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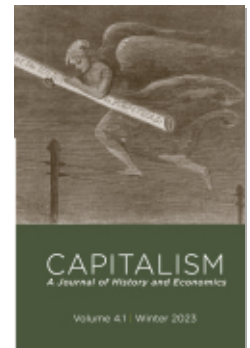
## Mixed Signals: Political Economies of the Sign

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# Mixed Signals: Political Economies of the Sign

**THE CAMERA**—at its origin—was supposed to reflect reality as fixed and frozen in its granular accuracy. Though, as with so many technological artifacts of its kind, the lens ended up changing the eye, as it offered both new ways of looking at and new ways of perceiving the world.<sup>1</sup> Another set of optics found its way into economics during the period in which the camera filtered into popular use: the distinction between the *nominal* and the *real*. That concept pair came to imply both the link and the gaps between perception and value. To stay with the photographic theme, *nominal values* work like a camera pure and simple; they provide snapshots of markets at definite moments in time. *Real values* by contrast work more like *spirit photography*; they capture the same moment but with the semitransparent specter of, among other things, inflation hanging over the scene.<sup>2</sup> Those man-made spirits—which might nonetheless persuade an observer—provide an analogy of what would come to be called the Fisher equation (real variation = nominal variation - expected inflation). Here too intangible variables—including *beliefs*—do in fact *haunt* and so alter the economic scene. They have incredible powers of expanding and shrinking wealth without ever moving a decimal on a balance sheet.

To simply track the evolution of concepts such as real/nominal from *inside* economic history is to see in two rather than three or four dimensions. If we broaden our perspective, it is a little uncanny that this concept pair grew alongside a host of others, each of which offered nascent understandings of that which we label as reality. We might think, for instance, of the semiotic revolution in linguistics, which drew distinctions between sign,

*Note:* I would like to thank Marc Flandreau and Francesca Trivellato for their valuable feedback. Also, my gratitude to my friend and interlocuter Andrew Sartori, for once describing my work as united by a concern with the “political economy of the sign”—an insight that provided the subtitle of this text. Any errors herein are mine alone.

<sup>1</sup> Jay, “Magical Nominalism”; Barthes, *Camera Lucida*; on photography, capitalism, and the law, see Huerta, *The Unintended*; on the “truth” value of photographs, see Bilotto, *A Violent Peace*, chap. 1.

<sup>2</sup> On spirit photography, see Harris, *Photography and Death*.

signified, and signifier, and so disrupted the stability of the link between the material world and words used to apprehend or describe it.<sup>3</sup> As it so happens, when the Swiss linguist Ferdinand de Saussure set out to explain the semiotic principle, he even reached for a monetary metaphor: “For instance, it is not the metal in a piece of money that fixes its value . . . its value will vary according to the amount stamped on it and according to its use inside or outside a political boundary.”<sup>4</sup> It is just a short leap then to monetary theory itself, which in the same period sought to determine if fiat or a metallic standard best served to stabilize value and, in the latter case, whether it should be silver or gold. In this frame, we can cite the words of the American economist Charles Conant, who was charged with stabilizing US currency after the monetary chaos of the Civil War. In his essay “Is an Ideal Money Attainable?,” Conant argued: “To the *undiscerning* minds of the mass of men a pound sterling of gold, a silver five-franc piece, or a paper dollar, represents always a definite unit.”<sup>5</sup> Conant’s *discerning* mind knew that belief was a mere myth, for purchasing power fluctuated endlessly. Given that, he believed all the more strongly in adopting the lesser of monetary evils—metal—which provided at least something approximating a fixed material worth. Finally, as an echo of these claims, we can hear Karl Marx’s conviction about the primacy of the material “base” over and above the more illusory “superstructure” of abstract tenets and values.

If we bring all these concept pairs together into one pointillist frame, we see not only a story of analogous taxonomic efforts but also a striking case of epistemological coevolution. United under a chronological arc stretching from the mid-nineteenth to the early twentieth century, these seemingly disparate intellectual preoccupations each in their own way sought to fix, or at least discern, the bond between the world itself and the “signs” marshaled to represent it.<sup>6</sup> Even as they go in different directions, we might consider how each was born in some way of the disruptions of nineteenth-century information revolutions, which I describe elsewhere as the *dematerialization of material life*.<sup>7</sup>

<sup>3</sup> Saussure, *Course in General Linguistics*; Aarsleff, *From Locke to Saussure*; Eschbach and Trabant, *History of Semiotics*.

<sup>4</sup> Quoted in Bilotto, *A Violent Peace*, 60.

<sup>5</sup> Conant, “Is an Ideal Money Attainable?,” 399.

