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## APPLYING REFLEXIVE GAME THEORY TO MEDIATION: NEW STRATEGIES FOR CONFLICT RESOLUTION

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### Abstract

This paper explores the application of Reflexive Game Theory (RGT) in mediation, demonstrating its capacity to enhance the efficacy of mediators in navigating conflicts of varying complexities. It outlines potential strategies for mediators to influence and change the parties' reflexive perceptions within these conflicts. Reflexive Game Theory, pioneered by Vladimir Lefebvre, offers a versatile framework for analyzing decision-making processes. This theory sheds light on the nuanced manner in which individuals and groups form their decisions, taking into account not only their own perspectives but also their perceptions of others' intentions and reactions. The author articulates how the practical implementation of RGT's core principles can markedly augment mediation effectiveness. It spotlights Lefebvre's dual approach to conflict perception, which presents mediators with two pivotal strategies. The first involves the mediator's efforts focused on modifying a participant's self-perception within the. The second direction concentrates on altering a conflicting party's perception of how a party perceives the opposing side's views and stances. This dual strategy not only enriches the understanding of conflict dynamics but also arms mediators with sophisticated tools to foster dialogue and achieve sustainable peace. The successful incorporation of RGT in mediation practices promises to revolutionize approaches to conflict resolution. In the article author introduces the innovative concept of "Reflexive Shift Mediation", emphasizing the mediator's role in altering parties' reflexive perceptions to facilitate resolution. This concept, reflecting a critical advance in mediation practice, requires further exploration and development. By offering a distinctive perspective for viewing and resolving conflicts, RGT paves the way for deeper comprehension and more nuanced mediation interventions.

**Keywords:** mediation, Reflexive Game Theory, RGT, conflict resolution, mediator strategies, conflict complexity, Reflexive Shift Mediation.

### Introduction

Conflicts are a fundamental aspect of human interaction, and thus, humanity has consistently faced the challenge of finding safe and effective ways to resolve disputes throughout history. While direct negotiations often pave the way toward resolution, they can sometimes reach an impasse. Therefore, when parties fail to reach an agreement, there arises a need for more sophisticated methods of resolution, often requiring the involvement of a third party. Mediation serves as one such critical intervention, offering a structured approach to facilitate dialogue and understanding between disputing parties.

In this article, we will explore the conflict resolution possibilities offered by Vladimir Lefebvre's reflexive phenomenology. Unlike traditional approaches to conflict, such as litigation, arbitration, and direct negotiation, his approach reveals that conflicts are just one of the many forms of human interaction. This revelation shows that the same structures can manifest in both conflict and cooperation, suggesting a universal applicability of Reflexive Game Theory (RGT).

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In this context, Lefebvre's insights offer new avenues for understanding and navigating not only conflicts but also cooperative dynamics through mediation. By applying RGT, mediators are equipped with a versatile tool that goes beyond traditional resolution methods, capable of altering perceptions and fostering understanding across a wide range of interactions. This paper aims to explore how the broad applicability of RGT can enhance mediation practices, offering additional tools for facilitating human interactions.

### Materials and Methods

This study is based on a comprehensive review and application of Vladimir Lefebvre's seminal works on Reflexive Game Theory (RGT) and its implications for understanding both conflict and cooperation. Central to our examination is a detailed analysis of Lefebvre's key texts: "Lectures on Reflexive Game Theory" (2019), "Conflicting Structures" (1967), "The Algebra of Conflict", co-authored with G.L. Smolyan (1968), "The Formula of Man: Outlines of Fundamental Psychology" (1991), and "Algebra of Conscience" (2001). These and other publications lay the groundwork for our exploration of RGT's utility in mediation.

Our methodology unfolds in three primary phases:

**Theoretical Analysis:** we begin by dissecting Vladimir Lefebvre's theories, highlighting their potential application in mediation. This phase includes a thorough review of the mentioned works to extract crucial concepts and models relevant to conflict resolution and mediation practices.

**Methodological Justification:** the selection of RGT as the foundation of this study is justified by its unique perspective on decision-making processes in conflicts, emphasizing reflexivity's role in understanding and influencing the perceptions of opposing parties. Its applicability to both conflict and cooperation makes it an excellent framework for investigating the intricate dynamics of mediation.

