

Algorithmic Erosion

Artificial Intelligence, Culture, and Social Relations in Contemporary Capitalism

A critical rewriting aligned with A New Social Order in the Age of Consciousness

Abstract

Artificial intelligence and algorithmic governance are becoming embedded in capitalist production and platform ecosystems. They reorganize not only work, but also language, trust, friendship, identity, access to information, and the capacity for collective action. Extensive surveillance, automated evaluation, ranking, and data-driven decisions can reduce human autonomy, intensify job insecurity, and turn social relations into collections of scores and marketable signals.

Yet it is mistaken to attribute all these effects to AI itself. AI is a tool, not a destiny. Its social direction is determined by ownership relations, structures of power, economic objectives, and decision-making institutions. In the framework of A New Social Order in the Age of Consciousness, the central contradiction lies between the social production of data and knowledge, on one side, and the private concentration of ownership and decision-making power, on the other.

Introduction: Technology Within Social Relations

Two simplified stories dominate public debate. The first presents AI as an automatic solution to economic and social crises. The second treats it as an independent and inevitable force that will destroy culture and human relations. Both hide the roles of people, ownership, and power. AI systems are the result of collective labor by researchers, programmers, data workers, content producers, users, and infrastructures often built through public investment and knowledge.

Knowledge concentrated in models emerges from social activity, but control over data, computing power, chips, cloud infrastructure, models, and distribution channels rests with a small number of companies. Society participates in producing knowledge without necessarily participating in defining its purpose, ownership, or use. This gap is the point of departure for the present analysis.

Background: The Commodification of Everyday Life

In the digital economy, human experiences - from movement and shopping to conversation, interests, anxiety, and family relations - are converted into data. A platform is not a neutral intermediary. It designs the architecture of interaction and optimizes it around goals such as increasing time on platform, advertising, service sales, and behavioral prediction.

Market logic thus expands into areas previously grounded more directly in trust, custom, cooperation, and human relationship. The social value of a relationship may conflict with the exchange value of the data produced through it. Everyday life becomes raw material whose economic value, circulation, and secondary uses are largely unknown to the people who generate it.

This analysis does not deny the benefits of digital communication. Platforms can expand access to knowledge, connect distant communities, amplify marginalized voices, and enable new forms of cooperation. The question is under what structure, and under whose authority, these capacities are realized.

Mechanisms of Negative Influence

Surveillance and the Reduction of People to Profiles

Data-driven systems translate behavior into features, probabilities, and scores. A resulting profile may influence visible content, price, employment opportunity, access to credit, or the degree of surveillance. A person is judged not in their human wholeness but through estimates built from past data, data about supposedly similar people, and criteria selected by an organization.

Surveillance becomes more damaging when it is invisible, continuous, and difficult to contest. Awareness of constant observation can make behavior more cautious, reduce experimentation and creativity, and destroy trust between people and institutions. The core asymmetry is that the company knows a great deal about the person while the person knows little about the logic of classification or the ultimate purpose of data collection.

Algorithmic Management and the Individualization of Risk

In platform work, retail, warehousing, transportation, and even professional occupations, algorithms can assign work, measure speed, schedule shifts, score performance, and restrict access to jobs. The ILO describes algorithmic management as the use of computer-programmed procedures to coordinate labor within an organization [1, 2].

When evaluation criteria are unclear and no accountable human decision-maker is available, workers face a power that measures everything while remaining unseen. Variable income, expectations of constant connectivity, and the possibility of automated suspension transfer enterprise risk to the individual. Structural failure is recast as personal underperformance, and coworkers are turned into competitors.

The cultural consequence is not only individual fatigue or anxiety. Algorithmic management also changes collective work identity and the possibility of solidarity. A technology capable of shortening working hours and increasing security can, under a profit-centered structure, become an instrument for intensifying work and discipline.

Reputation, Scoring, and Trust

Ratings can facilitate cooperation among strangers, but they also reduce trust to a calculable and sometimes manipulable number. A few negative reviews, customer bias, or a system error may restrict a person's access to income and community. The demand for constant self-presentation, personal branding, and attention blurs the boundary between human personality and a marketable commodity.

Information Selection and the Engineering of Attention

Recommendation systems decide which content is emphasized, hidden, or repeated. When success is measured by engagement, emotional and divisive material may gain an advantage. These choices affect public language, political agendas, representations of social groups, and people's understanding of shared reality.

