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Large Language Models as Revolutionary Media Objects: Rethinking Relationality, Agency, and Knowledge in the Age of Generative AI

Abstract: The rise of generative AI, like large language models (LLMs), highlights a profound shift in the contemporary media landscape. LLMs produce deep mediatization effects, being part of the emerging generative infrastructure of contemporary digital capitalism. This paper conceptualizes LLMs as revolutionary media objects, drawing on theories from actor-network theory, object-oriented ontology, and critical AI studies to argue that their generative capacities enable new forms of non-human forms of machine semiosis, synthetic subjectivity, and recursive epistemologies. These generative models decenter anthropocentric frameworks and showcase a need for reevaluation of the relationship between humans, objects, and meaning and knowledge production via the phenomena of machine semiosis and digital habitus. Through a systematic literature review and theoretical synthesis, this work introduces concepts such as synthetic relationality, generative ecologies, and agentic co-entanglement to analyze how LLMs reconfigure sociality, power, and epistemology. The paper offers a novel framework for understanding the role of generative AI in reshaping contemporary platform infrastructures, with significant effects toward central concepts like agency, sociality, and knowledge production. This paper contributes to ongoing discussions within media theory and critical studies on AI about the role of LLMs in contemporary society.

Keywords: large language models; revolutionary objects; machine learning; artificial intelligence

Introduction

With the advent of generative artificial intelligence (AI), especially its latest development of large language models (LLMs), profound sociotechnical changes have been brought out in our contemporary societies. Generative AI, exemplified by chatbots like ChatGPT, has restructured the contemporary media landscape significantly, impacting communication (e.g. automating journalism) industries, political production

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of discourse, interpersonal relations, and knowledge production in unprecedented ways (Coeckelbergh, 2025). Within this instantiation of digital capitalism, traditional notions of anthropocentric authorship, epistemology, agency, and autonomy in knowledge production industries have been challenged by the generation of LLMs (Ashruf, 2025). LLMs, such as ChatGPT and others like Grok, DeepSeek, Perplexity, Co-Pilot, and Replika, are not just a new technological phenomenon, but they constitute a sociological shift in our sociotechnical collectivities (Depounti et al., 2022).

As Gunkel and Coeckelbergh (2024) suggest, LLMs can produce novel textual products that are not pre-scripted and which can act as a new form of non-human semiotic creation. This raises fundamental questions about what has been categorized as agency within the social sciences and the humanities more broadly (An, 2025; Moore, 2024). Whilst classical theories of language usage and speech acts rely on the presumption of the existence of a central human subject (Giddens, 1986; Searle, 1969) that coordinates speech and writing and articulates them, LLMs displace human subjectivity from the production of speech acts. By displacing the anthropocentrism inherent in discussions about textual production, chatbots raise critical concerns about our understanding of the relationship between agency and semiotic productions (Cabitza et al., 2025; Coeckelbergh & Gunkel, 2024; Kockelman, 2024).

This paper advances the theory of revolutionary objects (Joque, 2022) by situating LLMs within the mediating infrastructures of digital capitalism. It aims not merely to apply Joque's concept but to develop it through conceptual synthesis, introducing the conceptual triad of synthetic relationality, generative ecologies, and agentic co-entanglement as analytical tools for rethinking agency, knowledge, and sociality in the age of generative AI. Rather than offering a descriptive account of existing frameworks, the paper constructs a conceptual framework that extends Joque's proposition of revolutionary objectification into the domain of generative media, thus, offering a theoretical re-elaboration grounded in the workings of contemporary AI systems. This paper aims to provide a systematic literature review on AI, to develop this said critical literature and provide a conceptual apparatus and framework related to AI systems.

This conceptual framework developed here seeks to demonstrate that LLMs function as mediators of both discursive, cognitive and affective power, intertwining cognitive externalization with opaque algorithmic automation. The paper, thus, contributes to the theoretical development of Joque's object-oriented Marxian perspective toward a more general sociotechnical conception of generative algorithmic media.

Thus, this work tries to answer the following guiding question: How do we conceptualize agency, relationality, and knowledge under the framework of LLMs understood as revolutionary objects? As such, a brief discussion on different strands of object-oriented ontology is necessary, since it will inform the conceptual lens of this paper.

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Literature review

Empirical studies examine AI's impact on trust (Afroogh et al., 2024), education (Wang et al., 2024), and misinformation (Chu-Ke & Dong, 2024), while theoretical work addresses AI's ontology (Floridi, 2025) and societal implications (Moore, 2024). Contemporary critical literature on AI or generally science and technology studies tends to displace anthropocentrism in its conceptualizations of technology (Lindgren, 2023). Current critical work on AI is focusing on transitions from Big Data to "Big AI" or AI as a platform (van der Vlist et al., 2024). Emerging fields such as critical AI studies mark a new development in this line of thought, highlighting, as the prominent scholar Lindberg argued, the assemblage-like nature of most contemporary AI-based digital technologies. By calling them assemblages, Lindgren highlights that AI systems are made up of more than just mere technical parts constituting a technological whole, what Simondon called a "technical object" (Lindberg, 2019). Instead, assemblages are composed of both qualitative and quantitative parts that interact in various ways to form a whole that is not necessarily ontologically stable or static, but ever-changing in tandem with social forces such as culture and capital (Lindgren, 2023). As An argues, this form of conceiving of technology helps to conceptualize "technological systems as components of knowledge-producing networks that include people, organizations, and artifacts" (An, 2025). This multilayered stratification of sociotechnical phenomena underlies both their complexities and entanglement with broader social forces, displacing narrow instrumentalist or positivist views on technologies called "moralizing epistemologies" (An, 2025).