**Practical Application of Reflexive Game Theory in Mediation:** This section reconsiders the mediator's role through the lens of Reflexive Game Theory, analyzing key areas where a mediator's efforts can be most effective: firstly, in changing a party's perception of its position within the conflict; secondly, in influencing how a party perceives the conflict from the opposing side's viewpoint. By integrating RGT principles, this approach aims to deepen the understanding and modification of the parties' reflexive perceptions. Focusing on these perceptual shifts, the study seeks to uncover the transformative potential of mediation practices, equipping mediators with advanced strategies for navigating the complex psychological landscape of conflict resolution.

This study's methodology is designed to provide a comprehensive understanding of how RGT can enhance mediation practices. By leveraging Lefebvre's theoretical contributions and applying them to mediation, this research aims to illuminate new aspects of conflict resolution dynamics. Our methodological approach is intended to be replicable, enabling other researchers to utilize Reflexive Game Theory in mediation studies or to evaluate its impact on various conflict and cooperation scenarios.

### Results and Discussion

To effectively discuss Reflexive Game Theory as a cornerstone for successful mediation processes, we must first explore Vladimir Lefebvre's research on decision-making and conflict perception. Grasping these concepts is vital for understanding how they can improve mediation practices, shedding light on how mediators can leverage these insights for more effective conflict resolution. Vladimir Lefebvre's career embodies an extraordinary interdisciplinary approach, seamlessly integrating the exact and social sciences. Initially celebrated for his ground-breaking mathematical work in the Soviet Union, his move to the United States marked a significant pivot to conflict resolution and decision-making theory. This transition from mathematical modelling to human behavior and interaction analysis highlights the synergistic potential of applying rigorous analytical techniques to social phenomena studies. Lefebvre's work exemplifies how these fields interconnect, providing deep insights into human decision-making processes and conflict resolution strategies.

Reviewing Lefebvre's extensive contributions reveals that his research breaks conventional disciplinary limits, laying a solid theoretical groundwork for analyzing conflict dynamics. By merging mathematical rigor with an understanding of social dynamics, Lefebvre has paved new paths for investigating decision-making mechanisms and conflict. In 1967, with "Conflicting Structures", Lefebvre began integrating his mathematical insights with psychological theories, suggesting his theories' wider relevance beyond conflict resolution alone. This paved the way for more comprehensive explorations into human cognition and decision-making. His early collaboration with G.L. Smolyan, "The Algebra of Conflict" (1968), demonstrated his mathematical acumen in conflict structure analysis. This seminal work laid

the mathematical foundations for Reflexive Game Theory, highlighting conflict dynamics' predictability and structure. This exploration expanded with "Structure of Awareness: Symbolic Language Human Reflection" (1977), delving into human cognition and decision-making. Lefebvre's exploration into the algebraic models of ethical cognition and risk perception, as seen in his work from the early '80s, solidifies his standing as a pioneer at the intersection of mathematics and psychology (Lefebvre, 1981a; Lefebvre, 1981b). "The Formula of Man: Outlines of Fundamental Psychology" (1991) marked a pivotal turn toward the psychological applications of his theories, reflecting his growing interest in how reflexive processes influence human behavior and ethical decisions. "A Psychological Theory of Bipolarity and Reflexivity" (1993) furthered this dialogue. This transition from mathematician to psychologist was further evidenced in "Algebra of Conscience" (2001), which delved into the ethical dimensions of RGT, exploring moral conflicts and ethical decision-making through reflexive structures. This publication cemented Lefebvre's status as a leading thinker at the mathematics and psychology nexus, offering fresh perspectives on the ethical foundations of human choices. His later works, such as «Research on Bipolarity and Reflexivity» (2006) continued to push the boundaries of RGT's applicability. Lefebvre's "Lectures on Reflexive Game Theory" (2010) compilation represents the culmination of his life's work, providing an extensive overview of RGT's applicability across different fields. His theoretical and practical contributions, spanning from mathematical models to ethical systems, not only lay the groundwork for Reflexive Game Theory but also highlight its applicability in diverse fields, emphasizing its significance in enhancing conflict resolution and mediation practices. This collection not only encapsulates his theoretical developments but also highlights the practical benefits of his research in understanding and addressing human conflicts.