<sup>6</sup> See, e.g., Shell, *Money, Language, and Thought*. I also tied some of these threads together in Bilotto, *A Violent Peace*, chap. 5.

<sup>7</sup> Bilotto, “Anatomy of Credulity and Incredulity,” 3.

*Dematerialization* denotes that long-term process wherein exchanges that traditionally depended upon proximity and physical form came to depend upon or take place through information systems. The tangibles of cables and wires and branch banks begot the intangibles of messages and signals, telegrams and wire transfers, actuarial calculations and insurance plans.<sup>8</sup> All this considered, perhaps the otherworldly resonances of spirit photographs didn't seem much less surreal than the fact that disembodied voices could suddenly float through space through the telephone.<sup>9</sup> These at first shockingly ethereal dimensions of daily social and economic life spurred many efforts to seek to redefine the content or the drivers of the "real."<sup>10</sup> By attending to the informational domain, we can see many tropes differently, including that the industrial economy of the nineteenth century was already in some sense *postindustrial*.<sup>11</sup>

One case in point: in 1884, an article in the *American Law Register* noted that, in 1880 alone, 31,700,181 messages had been relayed, leaving the United States and moving outward toward the world. The problem this volume of information-transactions raised for commercial law was that a single mistake or overtly erroneous transmission could cause "the loss of thousands, and in extreme cases, even hundreds of thousands of dollars." The question was who should be held accountable in such cases for loss or destruction? There was already legal precedent for holding carriers responsible for the fate of the *tangible* merchandise they carried. Furthermore, there was also an insurance industry in place to protect the carriers and their contents. But to what extent could one consider a telegraph cable a "carrier of thoughts," and then to what extent could telegraph companies be held liable for the mistransfer or delay or damage either of these thoughts or caused by these thoughts? Requests for recompense came often if the delay or failure of messages relayed for the buying and selling of commodities resulted in loss of profits. In one case, the delayed transmission of a farmer's message to ship "at the very best rate" coal oil from Nebraska to Denver resulted in higher prices and loss of profits.<sup>12</sup>

It seems that, in most cases, US courts denied claims leveled against telecommunications companies except where there was proof that businesses or

<sup>8</sup> Müller and Tworek, "The Telegraph and the Bank."

<sup>9</sup> Peters, *Speaking into the Air*; Ronell, *The Telephone Book*.

<sup>10</sup> Ong, *Orality and Literacy*.

<sup>11</sup> Berman, *All That Is Solid Melts into Air*; Jameson, *Postmodernism*; Bell, *The Coming of Post-Industrial Society*; Marazzi, *Capital and Language*; Appadurai, *Banking on Words*.

<sup>12</sup> Rex, "Liability of Telegraph Companies," 281, 282–83, 290.

employees clearly intended to manipulate or delay information. Yet, whatever the verdicts, that the question began appearing in the courts reinforces the idea that new informational fonts of power and profit contained within them new sources of confusion and new vulnerabilities.<sup>13</sup> As institutions became dependent on the well-timed reception or release of information for their operations, they became susceptible to knowledge that was accidentally or intentionally ill-timed, delayed, lost, fabricated, or misstated. Additionally, the very networks through which advertising, brand, and reputation management stimulated global demand or secured market share also became conduits for slander, rumors, and all manners of fraud. While legal cases may not have had an observable impact on the evolution of credit or tabular theories of money, or of the nascent distinction between nominal and real, they offer insights of another kind. They reveal the kinds of conceptual pressures that informational variables were importing into economic life, and so into attempts to understand and manage markets.

This perspective might lead us to reconsider Marx's own desire to re-narrate the arc of economic reality. In describing the defects of nineteenth-century capitalism, Marx recounted a chain of substitutions that had taken place: railroads replaced roads, steamships replaced sailboats, and—most significantly—information started traveling not mouth to ear, nor even hand to hand via pen and paper, but instantly across the earth through telegraph cables. These replacements reduced the transfer time of goods and people and foreshortened the time frame of profit as well. But something else was at stake for him: the multiplication of processes that did not produce products but rather conjured transitory *some things* or *non-things*. So he argued that both the transport industry and the communication industry profited not from producing needed objects but merely from “displacing” people, things, and messages.<sup>14</sup> For Marx, the key to setting societies on better foundations would be the eventual reduction in importance of those “fictitious” elements—including the abstract accumulations of capital gains.

By the early twentieth century, however, legal scholars were continuing instead to try to “internalize” the transaction costs of the increased production of immaterial goods. Put another way, legal experts became increasingly concerned with the commercial implications of the relationship between hardware and software. For instance, in 1910, the American legal scholar

<sup>13</sup> For the extension of this question to the intangible matters of credit and reputation, please see Flandreau and Geisler Mesevage, “Untold History of Transparency.”

