Cognitive Marginality: A Framework for Targeted Manipulation

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Abstract: The "Marginal Man" is a foundational concept in social sciences that explores individuals existing between two cultures. This paper extends the concept into the cognitive domain, defining "cognitive marginality" as a state where individuals critically assess conflicting truths. The literature review conducted during this research identifies that there is no consistent framework that connects psychological behaviors to methods of targeted manipulation through information warfare. By exploring psychographic segmentation, cognitive dissonance, and modern information manipulation techniques, this research proposes a framework for identifying when individuals are most susceptible to influence. Applications of this framework could improve information campaigns, enhance detection of manipulation, and bolster defenses against adversarial influence.

Keywords: Cognitive marginality, Cognitive dissonance, Vulnerability, Disinformation, Psychographic segmentation, Social engineering

1. Introduction

The concept of the "Marginal Man" (Park, 1928), which was traditionally applied to cultural and social transitions, has not been fully explored in the cognitive domain where it may hold critical implications for modern information campaigns. The lack of clarity in defining and identifying the exact moment in time when individuals are vulnerable to influence, especially in high-stakes areas such as political messaging, marketing, and propaganda, presents a gap in both theoretical understanding and practical application, which will require further analysis. Despite extensive research into misinformation and the psychological factors influencing belief change, there is limited understanding of the precise moment when an individual occupies a state of cognitive marginality and whether this is the moment when they become most susceptible to new information. This paper does not attempt to evaluate this question of when an individual exists in a temporal state to receive new messages. Rather, it seeks to establish a theoretical framework to understand how cognitive dissonance and marginality intersect with manipulation tactics, which offers perspective for future research in targeted messaging. This paper also seeks to address this gap by extending the definition of the "Marginal Man" into the cognitive domain and exploring how cognitive marginality, which is an extension of the original definition, can be measured to enhance the effectiveness of targeted information campaigns.

2. Research Question

The question driving this research is as follows: Is an individual most susceptible to misinformation at the exact moment they begin to challenge their presuppositions during their transition into becoming a "Marginal Man?" This question requires clarification of the term "Marginal Man," as its definition has evolved significantly since its inception. Through literature review, this paper seeks to understand methods of influence that define effective information campaigns. Studies are presented in the fields of marketing, political messaging, and psychology to propose measurements of effectiveness for identifying whether an individual (or group) has become a marginal man, is ready to receive a new message, and whether this state of cognitive marginality defines the point at which they are most likely to change their beliefs and accept a new idea as truth. The framework presented in this paper attempts to link marginality to effective behavior influence. However, future research will be necessary to confirm this qualitative proposition.

3. Literature Review

Seminal Concepts: The Marginal Man. Robert E. Park's concept of the "Marginal Man" describes individuals caught between two opposing cultures, experiencing identity conflicts and innovation through cultural fusion (Park, 1928). This paper extends these principles into the cognitive domain, examining parallels with modern psychographics, cognitive dissonance, and targeted information strategies.

Psychographic Segmentation and Case Study. Psychographics delve beyond demographics to understand individual motivations, values, and decision-making processes. The Cambridge Analytica scandal demonstrated the power of psychographic segmentation in political manipulation. By exploiting vast user data, the firm

delivered personalized messages that leveraged emotional triggers and cognitive biases. This case highlights the effectiveness of targeted messaging in influencing behavior at scale (Isaak & Hanna, 2018).

Cognitive Dissonance. Leon Festinger's theory of cognitive dissonance (1957) explains the psychological discomfort individuals experience when holding conflicting beliefs.

Life Space. In Principles of Topological Psychology, Kurt Lewin defines "life space" as the collection of internal elements, such as emotions, needs, and desires, along with external factors like social relationships, the physical environment, and societal influences, that collectively shape an individual's behavior at any given moment.

3.1 Seminal Source Material - Marginal Man

Robert E. Park, in his seminal article Human Migration and the Marginal Man (1928), described the marginal man as "one whom fate has condemned to live in two societies and in two, not merely different but antagonistic cultures. His mind is the crucible in which two different and refractory cultures may be said to melt and, either wholly or in part, fuse" (Park, 1928, p. 892). Park's conceptualization applied to demographic minorities, suggesting these individuals commonly experience one of the following factors:

- Identity conflict, where they struggle to find a sense of belonging.
- Merging of ideas, where they adopt elements from both cultures, creating a new cultural identity but
 restarting the marginalization process through the formation of a new minority that clashes against
 the original marginalized group and the two opposing groups.
- Individuals experience culture struggles due to their ambiguous position between cultures and the uncomfortable nature of existing within two separate worlds. (Park, 1928)
- The different cultures fuse, "leading to new cultural forms and innovation."

