

Psychoanalysis of the Attention Economy in the Era of Big Data: A Topological Interpretation Based on Lacan's Three Orders

Yisheng Lin*, Qi Jiang, Zilan Zhang

Jiaying University, Meizhou 514000, China

**Author to whom correspondence should be addressed.*

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Abstract: In the era of Big Data, the attention economy has emerged as a core logic of capital accumulation, yet behavioral economic explanations fail to penetrate the unconscious drives and desire structures underlying attention investment. This paper adopts Lacan's topological framework of the three orders (the Real, the Symbolic, and the Imaginary) to conduct a psychoanalytic dissection of the attention economy. It argues that Big Data-driven attention mechanisms essentially manipulate desire across these three orders: algorithms, functioning as the “digital big Other,” exploit the Real's traumatic surplus and the deferred structure of desire through infinite scroll and traumatic stimuli; regulate identity production in the Symbolic via visibility laws, social currency, and datafication; and construct narcissistic illusions in the Imaginary through filters, filter bubbles, and illusions of hyperconnection. Ultimately, the paper proposes an ethics of lucid attention, calling for critical algorithmic literacy, confrontation with the Real's lack, dismantling of Imaginary illusions, and reclaiming sovereignty over attention—essential for preserving subjective dignity and human freedom in the digital age.

Keywords: Attention economy; Big data; Lacan's Three Orders; Psychoanalysis; Algorithm

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1. Introduction

In the information-explosive era of Big Data (*Ère du Big Data*), the fundamental contradiction between the finitude of human cognition and the infinity of information supply has become ever more pronounced. Herbert A. Simon was among the first to point out that information abundance leads to attention scarcity, thus giving rise to what is now termed the “attention economy”^[1]. Its core proposition is that attention is the key scarce resource in post-industrial society, and its capture, orchestration, and monetization have become the central logic of new forms of capital accumulation. Behavioral economics reveals the inherently irrational nature of human decision-making; phenomena such as the anchoring effect, loss aversion, and status quo bias are but a few examples of the cognitive biases that have become critical variables in economic models^[2, 3].

However, explaining the mechanisms of the attention economy solely on the behavioral level presents significant limitations. It fails to probe the unconscious drives (*pulsions inconscientes*) and the structure of desire that propel individuals to continuously invest their attention. Lacan's psychoanalytic theory—especially his topological framework of the “three orders”—offers a profound philosophical-psychological perspective for understanding how the attention economy embeds itself within and reshapes the subject's psychic world. According to Lacan, the subject emerges within a topology composed of the “Real” (the unsymbolizable traumatic kernel), the “Symbolic” (the order of language, law, and the “big Other”), and the “Imaginary” (the domain of mirror identification and egoic illusions). Desire (*désir*) perpetually gravitates towards the “*objet petit a*”—a cause of desire that remains forever unattainable^[4]. This paper argues that the attention economy in the era of Big Data is, in essence, an elaborate orchestration of desire manipulation enacted on the stage of Lacan's three orders, with algorithms assuming the role of the “digital big Other” (*l'Autre numérique*), systematically exploiting the subject's unconscious structures to achieve the efficient capture and commodification of attention.

2. The mechanisms of attention capture under the topology of the three orders: A psychoanalytic dissection

2.1. The intrusion of the Real and the algorithm's simulacral manipulation of the “*objet petit a*”

The “Real” is the domain that transcends symbolization (*hors-signifiance*), characterized by the traumatic kernel that resists integration into the symbolic order, manifesting through trauma (*Trauma*), anxiety (*Angoisse*), and the perpetual absence of the “*objet petit a*”. Algorithmic systems in the attention economy deeply understand and systematically harness this very feature of the Real:

Infinite scroll, autoplay, and personalized recommendations (“You may also like”) are designed to replicate the deferred structure of desire (*structure du différé du désir*). Each refresh or click yields a fleeting glimpse of the “*objet petit a*” (*aphanisis*), which immediately vanishes, triggering an even stronger desire to seek “just one more scroll.” This is the ultimate application of intermittent reinforcement, a concept from behavioral economics that locks user behavior through unpredictable “rewards”^[5].