The emergence of generative AI tools has been regarded as a fundamental shift in contemporary societies (Mühlhoff, 2025, pp. 10–11). Mühlhoff argues that the rise of AI brought about a "fundamental socio-technological transformation of the relationship between humans and machines" (Mühlhoff, 2019). This fundamental transformation is an effect of generative artificial systems, which are thought of as autonomous objects capable of effecting change within their environment in significant ways (Floridi, 2025). These aforementioned theoretical insights have not sufficiently addressed the generative and recursive nature of LLMs as infrastructures of social production. Bringing together Hui's (2019) theory of recursion, Kockelman's (2024) model of machine semiosis, and Joque's revolutionary objects, this paper aims to fill that gap. It demonstrates that LLMs are not merely technical hype-related novelties but epistemic *actants* embedded within recursive systems that produce new forms of social relations, knowledge construction, and communicative action. LLMs have been called stochastic parrots or bullshitting machines, but few theoretical investigations have stressed the ecology they bring forth at the level of sociality, knowledge, power, and agency. The theory of revolutionary objects developed here aims at such a conceptual clarification. Thus, firstly, an investigation into object-oriented materialist ontology is necessary to further clarify the conceptual framework of revolutionary objects and their emergent epistemological ecology.

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LLMs as agentic revolutionary objects

Object-oriented ontology has a long conceptual history, with some tracing it to the writing of 20th-century French sociologist Gabriel Tarde (Toews, 2025). Tarde's social ontology of the life of objects focused on the *mutual possession* between subjects and objects (Latour, 2002). Mutual possession means that objects are intertwined within networks of other objects, co-determining each other in various ways (Latour, 2025). Objects, according to Latour, a central figure of the field of object-oriented ontology, are not mere instrumental tools for human manipulation (Latour, 1996). Rather, for Latour, objects are *actants* that co-determine the actions of subjects in various ways. Objects are rich in agency, according to this perspective. Empirically, with the advent of smart internet of things objects and intelligent machines, reminiscent of a form of animism, the agency of objects has once again been highlighted in contemporary critical discussions on technology. Some theorists describe the agency of smart technologies as a form of "technoanimism" (Feher, 2025) suggesting a re-enchantment of the world via autonomous algorithms.

Autonomous algorithms highlight what has been discussed throughout the science and technology studies, namely the power of objects to embody specific social outlooks on the world and their capacity to enact real change in an environment (Airoldi, 2021). Facial recognition systems, used in migration contexts, can autonomously decide which person gets within the borders of a country and which person does not (Chun, 2021), as has been provided by empirical evidence. These systems expose a tension identified throughout the literature. Technologies act as both autonomous systems and as reproducers of specific ideologies or power structures (Kappeler et al., 2023; Kockelman, 2024; Moore, 2024). This tension can be resolved via a synthesis proposed by the theories on revolutionary objects by critical scholar Joque. Joque's line of argumentation shows that revolutionary objects both embody specific social, cultural, and political views and, at the same time, have the affordances to subvert and co-opt such parameters. According to the author, critical literature on AI should seek a "theory of the revolutionary object" or, more specifically, a theory of a "revolutionary objectification, of how it may be possible, in the absence of a single, unified subject, to revolutionize social relations" (Joque, 2022, p. 18).

This attempt at displacing the revolutionization of social relations from subjects to objects has a concrete meaning within this theoretical framework. In short, this theory is looking for a "way to revolutionize what counts" without making recourse to either an imagined totality or a transhistorical subject. By displacing transhistorical subjects toward objects, this theory also displaces anthropomorphism and opens new investigative and theoretical grounds for the analysis of LLMs. What "counts" within this framework is the interrelatedness of objects and subjects forming revolutionary objects as *actants* with specific immanent affordances (Joque, 2022). This is a key development within existing literature on AI (An, 2025; Lindberg, 2019; Lindgren,

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2023). More, this view is corroborated by other theoretical developments in conceptualizing the social effects of AI revolutionary objectification, of how it may be possible, in the absence of a single, unified subject, to revolutionize social relations (Moore, 2024). As Moore points out, however, AI leads to datafied subjectivities that are produced in opaque ways, inaccessible in clear asymmetrical power relations, like in a workplace environment (Moore, 2024). Moore argues for the right to data subject formation of workers (Moore, 2024) within this datafying ecology of AI systems, and this claim clarifies the existing power relations embedded within revolutionary objects like LLMs and other AI objects. According to social theorist Toews, this form of mutual possession is closely related to AI-based contemporary technologies, such as ChatGPT or other LLMs (Toews, 2025). Taken together, these perspectives converge on a crucial theoretical inflection point, namely that LLMs operate not only as social infrastructures but as recursive nodes of knowledge, thereby producing novel epistemic and social ecologies.