In 1937, Everett Stonequist expanded upon Park's work to examine how marginal individuals experience alienation and self-identity struggles. Stonequist extended the definition to include not just cultural but also social class transitions, professional identity conflicts, and gender identity challenges and recognized that someone who is marginalized by social class experience the same factors faced by the cultural marginal man. (Stonequist, 1937). The seminal concepts of marginality that were defined by Park and Stonequist were foundational in social and behavioral sciences. However, for our purposes, we need to expand their concepts into a higher dimension as they primarily focus on social and cultural factors in the physical domain rather than the cognitive dimensions that are increasingly relevant today.

Building on these concepts, modern marketing strategies have shifted from focusing solely on demographic and cultural factors to incorporating deeper cognitive dimensions, such as psychographics. This evolution highlights the increasing importance of understanding not just social positioning, but also the psychological factors that influence how individuals respond to targeted messaging. The primary aim of this paper is to analyze cognitive marginality by synthesizing three interrelated concepts: marketing strategies, cognitive biases, and the psychological impact of conflicting information. Through the lens of the "Marginal Man" concept, the paper examines how individuals are influenced and manipulated. Additionally, it explores the personal challenges individuals face when encountering information that contradicts their preexisting beliefs (Cognitive Dissonance). By linking these areas through Cognitive Marginality, the framework raises the question of whether identifying and targeting individuals at moments of cognitive marginalization is the most effective strategy to influence new behaviors. This framework is closely tied to **social engineering** and **information warfare** because both rely on exploiting vulnerabilities in human cognition to influence behavior.

3.2 The Field of Marketing - Psychographics

Modern information strategies exist which are readily used by marketing firms to identify an audience ready to receive a targeted message. Many articles describe methods researchers can use to identify and approach target audiences, highlighting the importance of demographics, cultural factors, and psychographics, which is defined by Oxford English Dictionary as "the study and classification of people according to their attitudes, aspirations, and other psychological criteria, especially in market research" (Oxford University Press, n.d.). These three aspects are used together to identify and target audiences to ensure that a marketing campaign provides messages that are particularly suited to the target market segment.

According to the website Ralion.io, "businesses can enhance their marketing strategies by dividing their customer base into distinct groups based on demographics, psychographics, behavior, and more." This segmentation enables more personalized marketing campaigns that increase engagement and conversion rates. Unlike traditional segmentation methods that focus on demographic factors such as age, gender, and cultural

background, psychographic segmentation delves deeply into individual motivations, preferences, and decision-making processes. According to the website, marketing teams can combine traditional and psychographic segmentation into an individualized customer profile so that individuals can be targeted with messages that will resound with their preferences (Raleon.io, 2024).

In her article "Beyond Demographics," Manreet Khara asserts that traditional demographic segmentation is inadequate for fully predicting target audience behavior. She argues that true personalization can only be achieved by analyzing data such as purchasing history, online interactions, and engagement metrics, which allow marketers to tailor content to the specific needs of their audience. Khara underscores the significance of psychographics in identifying individual attitudes, values, lifestyles, and emotional drivers, which play a critical role in how people respond to messaging campaigns (Khara, 2024).

Traditional marketing strategies primarily revolve around gathering data, directly engaging with customers, and conducting focus groups. These approaches rely heavily on audience interaction, which can present challenges in situations where transparency is not desired, such as in deception campaigns in which the audience should remain unaware of the manipulation. Big data analytics and psychographic segmentation bypass this need for direct engagement. Instead, these techniques focus on exploiting cognitive vulnerabilities by leveraging mental shortcuts known as cognitive biases. These biases, well-documented in psychological literature, simplify decision-making but also make individuals more susceptible to targeted messaging and are discussed in depth in the next two sections of this literature review.

3.3 Cognitive Dissonance

Modern Cognitive dissonance, a concept introduced by Leon Festinger in 1957, is widely used to understand how individuals respond to conflicting information. In this analysis we refer specifically to the psychological discomfort experienced when someone holds contradictory beliefs or encounters information that challenges their existing views. To alleviate this discomfort, individuals often either adjust their beliefs or reject the new information altogether. Even when confronted with objectively true information, they may reinforce their false perceptions to reduce the discomfort caused by cognitive dissonance (Festinger, 1957). In the context of information campaigns, understanding how dissonance affects perception is crucial for effectively targeting and influencing audiences.

Cognitive dissonance can cause individuals to reject factual corrections, especially when these corrections contradict deeply held beliefs. This effect was proposed and explored by Lewandowsky, Cook, and Ecker (2017), who examined the persistence of false beliefs, and the challenges involved in correcting misinformation in the "post-truth" era. Their research demonstrates that participants with strong political ideologies often clung to their original beliefs, even when presented with contradictory evidence. This phenomenon, known as the "backfire effect," suggests that efforts to correct misinformation may lead to further entrenchment of false beliefs rather than changing perspectives (Lewandowsky et al., 2017). These findings highlight the complexities of counteracting misinformation in modern communication. While factual corrections are essential, they often fail to change minds when cognitive dissonance is triggered. The propagandist can use this understanding to craft messages that minimize dissonance by aligning with their audience's existing beliefs, reducing the likelihood of rejection. In practice, this means that messages should be framed in a way that eases psychological discomfort, thereby increasing the chance of adherence and message acceptance.

