Algorithmacy and the Co-optation of the Subject

Conference Remarks — V18 (Complete)

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I. The Naming Problem

I want to start with a question that is usually simple, but has recently become very complicated: **How do you get a job?**

In an **oral culture**, you got a job because someone in your community vouched for you. Hiring was face-to-face, reputation-based, and transparent to both parties.

In a **literate culture**, you got a job because you had a credential. You encoded your experience into a resume, a standardized written document a stranger could evaluate at a distance. The technology changed, but the structure remained the same: two parties, one legible artifact.

Today, you submit a digital file to a portal. An **Applicant Tracking System** parses that file, extracts structured data, scores it against job requirements using keyword matching and pattern recognition, ranks you against thousands of other applicants, and presents a filtered representation to a hiring manager who never sees what you wrote. If the algorithm does not surface you, you do not exist as a candidate.

Everyone in the relevant literatures agrees this represents a significant shift. They disagree on what to call it.

- The **literacy scholars** call it a knowledge gap and propose teaching people how algorithms work (Dogruel et al., 2022).
- The **governance scholars** call it algocracy: rule by algorithm (Aneesh, 2009).
- The **critical theorists** call it algorithmic governmentality: power that bypasses the subject entirely (Rouvroy & Berns, 2013).

Each captures something real. None names the **cognitive competency** required to navigate the process.

I want to place that competency in a historical lineage. We had **oracy**: the competency of navigating oral coordination. We had **literacy**: the competency of navigating written coordination. I am proposing a third term: **algorithmacy**, the competency of navigating algorithmic coordination.

Andrew Wilkinson coined "oracy" in 1965 as a deliberate parallel to literacy and numeracy (Wilkinson, 1965). The **-acy** suffix names a competency, not a condition.

A note on what I mean by **cognition**. I am not using the term loosely. I mean the characteristic operations of thought: how people categorize, reason, remember, plan, and solve problems. Ong's central argument was that communication technologies do not merely transmit information. They restructure the operations of consciousness itself. Writing did not give oral cultures a new tool. It reorganized how literate people thought: enabling abstraction, subordination, analytic classification, and reasoning from general principles rather than from situational experience (Ong, 1982). Havelock showed that the Greek alphabet did not merely record speech. It made possible a new relationship between the knower and the known, enabling the separation of the thinker from the thought that philosophical reasoning requires (Havelock, 1963). Annette Vee extended this argument to computational environments, demonstrating that coding literacy restructures how people decompose problems, represent processes, and reason about systems, not as a metaphor for writing but as a distinct cognitive reorganization (Vee, 2017).

My argument is that algorithmacy develops through a mechanism structurally distinct from how oracy or literacy developed. That mechanism is **co-optation**.

II. The Structural Shift: From Dyads to Triads

Why do we need a new concept? Because every framework we have for understanding communication, and every literacy we have proposed to deal with technology, was built for **dyadic** interaction. The phenomenon we are trying to explain is **triadic**.

Consider what the hiring example actually reveals about communication structure.

Oral hiring was a dyad. Both parties had direct access to each other. The candidate spoke; the evaluator listened. The communication technology, speech, was transparent to both. The competency required was oracy: the ability to present credibly in person, to read character, to navigate reputation systems embedded in community relations.

Literate hiring remained a dyad. The candidate wrote a resume; the manager read it. The parties were now separated in time and space, but the mediating technology, the written document, was **legible to both sides**. The resume did not alter its content between writing and reading. The competency required was literacy: the ability to encode experience into standardized written categories.

Algorithmic hiring is a triad. The ATS occupies a **mediating position** between candidate and manager, and it does not transmit the resume. It transforms it. It parses unstructured text into structured data, applies scoring functions the candidate cannot see, ranks candidates relative to an applicant pool the manager never observes in full, and outputs a filtered representation that may bear little resemblance to what the candidate submitted. Neither party controls the intermediary. Neither party fully observes its operations.

Georg Simmel established that the transition from dyad to triad is qualitatively transformative (Simmel, 1950). His argument was precise: in a dyad, each party's withdrawal destroys the whole. The dyad depends on the irreplaceable participation of both. A triad introduces a fundamentally different social geometry. The third party can mediate between the other two, can form coalitions

with one against the other, and can pursue interests that diverge from both. Simmel identified three structural roles the third can occupy: the mediator who facilitates, the *tertius gaudens* who profits from the conflict of the other two, and the *divide et impera* who actively foments conflict to maintain control. The ATS occupies a position Simmel did not anticipate: an intermediary that performs all three roles simultaneously and opaquely.

This is the structural shift that makes existing literacy frameworks inadequate.

Digital literacy addresses the candidate's ability to use a computer to produce a document. That is a dyadic skill. It does not address what happens to the document inside the triad.