ChatGPT as sociotechnical infrastructure

Generative AI systems are not only particular technological systems, but they constitute specific changes within the sociotechnical infrastructure of today's algorithmic society. Whilst interobjective networks operate at both the technical and social level, they also set up conditions of possibility for emerging subjectivities and for ways of restructuring social relations, so critical to the framework of revolutionary objects. The infrastructural turn within the social sciences highlights this emerging preoccupation with the material dimensions of sociotechnical assemblages such as LLMs. These generative algorithms act as infrastructures for social exchange and dynamics.

LLMs are the latest instantiation of digital platforms such as Meta or TikTok, operating in quite a different social, epistemological, and commercial paradigm (Törnberg & Uitermark, 2025). However, as Törnberg and Uitermark (2025) argue, these technologies still operate within the framework of *infrastructuralization*, which means that these systems aim to become part of quotidian social infrastructure, operating in what Srnicek called "rhizomatic forms of integration" (Srnicek, 2017). Infrastructuralization means that digital platforms, according to Törnberg and Uitermark, continually "spread their roots to claim control of infrastructure and extend their data extraction into new areas" (Törnberg & Uitermark, 2025, p. 108). LLMs, such as Replika, do the same infrastructuralization process by engaging in data extractive practices at an affective level, collecting specific psychometric data about the user's well-being and mental states (Bae Brandtzaeg et al., 2022).

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LLMs as rhetorical machines

Whilst LLMs are usually analyzed for their production of content, and the problems derived from such production of content, more is happening beneath the layers of content production. Firstly, however, it is important to mention the issues brought forth by such algorithmic systems for communicational and epistemic exchanges. LLMs have been accused of hallucination, biased results, and the perpetuation of preexisting social injustice and prejudice, such as misogyny, racism, and classism in their output (Chen, 2023). Recent research suggests that there are structural limitations on such algorithmic systems that lead to these results (An, 2025).

Moreover, disinformation has been particularly highlighted within this literature as a threat to democratic societies posed by generative chatbots such as ChatGPT. As Coeckelbergh argued, however, using truth-criterions for such systems may be conceptually misleading, since these systems are "rhetorical machines" not bound by intersubjective constraints of the verification of utterances in accordance with their real-world referent (Coeckelbergh, 2025). Thus, they need to be examined at the level of *effects* they produce, namely performative effects of algorithmic speech-acts (An, 2025). Others, however, viewed such systems as "bullshit machines" (Hicks et al., 2024) operationalizing Harry Frankfurt's concept of bullshiting as discourse with no-truth criterion for the output of systems like ChatGPT.

Reconfiguring knowledge productions

Thus, LLMs are epistemic agents and rhetorical bullshit machines in a Frankfurtian sense. They are epistemic agents because they aid the co-construction of knowledge in dialogue with users, but their factual output is not the key element in their epistemic agency, as Coeckelbergh and Gunkel (2024) argued. Rather, they can persuade and engage in interactive dynamics that co-produce novel output together with users (An, 2025). Moreover, these systems challenge specific knowledge generation and creation practices in concrete ways by privileging a transactional and individualistic model of epistemological exchange. As An notes, these chatbot interfaces "reconfigure our relationship to knowledge" (An, 2025) in individualistic ways. According to An, these systems "privilege linear transmission over the noisy confluence and connections between truth-claims", creating new layers of epistemic-chamber-like effects and hyper-personalized filter bubbles. With chatbots that provide personalized replies to assure further engagement for data extraction and commercial purposes, epistemic isolation has risen to a new level of complexity. As a result, An adds, the "communal spaces where diverse perspectives productively clash may continue to erode", negatively affecting epistemological diversity that was once "fostered through tension" and the communication of diverse experiences and practices (An, 2025). Such a critical

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view is conceptually accurate and is corroborated by empirical findings within the literature on the cognitive effects of the usage of generative AI (Kosmyna et al., 2025).

However, according to Joque's conceptualization of revolutionary objects, generative objects such as AI are not just what the designer implants in it, but they have a multiplicity of affordances that stretch beyond the preprogrammed replies and behavior. According to Joque, objectification is a type of distributed cognition & cognitive externalization, it means "a form of forgetting, but one that is directly productive" (Joque, 2022). This productive form of forgetting is a way of placing some forms of cognitive burden on automated machines to facilitate other types of cognitions for various purposes. However, recent empirical research tends to highlight cognitive decline with heavy LLM usage, problematizing undue optimism regarding the revolutionary potential of some algorithmic systems (Kosmyna et al., 2025). Joque's theoretical point is not to hype generative technologies up, but rather to point toward their immanent affordances that allow for their restructuration under different social and commercial imperatives.