Vladimir Lefebvre's shift from the exact sciences to the social sciences marks a thoughtful and strategic integration of disciplines, highlighting an approach that enhances our comprehension of human cognition and the dynamics of conflict and cooperation (Taran, 1998, p. 162). His exploration into Reflexive Game Theory brings to light nuanced perspectives that, despite not being universally acclaimed for their ground-breaking impact, offer valuable tools for enriching the practices of mediation and negotiation. Lefebvre's contributions span from resolving interpersonal disputes to addressing complex group and political conflicts, providing a theoretical basis that broadens the skill set of mediators, negotiators, and facilitators (Fisher, Ury & Patton, 2011, p. 48). His research opens up new methodologies for improving our navigation through the complexities of human interactions, thereby augmenting the toolkit available to conflict resolution professionals.

In his work "Conflicting Structures", Vladimir Lefebvre notes that the relationships between research subjects are most vividly manifested in conflict. For the parties involved, it becomes vitally necessary to penetrate the adversary's intentions, analyze their "thoughts" and construct a "unique theory". Meanwhile, the "subject" strives to be inconsistent with the theory; it continuously "evades" the constructed theory, rendering it incorrect (Lefebvre, 2015, p. 5). This underscores the significant applicability of Lefebvre's theories and their pivotal relevance to mediation, which is aimed at conflict resolution.

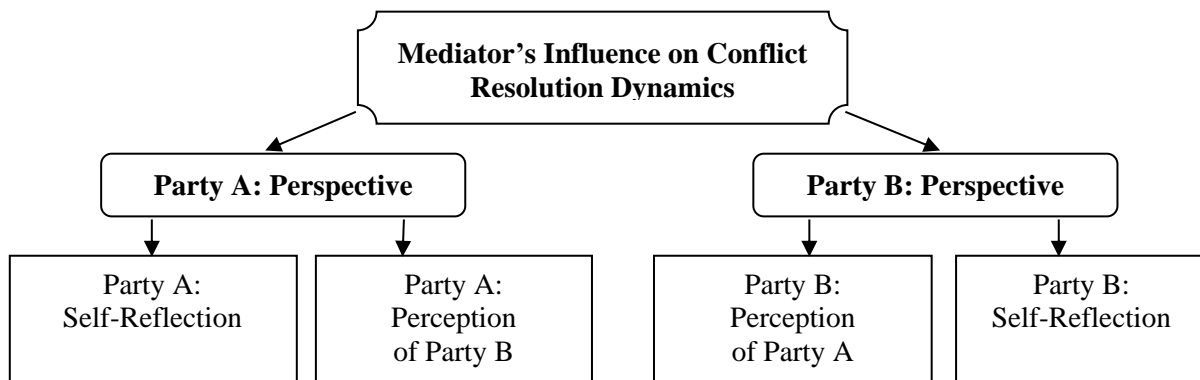
Vladimir Lefebvre's ideas are not confined to interpersonal conflicts but can also serve as a basis for resolving disputes at higher levels. In light of this, Iлона Mishchenko's commentary on the Ukrainian-Russian conflict starkly illustrates the broader crisis in global conflict resolution systems. Her analysis reveals the inadequacy of the existing world order, presumed to be safeguarded by international legal norms, in preventing such conflicts. This situation highlights the urgent need for transformative approaches in both international and national legal systems (Mishchenko, 2022, p. 52). We believe this statement further emphasizes the significance of turning to Vladimir Lefebvre's Reflexive Game Theory (Wojnowski, 2015, p. 16). Its practical application could address the crisis in maintaining global order and conflict resolution, urging legal and conflict resolution frameworks to proactively adapt to the shifting international and national landscapes.