(1) Traumatic stimuli and emotional arousal

Algorithms prioritize content with high emotional arousal, particularly negative, conflictual, catastrophic, or extreme information (“clickbait”). Such content functions as shards of the “Real” (*éclats du Réel*), penetrating the defenses of the everyday symbolic order with raw, unsymbolized impact, forcibly capturing attention^[6]. User interactions generate the “behavioral surplus” that nourishes algorithmic systems^[7].

(2) Data gaze and ontological anxiety

The totalized collection, analysis, and prediction of user data give rise to an algorithmic gaze. This gaze, emanating from an anonymous, systemic “digital big Other” (*l'Autre numérique*), claims to know—and even predict—the deepest, most inexpressible inclinations of the user (search histories, covert browsing). This induces a Lacanian anxiety (*Angoisse*): the subject senses that their innermost Real is being surveilled, defined, and manipulated, yet the source and logic of this gaze remain elusive, resulting in ontological insecurity.

2.2. Symbolic order: Regulation by the law of the Big Other and the production of identity

In Lacanian theory, the symbolic order is governed by the law of the big Other (Lacan, 1957). Within the attention economy, this order encompasses language (*langage*), law (*loi*), and the big Other (*l'Autre*). It is within this

symbolic structure that the subject is named, positioned, and regulated. Desire flows through a chain of signifiers (*chaîne signifiante*), yet remains constrained by the law of the “big Other”^[8]. In the digital context, the symbolic order manifests through platform architectures, algorithmic governance, and embedded social norms—together forming a dominant regulatory structure that shapes identity and subjectivity online.

2.2.1. Algorithm as the embodiment of the Big Other

Platform algorithms (*Algorithm as l'Autre*) personify the big Other in the digital age. They enforce an invisible *Law of Visibility* (*Loi de Visibilité*), determining which content is seen (exposure) and which is silenced (*shadow banning*). They define value standards: likes, shares, comments, and follower counts become the key signifiers for measuring an individual’s social worth and influence^[9]. Users’ desires for recognition, visibility, and influence must conform to algorithmic logic to be expressed and fulfilled. Concepts such as social preferences *and* identity utility from behavioral economics are precisely encoded within these algorithmic incentive structures.

2.2.2. Social currency and the circulation of signifiers

Within the Symbolic, the attention economy produces and circulates social currency (*Monnaie Sociale*)—likes, comments, shares, and follows^[10]. These signifiers flow among users, constructing symbolic capital (*capital symbolique*) and digital identity (*identité numérique*). The accumulation, display, and exchange of these signifiers constitute the user’s core digital labor^[11]. The subject becomes ensnared in an endless pursuit of recognition by the big Other, channeling their attention toward carefully curated self-presentation (curated self) and performative engagement with others’ content^[12].

2.2.3. Datafication of the subject and taxonomic violence

At the heart of the symbolic order lies classification and naming. Algorithms build user profiles (*Profil Utilisateur*) from vast behavioral data, slotting individuals into predetermined taxonomies (“Gen Z,” “urban middle class,” “tech enthusiast”). Subjectivity is reduced through datafication and profiling, with the subject’s complex, fluid inner experiences simplified, fixed, and regulated by the symbolic order’s classificatory logic^[13]. To receive “better” services—actually, more efficient attention capture—users actively or passively participate in constructing these datafied identities, accepting the big Other’s definitions.

2.3. Imaginary order: Narcissistic mirrors and the fortress of the filter bubble

The Imaginary is rooted in the mirror stage (*stade du miroir*), where the subject forms an ego (*moi*) through identifying with a unified, idealized image, founded on misrecognition (*méconnaissance*) and narcissistic relations (*narcissisme*)^[14]. The attention economy is an ideal site for constructing and sustaining the illusions of the Imaginary.

(1) Filters, beautification, and the digital mirror

Social media filters, editing tools, carefully curated angles, and content all construct a beautified, simplified digital self-image. Users project their Ideal Ego (*Idéal du Moi*) onto this image, gaining narcissistic satisfaction (*satisfaction narcissique*). However, this is a profound misrecognition, masking the messy, imperfect, and divided real self (*moi réel*). Maintaining this illusion demands continuous investment of attention—producing persona-consistent content, following and mimicking idealized influencers, and engaging in endless comparison^[15].