Tactics of retooling generative chatbots

Chatbots could become useful tools for unburdening logistical or other types of tasks, whilst opening space for other forms of creative pursuit. For this to be achieved, however, a serious reconsideration of the contemporary form of socio-economic and technical governance would be necessary, according to Joque. Even though technologies such as ChatGPT, Grok, and Co-Pilot are mostly commercial, they have open spaces where they can be utilized for things not embedded within the design-architecture. This space of technological "opening" allows such tools to be co-opted, re-tooled, and refunctionalized in various productive ways. De Certeau (1984) made the argument that people tend to subvert strategies – macro plans imposed by power – through various techniques of resistance and co-optation. De Certeau mentioned how Parisians subvert the state-defined pedestrian roads, arguing that even walking has a political "rhetoric" to it. Along the lines of this type of theoretical argumentation, Bonini and Trere (2024, pp. 10–11) argue that users co-opt algorithmic systems for their own end goals in similar ways to De Certeau's critical Parisians. For both sociologists, delivery workers retool algorithms embedded in food delivery platforms for personal or collective gain.

When it comes to chatbots, people are increasingly using chatbots for repetitive tasks or in creative ways. Bonini and Trere argue for a form of "algorithmic resistance" that can be expressed *through algorithms* (Bonini & Trere, 2024). This means, according to the two sociologists, that the inbuilt affordances of such systems can be reutilized in various ways, embodying the revolutionary object-like character mentioned earlier. The immanent possibilities of these tools are not reducible to mere

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output production, but LLMs can be reutilized in a multiplicity of ways, be it for creative or educational purposes, entertainment, or for political production (Bonini & Treré, 2024).

This emergent contradictory episteme highlights what Beer called the tensions of "algorithmic thinking" (Beer, 2022) and of computation in general. This endless possibility of refunctionalizing LLMs has been called the "Pandora-box problem" of endless repurposing of AI systems (Kockelman, 2024) in many directions that generate inner tensions within the logic of the system. Whilst An (2025) persuasively argued for the rise of a new form of epistemological individualism when it comes to *using* generative AI, the epistemic shift brought by AI does not necessarily lie in its output production. Rather, the recursive and generative episteme of generative AI ecology marks a de-centering of previous forms of knowing (Beer, 2022; Hui, 2019).

Epistemologies of generative ecologies

Media ecologist Postman famously argued that with every sociotechnical change, there comes a correlative epistemological change (Postman, 2005). With the printing press, you get a specific social formation and institutions; with TV, you get, according to Postman, entertainment. With generative AI, a new media ecology of recursion, data extraction, surveillance, and generativity is possible. LLMs, through infrastructuralization (Törnberg & Uitermark, 2025), create the conditions of possibility for a newly emergent epistemological ecology, reminiscent of early internet-era development; a form based on recursion and generativity. Before theorizing recursion and generativity, however, it is important to specify what is meant by generative AI as epistemic media. According to Fisher, epistemic media such as digital platforms or generative AI allow a new way "to know the world", and they also create new conditions for "knowing the self" (Fisher, 2022). The new ways of accessing the world are thought of in terms of the affordances brought forth by the generative systems and their social positioning, usage, popularity, and so forth. These generative systems work through cybernetic feedback loops between human and machine, that are "mediated by personal data and creating personalized knowledge" which, according to Fisher, is a "striking epistemic novelty".

The epistemic novelty lies in the interactional exchanges between humans and artificial chatbots and the relationality established within this recursive ecology. This observation has led theoreticians like sociologist Beer towards theorizing a recursive society of emerging machine-learning infrastructure. Berry calls this development of synthetic media, such as the infrastructuralization of chatbots, the "Inversion", where AI-generated content leads human socio-political expressivities, and not the other way around (Berry, 2025). This form of computational capitalism, according to Berry, is based on the increasingly machine-learning-based internet operations, which calls

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for a "recursive critique". Recursive critiques are, according to Berry, "methods that can identify and challenge how algorithmic systems reshape the very grounds upon which critique operates", signifying the change in sociotechnical infrastructure that affects even the expression of critical theory from within it (Berry, 2025).

These generative technologies utilize machine-learning systems that use cybernetic feedback loops, also known as recursive algorithms. Machine-learning systems are increasingly being embedded in more of the internet architecture for optimizing the operations of high-end algorithms (Ersozlu et al., 2024). At a functional level, recursion, within an algorithmic system, continues until a base case or halting point is reached, which stops the recursion and allows the results to be combined into a final solution desired by the designer of the system. This theoretization of recursion is, however, too conceptually narrow. According to Hui, recursivity is "not mere mechanical repetition", but it is rather characterized by "the looping movement of coming to itself to determine itself" while every movement is open to "contingency", which determines its "singularity" (Hiu, 2019, p. 7). These forms of recursion form new layers of what Hepp (2020) called "deep mediatization". Through this form of artificial deep mediatization, the social production of knowledge is mediated via LLMs and their probabilistic framings of the world and subjectivity.

Generating knowledge

According to Kockelman, generativity is a dynamic phenomenon of generalization based on limited quantities of data to produce new output (Kockelman, 2024). Dynamic generativity depends on co-production between the human user and the AI chatbot. Co-production emerges as a method of knowledge generation, where a specific instantiation of a chatbot is entangled with the user in the production of a specific output, blurring the lines between human and AI and challenging dominant ontologies of opposition between robot and human (Gunkel, 2023). These co-productive epistemic capacities make LLMs revolutionary media objects in their mediatization effects over knowledge production. These sociotechnical changes lead to new forms of agentic co-entanglement in the production of knowledge forms and content, leading to what some researchers call "thinking with AI", where AI is not seen as an epistemic tool independent of human thought, but rather as a dialogic partner in knowledge construction (Bajohr, 2025). How we know and what we know are changing with the advent of generativeAI.