<sup>14</sup> Marx and Engels, *Capital*, 3:164,134–35, 524–25.

Fred'k H. Cooke examined the possible extension of the commerce clause to what he called “intangibles.” In the original clause, which provided a framework for international trade, the word “commerce” only implied “tangible goods.” He found grounds to extend that clause to include the actual physical infrastructure of communications and transportation networks. However, the intangible “content” of those networks seemed precisely to float away from the foundation of legal precedent. Cooke stated: “Commerce among the states embraces navigation, intercourse, communication, traffic, the transit of persons and the transmission of messages by telegraphy.” His goal thus was to affect a constitutional change to extend the commerce clause to those phenomena “incapable of being touched or grasped or affecting the sense of touch.” Cooke (in an eerie reverberation of Marx) asserted that the “telegraph transports nothing visible and tangible, only ideas, wishes” and that the law had not been able to keep up with an economy wherein these abstractions had somehow mysteriously become commodities.<sup>15</sup>

What we see here, once again, is the way in which informational variables generated a need to resignify the very nature of reality, including economic reality. Even inflation itself was somehow a creature born of the speed and amplitude of information (think of the role of telephones, stock tickers, financial news, and exchange rates) as constituting the ghostly but very real skeleton on which the flesh of material life hung. Taking account of the primacy of these more illusory conditions, the American economist Irving Fisher also offered his take on the “real.” In his treatise explicating the abstract nature of capital and interest, he spoke of the need for understanding the primacy of *psychic income*, or “the psychic experiences of the individual mind,” to the production of wealth. As he reached for a metaphor, Fisher chose a technological one: “The human nervous system is, like a radio, a great receiving instrument. Our brains serve to transform into the stream of our psychic life those outside events, which happen to us and stimulate our nervous system.”<sup>16</sup>

In other words, individual pursuits of profit and their impact on the rate of interest and the general price level played out through signals and wires, grew and shrank with the news, and accumulated as much in the mind as in the vault. Fisher offered an elaboration on this general theme of economic “reality” being made of abstractions and perceptions—driven by profusions of modern signals—when he later explicated what he called the

<sup>15</sup> Cooke, “Application of the Commerce Clause to the Intangible,” 412, 413–414, 415.

<sup>16</sup> Fisher, *Theory of Interest*, 4.

“money illusion.”<sup>17</sup> The human mind *thinks* the number on the dollar is the signifier of absolute worth (nominalism) but it is not. As the telegraph was both central to yet different from the telegram, the nominal was tied to but also slipped away from the real.

Perhaps because information technologies change so rapidly, they not only bring renewed efforts to confront the strange “virtuality” of our real lives, but they also have an amnesiac quality that erases the memories of the epistemic shocks that attended previous revolutions. As a case in point, the economists Jonathan Haskel and Stian Westlake recently wrote a book entitled *Capitalism without Capital: The Rise of the Intangible Economy*.<sup>18</sup> The blurb offered by the publisher reads as follows: “For all sorts of businesses, from tech firms and pharma companies to coffee shops and gyms, the ability to deploy assets that one can neither see nor touch is increasingly the main source of long-term success.”<sup>19</sup> In fact, one of their main points is that macroeconomic measuring rods such as GDP calculate “investment” in terms of tangible assets only. However, they claim, especially since the 1960s, companies and individuals have been increasingly investing in “ideas, in knowledge, in aesthetic content, in software, in brands, in networks and relationships.”<sup>20</sup> Interestingly, they—in 2017—appear to “discover” the intangible economy as a dominant form of economic life, without any reference to the long history of dematerialization that came before. Here, then, we see the pattern repeat. Each nascent phase of informational intensification—in this moment, social media and digital currency—creates renewed pressure to sort and measure the nature of reality. And in that sorting, the debate often arises once again about the nature of the relationship between the tangible and the intangible. So, whatever the discrete accuracy of some of the insights, there is something interesting—especially for the historian of dematerialization—in the amnesia of *Capitalism without Capital*. It reads a little like the twenty-first-century discovery of spirit photography.

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Every piece in this issue is concerned in some way with the informational infrastructures of capitalism: lexical innovations, citation practices, courier networks, and ideological atavisms packaged under “brain science.” While

<sup>17</sup> Fisher, *Money Illusion*.

<sup>18</sup> Haskel and Westlake, *Capitalism without Capital*.

<sup>19</sup> See <https://press.princeton.edu/books/hardcover/9780691175034/capitalism-without-capital>.

<sup>20</sup> Haskel and Westlake, *Capitalism without Capital*, 15.

separated in time, space, and theme, each constitutes an exploration of past efforts to affect material positions by packaging and distributing *signs*.

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