Evidence about a direct relationship between algorithms and polarization is not uniform. Large experiments involving Facebook and Instagram feeds show that ranking changes can alter the content consumed and time spent, without necessarily producing major short-term changes in political attitudes [6]. Reviews also emphasize feedback loops between algorithmic mechanisms and existing social forces [7]. These findings require separating correlation from causation; they do not make platform power unimportant.

Documented Effects Across Social Domains

Economic and Labor Relations

Platform control through data, network effects, and centralized rules can push markets toward monopoly or oligopoly. As more users and providers depend on one platform, leaving becomes harder. The company is then more than a service seller: it also sets rules of participation, dispute resolution, access to data, and the conditions of income.

Higher productivity does not automatically create universal welfare. If gains remain privately owned while life security remains tied to full-time employment, the same technology that produces more wealth with fewer workers can intensify unemployment, weaken bargaining power, and increase insecurity. Shorter working hours, universal public services, a social share of digital wealth, and cooperative ownership can give productivity a different direction.

Social and Cultural Relations

The commodification of social infrastructure changes the incentives of interaction. Content is produced to be seen, and relationships are sustained to remain visible within a system. Followers, likes, and reposts can displace the quality of relationships and slower forms of dialogue. The pressure for constant presence, instant response, and social comparison reduces time for reflection and direct contact.

At the same time, online communities have enabled support and organization for migrants, minorities, dispersed groups, and social movements. In-group reinforcement can create solidarity, but it can also strengthen unverified beliefs, closed group language, and the exclusion of dissent. Outcomes depend on system design, social structure, and opportunities for free and safe encounters with other viewpoints.

Governance, Legitimacy, and Democracy

Large platforms exercise quasi-governmental power: they determine what conduct is permitted, who is visible, how disputes are resolved, and which data are used for which purposes. These decisions are often hidden under the language of technical optimization or terms of service and remain far from democratic accountability.

Control over information flows shapes the production and contestation of knowledge. A platform can bring new voices into the public sphere while also shaping discussion through opaque ranking, targeted advertising, and unequal enforcement. The problem is not only whether a statement is true, but also the architecture of visibility and the formation of shared reality.

False confirmation is especially important: multiple outlets may repeat a claim derived from a single source, creating the appearance of independent verification. Recommendation and reposting systems

can accelerate this effect. Access to the origin of a claim, transparency in chains of citation, and media literacy are essential protections.

Cultural Diversity and Human Relationships

Generative and recommendation models do more than distribute culture; they influence translation, representation, summarization, and judgments of relevance. Uneven datasets can marginalize low-resource languages, minority experiences, and narratives outside dominant currents. Here bias is not merely a statistical error. It reflects historical inequality in data and present inequality in the power to select standards.

Algorithmic standardization can reduce diversity when systems learn from the most frequent patterns and cultural success is measured through market attention. Public access to tools, support for low-resource languages and cultures, and community participation in design can release AI's creative capacity instead of narrowing it.

Algorithmic mediation can also reshape the formation, maintenance, and ending of relationships. Personalization may be useful, but it can trap people in prior classifications and limit opportunities to change preferences or encounter something new. Human autonomy includes the right to change and the right to remain unpredictable. Commercial companions and assistants may support education, accessibility, and reduced loneliness; if their goal is dependency and data extraction, emotional vulnerability becomes a source of profit. Protection of inner privacy and a ban on covert manipulation should be treated as digital rights.

Evidence, Limits, and Context

Research on the social effects of AI faces serious difficulties. Self-reported measures can suffer from sample bias and subjective interpretation; platform data are often unavailable to independent researchers; short-term experiments may miss cumulative, cross-platform effects; and results from one country or workplace may not generalize to all societies.

Three levels should therefore be distinguished: direct evidence about a specific mechanism; correlation between system use and an outcome; and structural interpretation of the general direction of change. Critical analysis is more credible when it does not collapse these levels and when it states the limits of knowledge clearly.

AI's effects are not uniform. Occupation, class, gender, language, geography, union strength, privacy law, access to human review, and ownership structure can change the outcome. Digital literacy and individual resilience matter, but they must not replace institutional responsibility. User training cannot eliminate monopoly, imposed contracts, or the absence of a right to appeal.