The Vladimir Lefebvre's Reflexive Game Theory articulates that within any group, each pair of individuals (or 'subjects') is either in a relationship of alliance or conflict. This distinction is crucial for understanding the dynamics at play in mediation scenarios, as it frames the interaction between parties within a clear, binary context. Key to this framework is the concept of decision-making (Nye, 2023, p. 92). Lefebvre suggests that a group's actions, available to its subjects, form a structured decision-making landscape. Subjects choose from these actions, navigating constraints of relationships and external pressures (Lefebvre, 2010, p. 33-34). This perspective is essential for mediators, who must understand the complex decision-making fabric of parties in conflict. Moreover, Lefebvre explores the nuances of intention, dividing subjects into goal-oriented and arbitrary based on their approach to forming intentions. This division enriches our

grasp of what drives parties in conflict, offering mediators insights into guiding parties toward reassessing their goals for more positive outcomes.

By applying Reflexive Game Theory, mediators gain a sophisticated understanding of the interplay between relationships, intentions, and choices in conflict resolution. This application not only validates the theoretical robustness of RGT but also its practical utility in enhancing mediation strategies. Thus, RGT equips mediators with a comprehensive toolkit for navigating the intricate dynamics of human conflicts, spotlighting the theory’s enriching contribution to mediation practices. Vladimir Lefebvre views reflection in its traditional philosophical and psychological sense as the ability to assume the position of an “observer”, “researcher” or “controller” towards one’s body, actions, and thoughts (Lefebvre, 2010, p. 33). Expanding this notion, reflection is also seen as the capacity to adopt a researcher’s stance towards another “character”, their actions and thoughts. This broader understanding of reflection allows for the construction of a comprehensive subject of study, highlighting reflexive processes as a distinct phenomenon that defines the specificity of relationships between researcher-objects. This expanded view of reflection can be invaluable in conflict resolution through mediation, offering a framework for understanding and navigating the complex dynamics of interpersonal relations, enabling mediators to facilitate more effective communication and understanding between conflicting parties.

In the realm of Reflexive Game Theory as proposed by Lefebvre, two pivotal focal points emerge for mediators: the reflection of a party on its own position within a conflict and its perception of the opposing party’s reflection on the same issue. These reflexive perceptions are key to understanding and managing the intricate nature of conflicts (Tarasenko, 2010). By modifying either aspect – the party’s self-view or its view of the opponent’s stance – a mediator can significantly influence the conflict’s dynamics. This presents mediators with two main avenues: first, aiding parties in reassessing and possibly changing their own positions; and second, helping them comprehend and perhaps modify how they are perceived by their opponents. This sophisticated grasp of conflict and mediation underlines the critical role of reflexive thinking in dispute resolution. Lefebvre’s theory posits that the success of mediation does not solely depend on the mediator’s capacity to facilitate dialogue or suggest solutions but also on a deep engagement with how parties perceive themselves and each other within the spectrum of conflict.



**Fig. 1 Applying Reflexive Game Theory to Conflict Mediation**

*Developed by the author*

In Fig. 1, “Applying Reflexive Game Theory to Conflict Mediation”, we present a schema that outlines the mediator’s strategic role within the Reflexive Game Theory framework. This illustration shows how mediators can influence the dynamics of conflict resolution by leveraging their understanding of both individual and collective behaviors. By guiding conflicting parties towards a deeper understanding of their own positions and the opposing viewpoints, mediators facilitate enhanced comprehension. This, in turn, effectively advances the conflict resolution process, underscoring the critical importance of their role in navigating the complex landscape of human conflicts.

Within the outlined mediator activity model, it’s crucial to recognize that a mediator’s influence on the parties is not unidirectional. Unlike a traditional subject-object interaction, where the subject acts upon

an object lacking consciousness, in social relations, the scenario transforms. Here, both the mediator and the parties possess consciousness, making their relationship akin to that between two researchers, each studying the other. This dynamic is especially pronounced in conflicts, drawing significant interest for analyzing interactions in complex systems. Understanding an opponent's intentions becomes essential, forcing each participant to delve into the other's mental world and construct a unique theory of their perspective (Sykulski, 2021, p. 69). This ongoing adaptation and avoidance of predictability by the parties highlight the complex, evolving nature of mediation.