Algorithmic literacy addresses awareness that the intermediary exists and knowledge of how it operates (Dogruel et al., 2022). But Chung recently found that users with *higher* algorithmic knowledge were *less* likely to correct misinformation (Chung, 2025). Knowledge of the intermediary does not predict the ability to coordinate through it.

AI literacy addresses technical understanding of natural language processing, machine learning, and pattern recognition. But understanding how an ATS parser works at a technical level does not tell the candidate how formatting choices affect parsing outcomes, how keyword placement interacts with scoring functions, or how application timing affects position in the ranked queue.

Each framework assumes a subject who stands **outside** the system and learns about it. Algorithmacy names what develops when you are **inside** the triad, navigating an intermediary whose behavior changes in response to your behavior.

III. Co-optation as Mechanism

The concept of co-optation comes from a specific place in organizational theory, and it addresses a specific problem that the hiring triad makes visible: **how do people develop the competency to coordinate through a system that did not exist before they entered it?**

Coordination theory has recognized three mechanisms for over half a century. **Hierarchies** coordinate through command. **Markets** coordinate through contract. **Networks** coordinate through collaboration.

Each mechanism rests on a shared assumption: **competence precedes participation**. You enter a hierarchy already knowing how to follow directives. You enter a market already knowing how to evaluate a price. You enter a network already possessing the social capital that makes you a viable partner.

David Stark and Pieter Vanden Broeck identified a **fourth coordination mechanism** that violates this assumption. Analyzing how platforms organize economic activity, they argued that platforms represent a structurally distinct form: "Whereas actors in hierarchies command, in markets they contract, and in networks collaborate, on platforms they are co-opted" (Stark & Vanden Broeck, 2024). Steven Vallas and Juliet Schor reached the same conclusion through independent analysis (Vallas & Schor, 2020).

Philip Selznick introduced co-optation in 1949 to describe how the Tennessee Valley Authority enrolled local actors into federal coordination structures (Selznick, 1949). Stark and Vanden Broeck extend this to platforms: platforms enroll autonomous actors into algorithmically mediated coordination where **participation itself produces the competency required to participate**.

That is the structural break. And the hiring triad illustrates it precisely.

Nobody trains job seekers in ATS navigation. No institution offers a curriculum in algorithmic resume optimization. The competency develops through the coordination practice itself. A candidate learns that multi-column formatting disrupts parser extraction, that keyword density in the first third of the document disproportionately affects scoring, that applications submitted within the first 48 hours of a posting occupy a different position in the ranking queue.

Crucially, the system the candidate is learning to navigate is simultaneously learning from the candidate. Every application feeds data back into the ATS, refining the scoring models for the next round of candidates. This recursive loop is the structural signature of co-optation.

This maps onto Ong's historical sequence:

- **Oracy** developed through **immersion**. Nobody designed oral culture.
- **Literacy** developed through **instruction**. Institutions structured the acquisition. But the book did not adapt to you.
- **Algorithmacy** develops through **co-optation**. The intermediary is active, adaptive, and optimizing for objectives that are not the participant's.

The empirical literature confirms that co-optation produces genuine cognitive competency, not mere behavioral compliance. Cameron's ethnography of ridehailing drivers documents sophisticated strategic reasoning (Cameron, 2022). Shapiro identifies **"qualculation,"** a reasoning style blending intuition with strategic calculation (Shapiro, 2018). DeVito documents continuous cycles of sense-making, theory formation, testing, and revision (DeVito, 2021).

If oracy produced its signature cognitive operations, algorithmacy is producing its own: **rapid folk-theorizing** of opaque system behavior, **qualculation** as affective-strategic reasoning, **cross-platform strategy transfer**, and **anticipatory self-quantification**.

IV. Against the Alternatives

The claim is on the table. Five existing frameworks have tried to name what I am describing. Each captures something real. Each is insufficient.

1. Against Algorithmic Literacy. The most common alternative. Dogruel, Masur, and Joeckel define it as awareness of algorithms plus knowledge about how they work (Dogruel et al., 2022). The Chung finding is the decisive counterevidence: higher algorithmic knowledge predicted *less* effective navigation, not more (Chung, 2025).

2. Against Electracy. Gregory Ulmer made the same terminological move: a new -acy term positioned after orality and literacy in a historical sequence (Ulmer, 2003). Electracy encompasses a 300-year apparatus shift. Algorithmacy targets the triadic coordination structure specifically.

Electracy describes a civilizational condition. Algorithmacy names a cognitive competency. And algorithmacy generates testable predictions.

3. Against Algocracy. Aneesh proposed algocratic governance as a third mode alongside bureaucracy and market governance (Aneesh, 2009). But algocracy describes the governance structure of the triad. It does not describe the cognitive competency the triad produces in its participants.