Policy and Harm-Reduction Strategies

The first level is immediate protection: limit disproportionate surveillance; prohibit the use of sensitive data for unrelated decisions; disclose evaluation criteria; guarantee understandable explanations; provide access to an accountable human decision-maker; record and report errors; and compensate for harm. NIST's AI Risk Management Framework offers a voluntary method for integrating trustworthiness into the design, development, use, and evaluation of AI systems [5].

The EU Platform Work Directive 2024/2831 provides a legal example combining data protection, transparency, human oversight, worker-representative involvement, and the right to challenge automated decisions [3]. Its importance lies in recognizing workers as rights-bearing people capable of contestation, not merely as points in an optimization system.

The second level is collective power. Workers and users should participate in the assessment and design of high-impact systems before deployment. Unions, workplace councils, civil organizations, and representatives of vulnerable communities need access to relevant information, the right to negotiate criteria, and the ability to demand independent audits. ILO case studies likewise examine the roles of social dialogue and collective representation in shaping workplace AI [8].

The third level concerns ownership: data portability and interoperability, public infrastructure, platform cooperatives, data trusts, open models for public purposes, and a social share of digital wealth. The fourth level is redefining productivity. Technology's benefits should not appear only on corporate balance sheets. Reduced working hours without reduced income, universal public services, social security, and investment in education and culture can convert productivity into free time, creativity, and collective well-being.

Ethical and Legal Questions

Transparency is necessary but not sufficient. A system may be transparent and still enforce an unjust relationship. AI ethics must ask not only how a decision was made, but whether the decision is legitimate, how power is distributed, whether refusal is possible, and whether affected people can participate in changing the rules.

Epistemic rights include the right to know, the right not to be known, access to the origins of information, the right to correct a profile, and freedom from covert manipulation. Privacy is not merely protection of an isolated data point; it is protection of the inner space needed to think, experiment, and change without continuous surveillance.

Traditional legal categories of work also fit platform realities poorly. A formal declaration of self-employment must not disguise platform control or eliminate labor protections. Legal status should be based on real power relations, economic dependence, and the degree of control.

Counterarguments and Critical Cautions

Broad analyses can overlook differences among systems and contexts. A medical diagnostic tool, recommendation system, shift-scheduling application, and generative model do not present identical benefits or risks. Research also shows that people participate in wider media ecosystems and that changing an algorithm alone does not always change political attitudes. Claims of certain causation should be avoided, but methodological caution should not become a denial of platform power over attention and access to information.

Platforms have also created economic and communicative opportunities, especially for underserved regions and dispersed groups. Critical inquiry does not deny opportunity; it examines how opportunity, risk, profit, and decision-making power are distributed.

Metaphors such as 'the domination of the algorithm' can mistakenly give technology an independent will. The principal actors must remain visible: the organizations and institutions that design, own, and deploy systems. An algorithm is a mechanism through which power is exercised, not a power

independent of social relations.

Connection to A New Social Order in the Age of Consciousness

The book treats AI as a leading expression of the socialization of knowledge production. Millions of people directly and indirectly produce data, language, images, experience, and feedback, yet their right to participate in decisions about this collective product is not proportional to their contribution. The desired transition is therefore from participation in producing knowledge to participation in power.

Such participation is impossible without freedom. Freedom of expression, media, research, association, unionization, strike, and assembly are instruments for correcting error and restraining power. Data-driven planning without these freedoms can make domination more precise. AI should assist analysis, transparency, and decision-making; it should not become a source of political legitimacy or a substitute for democratic judgment.

The conscious and responsible citizen is not a passive consumer. Citizens participate in setting rules, evaluating consequences, and revising decisions. Digital literacy is essential, but it becomes effective only when joined to real rights and participatory institutions.

A conscious transition is a possibility, not a guarantee. The growth of productive forces does not automatically create a more just order. The same computational capacity can identify social needs or enable more precise surveillance and manipulation. The direction of change depends on consciousness, organization, ownership, and institutions of power.

Conclusion

Under platform capitalism, AI can normalize surveillance, individualize risk, make culture calculable, and concentrate epistemic power. These outcomes are not the inevitable destiny of technology. If freedom, justice, transparency, accountability, and participation in power guide institutional design, the same technology can reduce compulsory labor, expand shared knowledge, strengthen creativity, and increase collective capacity.

The decisive question is not what AI will do to humanity, but how society - through its structures of ownership and institutions of decision-making - will direct this capacity and for whose benefit. Socialized knowledge must be accompanied by social participation in power. Otherwise society will produce the data and knowledge while others decide how people will live.

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