For example, educational uses of LLMs, an ascending trend within contemporary educational contexts, such as automated tutoring or assessment tools, make visible the recursive and interactive epistemology that underpins knowledge co-production between human and artificial agents. Students use LLMs for finding various answers to various questions, co-generating, through recursive interactions, specific knowledge.

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LLMs chatbots are personalized systems understood as the object that knows, emerging as co-creators and partners of intellectual products and projects. Knowledge production is revealed as interactional and looped, contingentand singular, between human and nonhuman artificial systems (Beer, 2022; Fisher, 2022). LLMs are epistemic agents or knowing machines (MacKenzie, 1998), however, their epistemic trustworthiness and truthfulness are dubious (Henrique & Santos, 2024). LLMs and generative AI systems are, in this context, dynamic relational epistemic media described as, according to Fisher, "media forms and practices, which not only communicate knowledge, but also create knowledge" (Fisher, 2022). This ecology of co-production of knowledge can empirically be observed with the increasing usage of generative tools in scientific production or artistry (Khalifa & Albadawy, 2024). This open space of recursion leads to generative affordances that restructure what is understood by agency and relationality.

Asymmetric agentic co-entanglement: LLMs and machine habitus

Within the framework of actor-network theory, technologies such as LLMs are social actants. According to Airoldi (2021), generative AI systems have a specific machine habitus, producing concrete differences in social environments. Agency is usually thought of as the power or capacity of a human agent to effect "change" in one's environment (Giddens, 1986). Giddens' theory of agency has been criticized for being anthropocentric, not considering the agency expressed by non-humans (Airoldi, 2021). Airoldi argued for a post-anthropocentric machine habitus of AI as a data extractive social actant that commodifies sociality for further opaque machine-learning operations (Airoldi, 2021, p. 7). However, Kockelman points out the derivative and parasitical nature of the agency of LLMs, understood as non-intentionality-based agents (Kockelman, 2024, p. 30). As Cabitza et al. argue, this new framework of agency needs to consider "where humans and machines coexist, characterized by their resemblance, interchangeability, and mutual replaceability in terms of their capacity to act – meaning their ability to affect their surroundings" (Cabitza et al., 2025), theorizing a "cybork" mix between human and AI.

More, according to this framework, the entanglement between human and non-human, humans and machines are interchangeable in their capacity to affect surroundings. Whilst this framework centers algorithmic objects as actants, it overemphasizes their agential capacities by calling them interchangeable with humans, since most generative systems are proprietary systems developed by public or private entities for commercial reasons, and not tools found in "nature" born independent of human action and practices (Moore, 2024). Revolutionary media objects are technical artifacts, born at the intersection between the complexity of the objects themselves, independent of human thought and human practice, in co-entanglement of unburdening of affect and cognition (Joque, 2022).

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Artificial agency

These forms of co-entanglement are embedded within the recursive and generative ecology, where the agential powers of humans looped in interactional exchanges with chatbots are mined for data, highlighting a key power asymmetry within this post-anthropocentric environment. As digital media scholar Romele (2025) argued, this ecosystem, made up of machine-learning-aided chatbots, leads to the development of a digital habitus, co-extensive with Airoldi's machine habitus theory. Asymmetry at the level of power is foundational for this human-robot co-entanglement, since users do not have access to the "inner states" of chatbots such as Replika, but they are, rather, opaque, monitoring, and invasive (Bae Brandtzaeg et al., 2022). This habitus is made of AI bots as actants producing effective change and difference at the level of interactional exchange (Airoldi, 2021; Romele, 2025). Romele goes further to add that this agentic power is not only expressed via the traditional means of conceiving acts of agency. Digital machines, such as LLMs, are habitus machines because "they actively and autonomously produce social classifications and categories" through vectorization processes usually "based on previous, human-made classifications," which end up embedded within the workings of the generative systems (Romele, 2025).

For Romele, the agentic powers of LLMs are expressed via classificatory means, showcasing a further development of the reconceptualization of agency when it comes to non-human algorithmic systems. Romele's insight is further corroborated by the findings of researchers such as Chun, who emphasized the embeddedness of AI tools in predictive policing technologies such as facial and emotional recognition cameras that collect biometric data (Chun, 2021). However, these forms of synthetic agentic co-entanglementled to novel forms of emerging relationalities between human and robot, based on material power asymmetries between the human agent and the commercial chatbot. This synthetic relationality becomes observable in popular commercial products such as AI companionship apps like Replika, or in ChatGPT used for therapy and in cultural phenomena such as "AI-induced psychosis" (Preda, 2025), where intense emotional engagement with recursive chatbots produce adverse psychological mental states and instability at the level of user-subjectivity.

