodological basis for modeling, we could stand firmly at some equilibria positions, specifying the modality of achieving positive peace as a “win-win” formula nationally, regionally, and globally; thence, strategizing a balance of peace-state of intra-and-inter-state conflicts.

It can be argued that this study’s (Positivity of Peace Hypergame Model)’s fundamental equilibrium is equivalently equal to the dual formula of (Global Hegemony of Peace Versus Realist Hegemony of War’s Inevitability) as proved strategically, applicably through our provided equations. Also, a (Balance of Peace-State Hypergame Model)’s equilibria of intra-state conflicts occur at the (Mini-Maximum Equilibrium) and (Nash Equilibrium of the Hypergame) positions. Simultaneously, this model’s solution points of the inter-state conflicts are achieved parallelly with the occurrence of three Nash equilibria of the hypergame, where the success of a peace process might be limited, normal, or multiplied as given within its relevant equations. Shortly, the two hypergame models’ findings can be explained as the following:

First: The (Positivity of Peace Hypergame Model “PPHGM”) is briefly crystalized. By introducing a Multi-Level Conflict Management Strategic Approach, the (Positivity of Peace Hypergame Model “PPHGM”) and the (Balance of Peace-State Hypergame Model “BPSHM”) came second after the (Clash of Civilizations Game) to manage conflicts within and between nations. The (PPHGM) is a second-level hypergame where the entire hypergame comprises hypergames perceived by the players _ conditioning that one player at least understands that a hypergame is being played and that there is a misperception in the game; so, the deception can find its way within the course of such interactions.

In the (PPHGM), which contained two separate entire-hypergames of different levels of strategic interactions transforming the IR and media theories applied into strategic practice, the equilibria reached are as follows: 1. The (PPHGM)’s (HG)₁’s equilibria: {(Elite-Publics’ Mutually Impact Realm “EP-MIR”); (Fledgling Peace Hegemony “FPH”); (Omnipotent Peace Hegemony “OPH”); and (Peace-Broker Discourse “PBD”)}. 2. The (PPHGM)’s (HG)₂’s equilibria: {(Global Transformation

Initial Realm “GTIR”); (Adoption and Gratification Sphere “AD-G”); and (Peace-Hegemony-Oriented-Mass-Ideological Rehabilitation “MIR”)). 3. The (Positivity of Peace Equilibrium “PPE”): The (PPE) is *equivalent* to the $\{(GHP - (RHW)^{-CU})$ formula} that equals the “Global Hegemony of Peace Versus Realist Hegemony of War’s Inevitability (GHP vs. RHW),” which means eliminating the (RHW) if it was in a minus value of collective utility (CU) as proved in the (PPE) equations mentioned in previous parts.

Therefore, we proved the (Positivity of Peace Hypergame Model)’s central hypothesis: The binary formula of (Global Hegemony of Peace Versus Realist Hegemony of War’s Inevitability) is the equilibrium or solution point of a positivity of peace developed relevant-hypergame model.

Second: The (Balance of Peace-State Hypergame Model “BPSHM”) follows in the same context. The (BPSHM) is a first-level hypergame where the entire hypergame includes games perceived by the players, and that misperception and incomplete or misled understanding may exist about the reality, the game, and other players’ preference vectors.

The (BPSHM) contains an intra-state hypergame “(HG)₁” and another inter-state one “(HG)₂”, emulating conflict management cases in real-world circumstances and reaching these equilibriums: a. The (BPSHM)’s (HG)₁’s equilibria, which are the {(Mini-Maximum Equilibrium) for conflict settlement in a zero-mediation stage; also, the (Stability of Peace State) Nash equilibrium of the hypergame for conflict resolution in a mediatory non-state actors’ stage}. b. Nash equilibria of the (BPSHM)’s (HG)₂, that are: the {(Initial Diplomatic-Political-Social Reconciliation Zone “(IDPSR) Zone”); (Disciplinary Region Creation Zone “DRCZ”); (Stability of Peace Sphere)}, as strategically explained before.

Based on the reached equilibria and the (BPSHM)’s (HG)₁ and (HG)₂’s related strategic-theoretic configurations and equations given previously, we proved the (Balance of Peace State Hypergame Model)’s hypotheses: a. A balance of peace-state within nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties socially, politically, and diplomatically at any phase during and post-intra-state conflicts. b. A

balance of peace-state between nation-states is initially achieved through constructing a reconciliation and mutually utility-maximization-oriented-merged diplomacy bridging major conflicting parties diplomatically, politically, and socially at any phase during and post-inter-state conflicts.



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CURRICULUM VITAE

Name-Surname: Mariam Mohamed Elshahawi Ibrahim Elhadidi ARIBA	
Education Information	
Graduation	
University	Mansoura University – Egypt
Faculty	Faculty of Arts
Department	Media Department – Journalism Branch
Master Degree	
University	Mansoura University – Egypt
Institute Name	Faculty of Arts, Media Department
Major Specialization Branch	Journalism, Public Opinion, and Domestic and Foreign Politics
Program	Master Program
Articles and Publications	
1. Ariba, Mariam. “A Conflict or War Impediment Strategic Approach: Perception Games, Deception Hypergames, and Deterrence in Global Politics.” <i>Global Journal of Human-Social Science F (GJHSS-F)</i> 22, no. 6 (2022): pp. 59-87. https://globaljournals.org/papers/; https://globaljournals.org/early-views-of-gjhss. 2. Ariba, Mariam. “The Positivity of Peace Intra-and Inter-State: Strategizing the Balance of Peace-State in Multi-Level Conflict Management Approach.” <i>International Journal of Politics and Security (IJPS)</i> 4, no. 1 (2022): pp. 1-57. https://dergipark.org.tr/tr/pub/ijps/issue/69504/1020204. 3. Ariba, Mariam. “The Representation of the Other and Balance of Culture: Is There a Relationship? Applying Game Theory to Media Discourse and Politics.” In <i>The Role of Intelligence and State Policies in International Security</i>, edited by Mehmet Emin Erendor, 163-204. The United Kingdom: Cambridge Scholars Publishing, 2021. https://www.cambridgescholars.com/product/978-1-5275-7604-9. 4. Ariba, Mariam. “How Could Positive Peace Prevail in the Middle East? Managing the 2013 Egyptian Intra-State Conflict Based on Merged Theoretical Perspective.” Paper Presented at <i>The International Ilem Summer School 6 (IISS 6): Transnational Islam and Challenges of Being Muslim Umma</i>, Istanbul, Turkey, July 29-August 4, 2019. 5. Ibrahim, Mariam Mohamed. “The University Youth’s Attitudes Concerning the American Foreign Policy Towards Egypt After the 30th of June Revolution Based on Their Dependence on the Egyptian Electronic Journalism.” Paper Presented at <i>The Second International Scientific Conference of the Canadian International College (CIC) for the Technology of Media: The Impact of New Media on the Arab Societies, Studies on the Surrounding Reality and Perspectives for the Future</i>, Cairo, Egypt, May 3-5, 2017. 6. Ibrahim, Mariam Mohamed Elshahawi. “The Role of the Egyptian Electronic Journalism in Formulating the Attitudes of the University Youth Towards the Egyptian-American Relations After the 30th of June Revolution: Field Study.” Master’s Thesis. Mansoura University, Egypt, 2017.	