Dr. David J. Rothkopf first defined the term "infodemic" in 2003 as "a few facts, mixed with fear, speculation, and rumor, amplified and relayed swiftly worldwide by modern information technologies." He argued that the rapid spread of information through the internet contributes to public confusion and complicates effective crisis management (Rothkopf, 2003). While Rothkopf's original definition was not peer-reviewed, it has since been studied extensively, particularly by the World Health Organization (WHO), which has documented similar patterns during the COVID-19 pandemic (WHO, 2020).

Avery et al. (2021), in their study "The Impact of COVID-19 on Health Behaviors and Well-being," examined how misinformation during the pandemic affected health behaviors, finding that it intensified stress and disrupted healthy routines. Participants with access to credible sources of information reported improvements in their eating and physical activity habits, while others struggled without the guidance to maintain their routines. The findings logically concluded that trustworthy information and support from peers to define the perception of credibility played a significant role in improving emotional well-being, thereby aiding people in managing stress and preventing unhealthy responses to the perceived information (Avery et al., 2021). While the authors did not view their results through the lens of factors associated with susceptibility to deception, the effects observed in

this study closely parallel Robert Park's concept of marginality and the psychological theory of cognitive dissonance.

Although significant advances have been made in understanding belief resilience and the persistence of misinformation, a critical gap remains concerning the effects of disinformation on real-world behavior. Andrew Chadwick and James Stanyer (2024) highlight this in their review of empirical studies in information sciences. While the cognitive impacts of deception are well-documented, how these mechanisms translate into physical behaviors is less understood. Specifically, Chadwick and Stayner suggest that behaviors driven by intentional and unintentional deception remain under-researched (Chadwick & Stanyer, 2024). This gap raises the question of whether concepts like marginality, cognitive dissonance, and information overload—effective in marketing for altering perceptions—also drive behavior when used as tools of deception. Current research has yet to fully explore how these methods, in the context of disinformation campaigns, influence physical behavior. However, there is one aspect of disinformation that is consistent throughout the literature. Timing is critical for messaging effectiveness.

Douglas Bryant used statistical analysis to determine measurements of effectiveness for information campaigns and psychological operations. His findings highlight a statistical connection between effectiveness and the pervasiveness of a message. Particularly that information campaigns become more impactful as sample sizes increase and as more data is collected over time. He states: "Over the course of multiple experimental operations, statistical analyses can demonstrate which of these outcomes, if any, reliably change in response to the influence message and which do not" (Bryant, 2024 p. 145). He also indicates that it is difficult to predict the precise timing to introduce a novel message because the overall effects (or actions taken by the receiver) must be measurable and linked to a "specific influence outcome" (Bryant, 2024 p. 145). At the beginning of a messaging campaign, these outcomes are often undefined, which makes measurement of influence difficult. Going back to our understanding of cognitive bias, repeated tests over time could have a backfire effect of alerting the audience to our message, causing them to reject our message regardless of perceived validity. We know that marketing techniques have proven successful by providing targeted messages to specific demographics and to individuals with similar psychographic categorization and that these methods require less engagement with the audience. Therefore, it is imperative to determine whether psychographics can be utilized to identify cognitive marginality and whether they can be used to better predict measurements of effectiveness for an information campaign.

4. Methodology

The hypothesis and topic of this paper were developed through an extensive literature review, analysis, and synthesis of multiple works referenced throughout the article. By systematically examining key studies across fields such as cognitive psychology, marketing, and information science, this paper identifies an inadequate association between the social sciences and the information warfare domain. This gap in the literature may warrant future investigation.

Specifically, the seminal literature discusses marginality in relation to cultural demographics through race, culture, and gender studies. In the context of information warfare and manipulation campaigns, concepts like cognitive dissonance, marginality, and information overload remain underexplored in that they are not linked through a common framework.

Each area presented in this paper has been studied individually within each respective scientific field, but they are not directly linked to information warfare or manipulation. A common framework is necessary to apply proven manipulation strategies used in marketing and psychology to deliberately influence individual behaviors in information warfare. The proposed link between these three areas is the expansion of the marginal man concept into the cognitive domain.