Commercial AI and humans: A commodified relationality

Synthetic relations between humans and AI are, therefore, unequal. Kockelman argues that LLM chatbots are discursive agents, engaged in a certain episteme with specific social and discursive economies and power (Kockelman, 2024, p. 60). According to recent research in human-robot relationships, these forms of relationality can lead to addiction (Yankouskaya et al., 2025), isolation, and alienation (Bae Brandtzaeg et al., 2022). AI-human relations are also commodified; ChatGPT is a commercial

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system. Prompts are data commodities monitored and integrated into the system for optimization (Kappeler et al., 2023). Outputs need to align with the interests of the actors that build them, and for continuous engagement (Kockelman, 2024). The recursive circularity of interaction between humans and AI leads to Carpenter's suggestion of "synthetic socialness", where non-human chatbots are capable of engaging in the production of sociality and social behavior (Carpenter, 2024).

Synthetic relationalities

At the level of human-robot relationalities, theoretician Toews furnishes a theory of mutual possession in object-object-like relations, where both human and robot are objects co-dependent on each other for performative or agential expressions (Toews, 2025). This form of "speculative relationality", as Toews (2025) calls it, tries to highlight the complex nature of objects, where objects are not mere instrumental tools for human manipulation, but they determine human behavior in complex ways. However, this form of synthetic relationality or speculative relationality depends on commodifiable interactions (Chun, 2021; Kappeler et al., 2023; Moore, 2024) between humans and chatbots, further consolidating the social and economic powers of specific companies, states, or other actors producing LLMs. Replika, an increasingly popular machine-learning-based chatbot that acts as a virtual friend, highlights this synthetic relationality, producing a "recursivisation of personhood" by datafying the user's subjectivity for profiling and for personalization (Lungu, 2025).

LLMs are revolutionary media objects in themselves by unburdening cognitive load, but at the level of commercial instantiation, they remain data-extractive and caught in a commodifying logic. As Joque argued, AI systems do not represent their users as they are in their singularities, but rather construe them "as it is profitable" (Joque, 2022, p. 129) in a commercial sense. Replika does not see its human counterpart as they "are" but rather as a datafied object for the circulation and extraction of data (Lungu, 2025).

The co-production between an LLM and a human user of subjectivities via recursive and generative looping of communicational exchange is one such site of revolutionary potential for changing or creating new forms of, for example, selfhood. This ecosystem gives form to a synthetic subjectivity, co-produced (Cabitza et al., 2025) and negotiated within this interobjective network between human and AI model. These revolutionary objects change, relationally, the subjectivities of the human users engaging in conversational exchange with the chatbot, leading to the creation of non-human subjectivities within the recursive models called here "synthetic subjectivities" built parasitically (Kockelman, 2024; Moore, 2024; Toews, 2025) based off the datafied subjectivities of human users training the chatbots. The data subjectivity of the chatbot is formed through interactional exchange with a human being, hence

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constructing itself in relation to data gathered from the user, making this synthetic subjectivity co-produced and co-entangled as a result of relationality between human and chatbot.

In this context, the relationality between human and AI chatbot emerges as a tensed (Beer, 2022) and vexed relationality (Toews, 2025), caught between cognitive and affective unburdening and freeing of the mind on the one hand (Joque, 2022), and commodification and alienation on the other hand (Bae Brandtzaeg et al., 2022). These power asymmetries are sites for negotiation between users and LLMs, where this negotiation ends up producing novel uses of these tools for different end goals than those intended by their designers (Bonini & Treré, 2024), and can lead to novel speculative relationalities and synthetic subjectivities.

Conclusions

This paper has argued that LLMs represent a novel media formation – a revolutionary object – through which agency, relationality, and knowledge are being reconfigured under the conditions of digital capitalism. By extending Joque's concept of the revolutionary object, the analysis reconceptualizes LLMs not as isolated technical artifacts but as recursive infrastructures mediating social, epistemic, and affective exchanges. The conceptual triad developed and employed here – synthetic relationality, agentic co-entanglement, and generative ecologies – captures the changes within contemporary sociotechnical configurations brought forth by the generative AI models.

As revolutionary media objects, LLMs embody a specific dialectical tension. These objects enable new forms of cognitive unburdening, creative collaboration, and epistemic co-production, while simultaneously embedding users within commodified, opaque, and extractive infrastructures. Their revolutionary character thus lies not in an explicit social emancipatory potential alone but in their capacity to transform the conditions of "mediatization" themselves. For example, in educational contexts, LLMs mediate learning and authorship. In workplaces, they automate collaboration and reshape intellectual labor. In intimate contexts, chatbots like Replika vectorize emotional input from the user into data circulation, extraction, and user-profiling. When used as therapists, these models intensify this dialectical tension, underscoring both the liberating potential (free-accessible on demand therapy) and surveillance, datafication, extraction and bullshitting. Taken together, these instances reveal that LLMs materialize the vexed dynamics of generative capitalism itself. LLMs are technologies that *can* simultaneously amplify human creativity and deepen the processes of commodification, becoming the infrastructural sites where knowledge, subjectivity, and social relations are continuously produced, reproduced and contested.