4. Against Algorithmic Governmentality. Rouvroy and Berns argue that algorithmic governance bypasses the subject entirely (Rouvroy & Berns, 2013). Their framework cannot explain **variance**: why two candidates with identical qualifications produce dramatically different outcomes.

5. Against Secondary Orality. Logan extended McLuhan to argue that digital media are producing a "secondary orality" (Logan, 2010). The phenomenon of **algospeak** directly parallels the formulaic structures of primary orality. But in primary orality, formulaic structures emerged from **memory constraints** in a dyad. In algorithmacy, they emerge from **detection avoidance** in a triad. **The surface resembles orality. The deep structure is triadic. That is why it requires a new term.**

V. The Co-optation of the Subject

This brings me to the strongest version of my claim.

Hiring is the canary in the coal mine. The mechanism I am describing is becoming the **baseline condition for human participation across domains.**

Think about the history of literacy. Five hundred years ago, literacy was a specialized skill for priests and clerks. Then the bureaucracy expanded. Literacy stopped being a "skill" and became the **condition of legibility** to the state.

We are crossing that threshold again.

Today, it is not just jobs. It is **dating**. It is **news**. It is **credit**, **politics**, **housing**, **friendship**. In every one of these domains, the dyad has been replaced by the triad. And if you cannot navigate the intermediary, you do not coordinate. You do not exist as a participant.

Algorithmacy is not "tech skills." It is the new condition of participation. And like literacy before it, it does not merely equip the subject with a tool. **It reconstitutes the subject.**

The ATS does not just filter candidates. It teaches candidates to think of themselves as parseable data. They stop presenting themselves as unique. They start presenting themselves as compatible.

Ravenelle's ethnography of gig workers documents this reconstitution directly. She identifies three distinct typologies shaped by platform participation: **Success Stories**, **Strugglers**, and **Strivers** (Ravenelle, 2019). These are not personality types people bring to the platform. They are cognitive orientations produced through differential exposure to the triadic structure.

Cheney-Lippold makes the complementary argument from the system's side. Algorithms construct identity categories as **"measurable types"** through statistical classification (Cheney-

Lippold, 2011). **Constitution and competency are concurrent products of the same mechanism.**

This concurrence distinguishes co-optation from Foucault's disciplinary power and Butler's performativity:

- In **Foucault**, the institution is visible and the discipline is explicit.
- In **Butler**, the norms are diffuse and nobody owns them.
- In **co-optation**, the intermediary is opaque, the grammar is proprietary, and the owner can update it without notification.

You cannot subvert a grammar you cannot see, owned by an entity that can rewrite it overnight.

Heidegger called this **standing-reserve** (*Bestand*): a mode of revealing where beings show up not as things in themselves but as resources standing by for optimization (Heidegger, 1954/1977). The platform user is not a person; she is a data-generating resource whose participation trains the system while developing the cognitive orientation the system requires.

We see this most clearly with **large language models**. Jakesch and colleagues found that users given an opinionated AI writing assistant were **twice as likely** to write paragraphs agreeing with the assistant. More significantly, they were more likely to report holding that opinion afterward (Jakesch et al., 2023). They called it **"latent persuasion."** That is co-optation of the subject.

The distribution of this subject-formation is uneven, and it **compounds**. Brian Street's **ideological model of literacy** predicted exactly this pattern (Street, 1984). ATS systems that penalize employment gaps common among caregivers, content moderation algorithms that flag Black vernacular as toxic: these restructure the conditions of algorithmacy for entire populations before those populations even begin participating.

Stiegler called the underlying process **grammatization**: the progressive breaking-down of continuous human experience into discrete units that can be stored, reproduced, and manipulated by technical systems (Stiegler, 1998). In oral hiring, the whole person showed up. In literate hiring, the person was grammatized into credentials. In algorithmic hiring, the person is grammatized into data points, keyword vectors, compatibility scores. Grammatization once operated at the pace of alphabetic inscription. It now operates at the speed of gradient descent.

VI. Closing
Oracy. Literacy. Algorithmacy.

Three cognitive competencies. Three communication technologies. Three structural conditions.

- In oral culture, you participated because you were known.
- In literate culture, you participated because you were credentialed.
- In algorithmic culture, you participate because your data survives the intermediary.

The transition to literacy took millennia. The transition to algorithmacy is happening within a single generation.

Whether we can use this competency to resist the systems that produce it is an open question. Literate populations eventually used writing to overthrow the systems that taught them to write. But it took centuries. We do not have centuries.

But we cannot ask the question of resistance until we recognize what is happening: We are developing the cognitive competency to navigate a world that views us as raw material. That competency is **algorithmacy**.

Thank you.

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