(2) The filter bubble as a fortress of the imaginary

Algorithm-driven personalized feeds create filter bubbles (*Bulles de Filtres*)^[16]. These bubbles operate as exclusive, homogenous strongholds within the Imaginary, immersing the user in content that reinforces existing beliefs and interests—"the world as I imagine it to be." They effectively block heterogeneous, disruptive voices from the Symbolic or Real, stunting the subject's exposure to information that could shatter egoic illusions, thereby producing cognitive narrowing, group polarization, and reality distortion.

(3) The illusion of hyperconnection and imaginary communities:

Digital technologies create the illusion of being always-on and globally connected. Users feel part of vast, possibility-laden digital communities. Yet Lacan reminds us that relations in the Imaginary are essentially narcissistic, based on projective identification with the other's image. Much digital interaction remains shallow, symbolic (emojis, brief comments), lacking the linguistic mediation and true recognition of otherness (*altérité*) that deeper Symbolic exchange requires^[17]. This "connectedness" satisfies narcissistic needs (to be seen, acknowledged) but may obscure—or worsen—real loneliness and the poverty of genuine Symbolic dialogue.

3. Toward an ethics of lucid attention

Confronting the alienating predicament of the attention economy demands a lucid ethics of attention (*Éthique de l'attention lucide*) informed by Lacanian insights and behavioral economics:

3.1. Recognize the tricks of the "Big Other" and cognitive biases

- (1) Critical algorithmic literacy: Understand how platforms, algorithms, and business models exploit the three orders to capture attention.
- (2) Metacognitive monitoring: Apply behavioral economics knowledge to detect anchoring effects, loss aversion, confirmation bias, and cultivate cognitive resilience.

3.2. Confront lack and embrace the unknowability of the real

- (1) Accept the eternal absence of the "*objet petit a*": Resist hoping for fulfillment through digital illusions (Imaginary) or data metrics (Symbolic).
- (2) Tolerate uncertainty: View information overload, ambiguity, and the unknown as real dimensions of existence, not noise to be extinguished by endless input. Practice digital fasting to restore a sense of the Real.

3.3. Shatter the imaginary, seek symbolic exchange

- (1) Burst the bubble: Intentionally access non-algorithmic sources, seek dissenting views and heterogeneous voices to break the Imaginary's fortress.
- (2) Deep communication: Strive for Symbolic dialogue that transcends narcissistic image management and shallow symbolic exchange, recognizing and engaging otherness (*altérité*).

3.4. Reclaim sovereignty over attention and temporality

- (1) Deliberate planning: Treat attention as a core resource for shaping self and world; proactively direct it toward self-defined goals and values rather than passively responding to algorithmic demands.
- (2) Restore deep time: Create undisturbed deep time for sustained focus (reading, creating, contemplation,

deep dialogue), rebuilding continuity and depth of experience.

The attention economy of the Big Data era is not merely an issue of information filtering or market efficiency; it is a profound transformation of desire and subjectivity staged within Lacan's topological structure of the "Real, Symbolic, and Imaginary". Algorithmic systems, as the digital big Other, orchestrate the manipulation of the lack and anxiety of the Real, the rules and identity production of the Symbolic, and the illusions and narcissistic satisfactions of the Imaginary, achieving the efficient capture, commodification, and alienation of humanity's most precious cognitive resource—attention. The cognitive biases revealed by behavioral economics become levers for algorithmic exploitation, accelerating the psychic structure's fragmentation and the erosion of reflexivity.

4. Conclusion

This interdisciplinary analysis suggests that addressing this predicament demands more than technical optimization or individual self-discipline; it requires engagement at the level of the psychic structure itself. Constructing a lucid ethics of attention calls for recognizing the ruses of the "big Other" and the human cognitive limitations, courageously confronting the lack and uncertainty of the Real, dismantling the Imaginary's illusory mirrors, seeking genuine Symbolic dialogue, and ultimately reclaiming sovereignty over one's attention and temporal experience. This is not merely a path for maintaining mental health in the digital age but a necessary condition for preserving the subject's dignity (*dignité du sujet*) and the essence of human freedom (*essence de la liberté*). Future research should integrate empirical neuroscience (e.g., studies of attention and reward circuits) and platform ethnography to deepen our understanding of this complex psychic-economic formation.

Disclosure statement

The author declares no conflict of interest.

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