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References

Afroogh, S., Akbari, A., Malone, E., Kargar, M., &Alambeigi, H. (2024). Trust in AI: Progress, challenges, and future directions. *Humanities and Social Sciences Communications*, *11*(1), 1568. https://doi.org/10.1057/s41599-024-04044-8

Airoldi, M. (2021). *Machine Habitus: Toward a Sociology of Algorithms*. John Wiley & Sons.

An, M. (2025). Boundary-making practices: LLMs and an artifactual production of objectivity. *AI & SOCIETY*, *40*, 5967–5979. https://doi.org/10.1007/s00146-025-02409-4

Ashruf, C. (2025). Artificial intelligence through the eyes of Hannah Arendt: Fear, alienation, and empowerment. *AI & SOCIETY*. https://doi.org/10.1007/s00146-025-02435-2

Bae Brandtzaeg, P., Følstad, A., & Skjuve, M. (2022). My AI friend: How users of a social chatbot understand their human–AI friendship. *Human Communication Research*, *48*(3), 404–429. https://academic.oup.com/hcr/article/48/3/404/6572120

Bajohr, H. (2025). *Thinking with AI: Machine Learning the Humanities*. Open Humanites Press. https://www.openhumanitiespress.org/books/titles/thinking-with-ai/

Beer, D. (2022). *The Tensions of Algorithmic Thinking: Automation, Intelligence and the Politics of Knowing*. Policy Press.

Berry, D.M. (2025). Synthetic media and computational capitalism: Towards a critical theory of artificial intelligence. *AI & SOCIETY*, *40*, 5257–5269. https://doi.org/10.1007/s00146-025-02265-2

Bonini, T., & Treré, E. (2024). *Algorithms of Resistance: The Everyday Fight Against Platform Power*. MIT Press.

Cabitza, F., Natali, C., Varanini, F., & Gunkel, D. (2025). Beyond cyborgs: The cybork idea for the de-individuation of (artificial) intelligence and an emergence-oriented design. *AI & SOCIETY*, *40*, 3333–3348. https://doi.org/10.1007/s00146-025-02191-3

Carpenter, J. (2024). *The Naked Android: Synthetic Socialness and the Human Gaze*. Routledge & CRC Press. https://www.routledge.com/The-Naked-Android-Synthetic-Socialness-and-the-Human-Gaze/Carpenter/p/book/9780367772529

Certeau, M. de. (1984). *The Practice of Everyday Life*. University of California Press.

Chen, Z. (2023). Ethics and discrimination in artificial intelligence-enabled recruitment practices. *Humanities and Social Sciences Communications*, *10*(1), 567. https://doi.org/10.1057/s41599-023-02079-x

Chu-Ke, C., & Dong, Y. (2024). Misinformation and literacies in the era of generative artificial intelligence: A brief overview and a call for future research. *Emerging Media*, *2*(1), 70–85. https://doi.org/10.1177/27523543241240285

Chun, W.H.K. (2021). *Discriminating Data: Correlation, Neighborhoods, and the New Politics of Recognition*. MIT Press.

Coeckelbergh, M. (2025). LLMs, truth, and democracy: An overview of risks. *Science and Engineering Ethics*, *31*. https://link.springer.com/article/10.1007/s11948-025-00529-0

Coeckelbergh, M., & Gunkel, D.J. (2024). ChatGPT: Deconstructing the debate and moving it forward. *AI & SOCIETY*, *39*(5), 2221–2231. https://doi.org/10.1007/s00146-023-01710-4

Depounti, I., Saukko, P., & Natale, S. (2022). Ideal technologies, ideal women: AI and gender imaginaries in Redditors' discussions on the Replika bot girlfriend. *Media, Culture & Society*, *45*(4). https://journals.sagepub.com/doi/10.1177/01634437221119021

Ersozlu, Z., Taheri, S., & Koch, I. (2024). A review of machine learning methods used for educational data. *Education and Information Technologies*, *29*(16), 22125–22145. https://doi.org/10.1007/s10639-024-12704-0

Pobrane z czasopisma Mediatizations Studies **http://mediatization.umcs.pl**
Data: 31/10/2026 14:23:20

Feher, K. (2025). *Generative AI, Media, and Society*. Routledge & CRC Press. https://www.routledge.com/Generative-AI-Media-and-Society/Feher/p/book/9781032968735

Fisher, E. (2022). Epistemic media and critical knowledge about the self: Thinking about algorithms with Habermas. *Critical Sociology*, *48*(7–8), 1309–1324. https://doi.org/10.1177/08969205211044193

Floridi, L. (2025). AI as agency without intelligence: On artificial intelligence as a new form of artificial agency and the multiple realisability of agency thesis. *Philosophy & Technology*, *38*(1), 30. https://doi.org/10.1007/s13347-025-00858-9

Giddens, A. (1986). *The Constitution of Society: Outline of the Theory of Structuration*. University of California Press.

Gunkel, D.J. (2023). *Person, Thing, Robot: A Moral and Legal Ontology for the 21st Century and Beyond*. MIT Press.

Henrique, B.M., & Santos, E. (2024). Trust in artificial intelligence: Literature review and main path analysis. *Computers in Human Behavior: Artificial Humans*, *2*(1), 100043. https://doi.org/10.1016/j.chbah.2024.100043

Hepp, A. (2020). *Deep Mediatization*. Routledge.

