

GAME THEORY IN ACTION: EXPLORING PLANETARY CHESS AS A TOOL FOR SOCIAL CHANGE

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ABSTRACT

This paper introduces Planetary Chess, an innovative system aimed at dismantling systemic racism, that includes an educational gaming platform. Still in the conceptual stage, the Planetary Chess game leverages game theory principles to enhance the learning experience, drawing inspiration from strategic decision-making concepts. Operating within the metaverse and integrating NFTs, the game offers an immersive environment where players engage in traditional chess gameplay. Throughout the experience, players encounter questions from planetary chess literature, promoting critical thinking and knowledge acquisition. Planetary Chess features both two-player and single-player modes, with the latter incorporating a play-for-pay concept for users to earn and upgrade chess sets. Additionally, NFT integration allows for the acquisition of unique chess sets with dynamic graphics depicting animated exchanges between pieces. By integrating game theory principles, Planetary Chess presents a unique approach to educational gaming, although it remains in the development stage, potentially impacting learning outcomes and the gaming landscape.

KEYWORDS

Game Theory, Metaverse, NFTs, Educational Gaming, Systemic Racism, Chess, Game Development, Counter Racism

1. INTRODUCTION

Video games have emerged as powerful tools for entertainment, education, and social impact. The integration of educational content into gaming experiences has led to the development of serious games aimed at addressing societal issues and promoting learning outcomes. With the rise of the metaverse and the adoption of non-fungible tokens (NFTs), new possibilities have emerged for enhancing educational gaming experiences and fostering engagement with complex topics such as systemic racism. Furthermore, in the examination and application of Game Theory, Planetary Chess attempts to challenge players in decision making towards goal orientated solutions.

“We hope, however, to obtain a real understanding of the problem of exchange by studying it from an altogether different angle; this is, from the perspective of “a game of strategy.”

-John von Neumann and Oskar Morgenstern- The Theory of Games and Economic Behavior

Dr. Francis Cress Welsing introduced the term "Planetary Chess" in her publication "The Isis Papers." Within the framework of social science, Planetary Chess posits a straightforward premise: systemic racism resembles a vast chess game where non-white populations often find themselves at a disadvantage due to a lack of strategic understanding. Consequently, an

instructional manual titled "Introduction to Planetary Chess" was developed, drawing heavily from the scholarly contributions of Dr. Francis Cress Welsing and Dr. Amos Wilson.

2. PLANETARY CHESS

Planetary Chess is a chess game that operates within the metaverse and leverages NFTs to enhance gameplay and monetization. The game incorporates elements of traditional chess gameplay with educational content sourced from planetary chess literature, which explores themes related to racism, social justice, and systemic oppression. Players engage in both single-player and two-player modes, with an AI opponent named AI Stewie providing adaptive difficulty levels based on player responses to educational questions. In a societal context, Planetary Chess represents a strategic form of resistance known as counter-racism, initially formulated by Mr. Neely Fuller Jr. in his seminal work, "The United Independent Compensatory Code/System/Concept - A Compensatory Counter-Racist Code." Despite Mr. Fuller's authorship dating back to 1957, his framework has often remained obscure and erroneously characterized as "black extremism," especially in contrast to the more contemporary emergence of the concept of Antiracism.

"If you do not understand White Supremacy (Racism) - what it is, and how it works- everything else that you understand will only confuse you." -The United Independent Compensatory Code/System/Concept - A Compensatory Counter-Racist Code.(Fuller)

To grasp the fundamental disparity in strategic approaches, we draw an analogy to a game of chess, wherein the practitioner of antiracism assumes the role of the black pieces confronting systemic racism represented by the white pieces. In this scenario, systemic racism makes the initial move as the aggressor. However, instead of adopting a well-prepared stance for the confrontation, the antiracist player seeks concessions from the systemic racism entity. This approach entails appeals, pleas, and entreaties for the system to relinquish its advantages and act against its inherent interests in securing victory in the game.

"And then there are those whose need for power and impatience to obtain it are greater than others. They turn particularly aggressive, getting their way by intimidating people, being relentless and willing to do almost anything. You must transform yourself into a superior observer of people's unsatisfied aggressive desires, paying extra attention to the chronic aggressors and passive aggressor in our midst. You must recognize the signs- the past patterns of behavior, the obsessive need to control everything in their environment- that indicate the dangerous types. They depend on making you emotional- afraid, angry- and unable to think straight. Do not give them this power. " - The Laws of Human Nature (The Law of Aggression) Green, p. 473

The counter-racist student endeavors to comprehend the rules and intricacies of the game to formulate tactics and strategies aimed at overcoming the adversary.

"By viewing a complex situation as a game, you can translate the intuitive insights of an experienced observer into a quantitative model."
Game Theory (Davis)

The "Introduction to Planetary Chess" outlines the winning formula for the racism game, influenced by the wisdom of Sun Tzu. The principles of "Know thyself" and "Know thy enemy" are emphasized as fundamental to achieving victory. Additionally, the concept of defeating an enemy without resorting to violence, as advocated in the Art of War, serves as the cornerstone for comprehending and ultimately prevailing in the racism game.

3. LEVERAGING NFTS FOR MONETIZATION

One of the key innovations of the Planetary Chess game is its use of NFTs for monetization. Players can earn and upgrade chess sets through gameplay, with rarer sets featuring enhanced graphics and animations depicting fight scenes between chess pieces. This monetization model incentivizes player engagement and provides a pathway for funding the ongoing development of the Planetary Chess initiative. At its core, Planetary Chess operates as a decentralized autonomous organization (DAO), mirroring the philosophical nature of Bitcoin, which unites adherents around a shared ideal. Through the strategic implementation of Blockchain Technology, its objective is to methodically dismantle systemic racism.