The synthesis of findings from seminal works, such as those by Festinger (1957) on cognitive dissonance, Chadwick and Stanyer (2024) on the effects of deception, and Avery et al. (2021) on misinformation during the COVID-19 pandemic, has revealed not only a deeper understanding of cognitive mechanisms but also pointed to areas where empirical evidence is still lacking. This synthesis supports the idea that there are critical, underresearched points in the transition from cognitive manipulation to actual behavioral changes, particularly within disinformation campaigns, large scale social engineering, and small-scale propaganda through targeted, individualized, influence that is enabled through psychographic segmentation in the cyberspace domain.

5. Results, and Discussion: Connecting Psychographics to Deception

The intersection of these fields suggests that cognitive marginality arises when individuals are most likely to experience cognitive dissonance, as observed in the backfire effect during attempts to correct misinformation (Lewandowsky et al., 2017). By finding ways to identify these characteristics within the psychographic data, marketers and information campaigners can better predict susceptibility to manipulation. Repeated exposure to messages—whether in marketing or misinformation—further entrenches existing beliefs, making it harder to dislodge misinformation. The Cambridge Analytica scandal (Isaak & Hanna, 2018) serves as a powerful example of how psychographics can be used to craft micro-targeted political messages, effectively manipulating voter behavior through personalized content. The combination of cognitive dissonance theory and psychographic segmentation helps us to understand when individuals are most vulnerable to new information. Information campaigns can exploit these cognitive and emotional triggers to influence behavior.

In June of 2024, Commander USINDOPACOM Admiral Samuel Paparo described the "Unmanned Hellscape," a part of Project 33 intended to degrade China's ability to conduct an amphibious landing across the Taiwan Strait. The purpose of this strategy is to place large quantities of unmanned vehicles in the Taiwan Strait during an invasion to degrade the adversary's targeting cycle, increase allied deception efforts, and improve resiliency of high value assets within the weapon's engagement zone. (Paparo, 2024) The effect of these physical systems in the information environment is to disrupt the enemy's targeting cycle by overwhelming their physical collection systems (sensors), increase processing requirements in the cyberspace domain, and re-directing the focus of their collection and decision-making cycle in the cognitive domain towards behaviors that are advantageous for the United States. If the adversary perceives threats to their landing forces within physical domain, this new information may challenge their understanding of the battlespace and force them to temporarily exist in a state of cognitive marginality.

Through personal correspondence, Mr. William Stegner (Professor, Naval Postgraduate School) elaborated on the connection between real world and cognitive behaviors and the cyberspace domain. He indicated that cyberspace will be critical to measure the cognitive domain, enabling the identification of an ideal cognitive state to initiate information-related capabilities across all domains and influence decision-making. To measure the effectiveness of the information received and accepted by the adversary, and to determine whether they exist in a state of cognitive marginality, cyberspace and artificial intelligence analysis will be required. These analyses will observe this state of marginality, which could then be used to predict the precise time to inject disinformation into the links and surfaces of the enemy targeting system (Stegner, 2025, personal communication).

6. Conclusion

This paper introduces the concept of cognitive marginality as a critical framework for understanding and predicting when individuals are most susceptible to influence. By integrating insights from the "Marginal Man," psychographic segmentation, and cognitive dissonance, this framework bridges theoretical foundations with practical applications in modern information campaigns. The findings emphasize the importance of timing and personalization in crafting effective messages while underscoring the ethical challenges of manipulation.

The interaction between cognitive dissonance (Festinger, 1957) and psychographic segmentation (Pennycook & Rand, 2019) offers factors that will assist in predicting when individuals have become cognitively marginal and may be most susceptible to misinformation. Misinformation campaigns, like marketing strategies, can exploit these cognitive and emotional triggers to influence behavior, with cognitive marginality acting as the measurement to forecast effectiveness of a targeted message by identifying the moment when decision makers are most susceptible to influence. By integrating insights from the "Marginal Man," psychographic segmentation, and cognitive dissonance, this framework bridges theoretical foundations with practical applications in modern information campaigns. The findings emphasize the importance of timing and personalization in crafting effective messages while underscoring the ethical challenges of manipulation.

For brevity, this article focuses on the cognitive and psychological aspects of information reception, particularly in relation to misinformation. We do not suggest that cognitive marginality is the sole factor in identifying susceptibility to novel messages; this potential connection requires further scientific evaluation. Several gaps remain, especially in the areas of human-computer interaction (HCI) and deception/force protection within the cyberspace domain. Additionally, this article does not explore the physical domain or practical military applications, instead emphasizing cognitive domain effectiveness and civilian methods to engage audiences. Future research could examine the use of large language models (LLMs) and big data analytics to detect cognitive

marginality and determine if this can improve prediction and recognition of susceptibility to manipulation. These fields offer promising avenues for improving the identification of vulnerable individuals or groups and refining the design of information campaigns targeting military objectives.

The views expressed here are those of the authors and do not necessarily represent the views of the Naval Postgraduate School, the Department of Defense, or the U.S. Government

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