Hicks, M.T., Humphries, J., & Slater, J. (2024). ChatGPT is bullshit. *Ethics and Information Technology*, *26*(2), 38. https://doi.org/10.1007/s10676-024-09775-5

Hui, Y. (2019). *Recursivity and contingency*. Rowman & Littlefield International.

Joque, J. (2022). *Revolutionary Mathematics: Artificial Intelligence, Statistics and the Logic of Capitalism*. Verso Books.

Kappeler, K., Festic, N., & Latzer, M. (2023). Dataveillance imaginaries and their role in chilling effects online. *International Journal of Human-Computer Studies*, *179*, 103120. https://doi.org/10.1016/j.ijhcs.2023.103120

Khalifa, M., &Albadawy, M. (2024). Using artificial intelligence in academic writing and research: An essential productivity tool. *Computer Methods and Programs in Biomedicine Update*, *5*, 100145. https://doi.org/10.1016/j.cmpbup.2024.100145

Kockelman, P. (2024). *Last Words: Large Language Models and the AI Apocalypse*. Prickly Paradigm Press.

Kosmyna, N., Hauptmann, E., Yuan, Y., Situ, J., Liao, X.-H., Beresnitzky, A., Braunstein, I., & Maes, P. (2025). *Your Brain on ChatGPT: Accumulation of Cognitive Debt when Using an AI Assistant for Essay Writing Task*. https://doi.org/10.48550/arXiv.2506.08872

Latour, B. (1996). On actor-network theory: A few clarifications. *Soziale Welt*, *47*(4), 369–381.

Latour, B. (2002). Gabriel Tarde and the end of the social. In P. Joyce (Ed.), *The Social in Question* (pp. 117–132). Routledge.

Lindberg, S. (2019). Being with technique – technique as being-with: The technological communities of Gilbert Simondon. *Continental Philosophy Review*, *52*(3), 299–310. https://doi.org/10.1007/s11007-019-09466-9

Lindgren, S. (2023). *Critical Theory of AI*. John Wiley & Sons.

Lungu, B.-A. (2025). Machines looping me: Artificial intelligence, recursive selves and the ethics of de-looping. *AI & SOCIETY*. https://doi.org/10.1007/s00146-025-02632-z

MacKenzie, D.A. (1998). *Knowing Machines: Essays on Technical Change*. MIT Press.

Moore, P.V. (2024). Workers' right to the subject: The social relations of data production. *Convergence*, *30*(3), 1076–1098. https://doi.org/10.1177/13548565231199971

Mühlhoff, R. (2019). Human-Aided Artificial Intelligence: Or, How to Run Large Computations in Human Brains? Towards a Media Sociology of Machine Learning. *New Media and Society*, *1*. https://philarchive.org/rec/MHLHAI-2

Mühlhoff, R. (2025). *The Ethics of AI: Power, Critique, Responsibility*. Policy Press.

Pobrane z czasopisma Mediatizations Studies **http://mediatization.umcs.pl**
Data: 31/10/2026 14:23:20

Postman, N. (2005). *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*. Penguin.

Preda, A. (2025). Special report: AI-induced psychosis: A new frontier in mental health. *Psychiatric News*, *60*(10). https://doi.org/10.1176/appi.pn.2025.10.10.5

Romele, A. (2025). *Digital Habitus: A Critique of the Imaginaries of Artificial Intelligence*. Routledge. https://www.routledge.com/Digital-Habitus-A-Critique-of-the-Imaginaries-of-Artificial-Intelligence/Romele/p/book/9781032509679

Searle, J. R. (1969). *Speech Acts: An Essay in the Philosophy of Language*. Cambridge University Press.

Srnicek, N. (2017). *Platform Capitalism*. Polity Press. https://www.google.ro/books/edition/Platform_Capitalism/2HdNDwAAQBAJ?hl=en&gbpv=0

Toews, D. (2025). *How Digital Social Life Matters: New Frames for Social and Cultural Analysis*. Routledge & CRC Press. https://www.routledge.com/How-Digital-Social-Life-Matters-New-Frames-for-Social-and-Cultural-Analysis/Toews/p/book/9781032045306

Törnberg, P., & Uitermark, J. (2025). *Seeing Like a Platform*. Routledge.

van der Vlist, F., Helmond, A., & Ferrari, F. (2024). Big AI: Cloud infrastructure dependence and the industrialisation of artificial intelligence. *Big Data & Society*, *11*(1), 20539517241232630. https://doi.org/10.1177/20539517241232630

Wang, S., Wang, F., Zhu, Z., Wang, J., Tran, T., & Du, Z. (2024). Artificial intelligence in education: A systematic literature review. *Expert Systems with Applications*, *252*, 124167. https://doi.org/10.1016/j.eswa.2024.124167

Yankouskaya, A., Liebherr, M., & Ali, R. (2025). Can ChatGPT be addictive? A call to examine the shift from support to dependence in AI conversational large language models. *Human-Centric Intelligent Systems*, *5*(1), 77–89. https://doi.org/10.1007/s44230-025-00090-w