“The DAO is the most potentially transformative organization to have come out of the blockchain revolution. It’s also one that in its weirdness is difficult to grasp.....future DAO’s might be operated automatically, run by machines with little or no human input.”
Blockchain: The Next Everything (Williams) p111-112 —

4. TECHNICAL CHALLENGES AND OPPORTUNITIES

While the concept of Planetary Chess holds promise for educational gaming, it also presents technical challenges in game development. Setting up environments, implementing open-source projects, and integrating educational content into gameplay require careful consideration and expertise. A considerable amount of technical expertise will be needed in the full implementation and execution of the application. Development is still a concept in very early stages. With the advancement in AI, some preliminary code has been written through software agents like ChatDev however, the author lacks the computer science background necessary. However, these challenges also present opportunities for innovation and collaboration within the gaming community.

5. IMPACT AND FUTURE DIRECTIONS

The integration of NFTs and the metaverse into educational gaming represents a significant advancement with transformative potential in addressing complex societal issues such as systemic racism. By harnessing technological innovations to facilitate immersive learning experiences and cultivate critical thinking skills, endeavors like Planetary Chess, as one facet of the broader systemic solution, hold promise for driving positive societal change. Future endeavors in research and development should prioritize efforts aimed at enhancing accessibility to educational gaming platforms, fostering inclusivity, and assessing the efficacy of such initiatives on both educational outcomes and societal perceptions. Additionally, the collaboration and engagement of a technically proficient partner or co-founder are sought to enrich the development process and advance this pivotal social initiative.

6. COUNTER ARGUMENTS

While the concept of leveraging technology to address systemic racism with Planetary Chess is intriguing, the paper detailing it, “Leveraging Technology to Dismantle Systemic Racism: Modeling and Simulation with Planetary Chess” falls short in several key areas according to a review published in the International Journal of Chaos, Control, Modelling and Simulation (IJCCMS). The review suggests that the paper lacks clarity in describing the methodology used and calls for clearer descriptions to enhance understanding. Additionally, it recommends the inclusion of comparison data to contextualize the proposed approach within the existing landscape of strategies addressing racial inequality. One significant concern highlighted in the

review is the perceived outdated nature of the proposed method. The reviewer notes that many current strategies for combating racism in chess utilize deep learning techniques, whereas Planetary Chess appears to rely on alternative methodologies. This discrepancy raises questions about the relevance and effectiveness of the proposed approach in comparison to contemporary methods. Furthermore, the review suggests that the paper could benefit from a more thorough examination of related work in the field. While the concept of Planetary Chess presents an innovative approach to addressing systemic racism, the paper would be strengthened by a more comprehensive exploration of existing literature and strategies within the realm of racial equity in gaming. Overall, the review recommends significant revisions to enhance the quality and relevance of the paper but found it acceptable to be published in the journal. It suggests that clarifying the methodology, providing comparison data, and addressing concerns about the currency of the proposed approach are essential steps to improve the paper's overall impact and contribution to the field.

7. ADDRESSING COUNTER ARGUMENTS

In response to the critiques raised by the review from the International Journal of Chaos, Control, Modelling and Simulation (IJCCMS), it should be noted that while the proposed methodology of Planetary Chess may differ from current approaches leveraging deep learning techniques, it represents a novel attempt to combat systemic racism within the gaming domain. The author acknowledges the importance of clarity in describing the methodology and intends to address this concern by providing additional details in future iterations of the paper. Furthermore, the suggestion to include comparison data will be duly considered to contextualize the proposed approach within the broader landscape of strategies addressing racial inequality in gaming. Regarding the perceived outdated nature of the proposed method, it is important to highlight that Planetary Chess offers a unique perspective on leveraging technology to dismantle systemic racism, drawing inspiration from principles of game theory. The author asserts that while alternative methodologies exist, Planetary Chess presents a distinct formula and methodology that warrant further exploration and validation. In conclusion, while the review offers valuable insights for improving the paper, the author remains committed to advancing the discourse on combating systemic racism through technology. The author welcomes collaboration and exchange with other researchers and practitioners in the field who are utilizing game theory in similar endeavors.

8. CONCLUSION

In conclusion, as Dr. Amos Wilson reminds us, the game of life is fraught with challenges, injustices, and systems designed to perpetuate oppression. Yet, it is also a game of strategy, where those armed with knowledge, courage, and determination can carve pathways to liberation and empowerment. Planetary Chess embodies this spirit of strategic resistance, offering a platform for critical thought, collective action, and transformative change. As we navigate the complexities of systemic racism, let us heed the wisdom of our ancestors and the insights of scholars like Dr. Wilson & Dr. Welsing. Let us recognize that our struggles are interconnected, our destinies intertwined. Through initiatives like Planetary Chess, we have the opportunity to rewrite the rules, challenge the status quo, and forge new paths towards equity, justice, and liberation for all. Planetary Chess is not just a game—it is a catalyst for change, a beacon of hope, and a testament to the power of collective action in the fight against systemic oppression. As we embark on this journey together, let us draw strength from our shared humanity, our shared struggles, and our shared vision of a world where justice reigns supreme. Let us move forward with courage, conviction, and solidarity, knowing that together, we can dismantle the systems of oppression that seek to divide us and build a future where all can flourish.

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