In the pursuit of agreement between conflicting parties, a crucial concept introduced by Vladimir Lefebvre is the notion of reflexive invariants or closures (Lefebvre, 2015, p. 11). He describes these as algebraic structures that inhibit a subject's ability to modify their worldview. Such invariants limit the reflexive structure's capacity to adapt or evolve its understanding (Schumann, 2014, p. 88). Within conflict scenarios, parties find themselves ensnared by these reflexive invariants, with liberation only achievable through a shift in their cognitive framework. It's here that the mediator's role becomes pivotal, tasked with instigating this shift by either modifying the cognitive operator or presenting an alternative construct. This process entails challenging either a party's own perspective or its interpretation of the opposing party's stance. In this context, we propose the introduction of a new concept termed "Reflexive Shift Mediation", as a specific variant of transformative mediation.

Grounded in the principles of Reflexive Game Theory, "Reflexive Shift Mediation" is proposed to enrich the transformative potential of mediation. This conceptual approach aims to address and navigate through the reflexive invariants or closures that often entrap parties within counterproductive cycles of thought and interaction. By pinpointing and engaging with these reflexive patterns, the proposed Reflexive Shift Mediation approach aspires to catalyze a more significant and profound evolution in how parties perceive each other and the nature of their conflict.

The essence of this novel approach lies in its strategic focus on ushering parties through a process of reflexive contemplation, designed to challenge and alter their fixed worldviews. The ultimate goal is not only to ameliorate the immediate conflict but also to foster a durable transformation in the cognitive and relational realms, setting the stage for the emergence of more constructive and resilient interactions in the future. The concept of Reflexive Shift Mediation suggests a focus on moving beyond the fixed reflexive patterns that limit each party's perspective, thereby enhancing the depth of engagement with the transformative aspects of mediation.

By exploring the potential benefits and integral components of this approach, we aim to outline how incorporating Reflexive Game Theory into mediation can potentially revolutionize the resolution process, offering fresh perspectives on facilitating meaningful change in conflict dynamics. This perspective invites further exploration and validation within the field, emphasizing the prospective advantages and the need for empirical studies to assess its efficacy and applicability in diverse mediation contexts.

## Conclusions

Our investigation into Vladimir Lefebvre's Reflexive Game Theory within the context of mediation has unveiled its profound applicability across various levels of conflict resolution, beyond merely interpersonal disputes. Initially, we delved into the theoretical analysis, dissecting Lefebvre's contributions to highlight their relevance and potential in enhancing mediation practices. This phase was pivotal in establishing a foundation for RGT's application in conflict resolution. Subsequently, we provided a methodological justification, emphasizing Reflexive Game Theory's unique perspective on decision-making and its critical role in understanding and influencing the perceptions of opposing parties. The theory's broad applicability across conflict and cooperation illuminated its value as a framework for investigating mediation dynamics. Finally, our practical application of RGT in mediation reevaluated the mediator's role, focusing on perceptual shifts and the mediator's strategic influence. This approach not only demonstrated the transformative potential of mediation practices but also equipped mediators with advanced strategies for navigating the complexities of conflict resolution. Through this structured exploration, our study affirms the significant impact of Reflexive Game Theory on mediation, suggesting avenues for future research and application to further enrich the field.

We have illuminated how mediators can leverage RGT to enhance their strategic influence in conflict dynamics, emphasizing the importance of understanding both individual and collective behaviors. This study underscores the non-unidirectional nature of a mediator's influence, advocating for a nuanced approach that views parties as conscious entities engaged in a mutual research dynamic. Our findings advocate

for the incorporation of RGT's principles into mediation practices, offering a methodological innovation that promises to enrich the toolkit of mediators and negotiators alike. This exploration not only affirms the versatility and depth of Lefebvre's theory but also highlights its potential to inform and transform current and future conflict resolution frameworks, making it an indispensable asset in navigating the complexities of human conflicts.

An important part of our article is the introduction of the original concept "Reflexive Shift Mediation". This innovative approach marks a significant contribution to the field of conflict resolution, emphasizing the transformative potential of mediation practices informed by reflexive thinking. However, while promising, this concept necessitates further development and empirical validation. Future research should focus on exploring its applicability across various conflict scenarios, evaluating its effectiveness in real-world settings, and refining its methodologies to fully harness its potential in fostering lasting resolutions.

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**Conflict of Interest.** The author declares that there are no conflicts of interest regarding the publication of this paper. All potential sources of conflict, including any financial, personal, or other relationships that could be perceived as influencing the content of this study, have been thoroughly examined and none were identified.

## References:

- Fisher, R. D., Ury, W. L., Patton, B. (2011). *Getting to Yes: Negotiating Agreement Without Giving In*. Penguin Books.
- Lefebvre, V. (1977). *Structure of Awareness: Symbolic Language Human Reflection*. SAGE Publications Inc.
- Lefebvre, V. (1980). *An Algebraic Model of Ethical Cognition*. Irvine, CA: School of Social Sciences.
- Lefebvre, V. (1981a). *On Two Ethical Systems*. Irvine, CA: School of Social Sciences, University of California.
- Lefebvre, V. (1981b). *Problems of Risk as Mirrored by Soviet Culture*. Irvine, CA: School of Social Sciences, University of California.
- Lefebvre, V. (1993). *A Psychological Theory of Bipolarity and Reflexivity*. Edwin Mellen Press Ltd.
- Lefebvre, V. (2001). *Algebra of Conscience*. Kluwer Academic Publishers.
- Lefebvre, V. (2006). *Research on Bipolarity and Reflexivity*. Edwin Mellen Press Ltd.
- Lefebvre, V. (2010). *Lectures on the Reflexive Games Theory*. Leaf & Oaks Publishers.
- Lefebvre, V. (2014). *What Are Consciousness, Animacy, Mental Activity and the Like?* Leaf & Oaks Publishers.
- Lefebvre, V. (2015). *Conflicting Structures*. Leaf & Oaks Publishers.
- Lefebvre, V., Smolyan, G. (1968). *Algebra konflikta [Algebra of the Conflict]*. Moscow: Knowledge. [in Russian].
- Lefebvre, V., Bix, D. L., Schmidt, S. E. (2006). *Structure-Determined and Emergent Procedures of Decision Making*. [https://web.archive.org/web/20061003042548/http://www.c4ads.org/files/modeling\\_decision\\_making\\_via\\_reflexive\\_theory.ppt](https://web.archive.org/web/20061003042548/http://www.c4ads.org/files/modeling_decision_making_via_reflexive_theory.ppt)
- Mishchenko, I. (2022). Publichno-pryvatna dykhotomiya mytnogo prava: teoretiko-metodologichni ta praktichni aspekty [Public and Private Dichotomy of Customs Law: Theoretical, Methodological and Practical Aspects]. *Evropsky Politicky a Pravni Diskurz [European Political and Legal Discourse]*, 9 (4), 52-59. <https://doi.org/10.46340/eppd.2022.9.4.5> [in Ukrainian].
- Nye, J. S. (2023). *Soft Power and Great-Power Competition*. Springer Singapore.
- Schumann, A. (2014). Probabilities on Streams and Reflexive Games. *Operations Research And Decisions*, 1, 71-96. <https://doi.org/10.5277/ord140105>
- Sykulski, L. (2021). Teoria gier refleksyjnych jako metoda analizy walki informacyjnej [Reflective Game Theory as a Method For Analyzing Information Warfare]. *Przegląd Geopolityczny [Geopolitical Review]*, 37, 58-74. <https://przegląd.org/wp-content/uploads/2021/10/XXXVII-03-Sykulski.pdf> [in Polish].
- Taran, T.A. (1998). Model of Reflexive Behavior in a Conflict Situation. *Journal of Computer and Systems Science Int*, 37 (1), 156-165.
- Tarasenko, S. (2010). The Inverse Task of the Reflexive Game Theory: Theoretical Matters, Practical Applications and Relationship with Other Issues. *Computer Science*. <https://doi.org/10.48550/arXiv.1011.3397>

- Wojnowski, M. (2015). «Zarządzanie Refleksyjne» jako paradygmat rosyjskich operacji informacyjno-psychologicznych w XXI w. [«Reflective Management» as a Paradigm of Russian Information and Psychological Operations in the 21st Century]. *Przegląd bezpieczeństwa wewnętrznego* [Internal Security Review], 12/15, 11-36. <https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-ee571f3e-2942-46ce-9e19-af8e970c6f7a> [in Polish].