

# On Not Being a Sign: Gold's Semiotic Claims

---

Elizabeth Ferry, *Brandeis University*

## ABSTRACT

In this essay I examine gold's semiotic claims in the context of perceptions of gold in global financial markets, beginning with an intriguing parallel drawn by my informants between gold and Bitcoin. I make several interrelated arguments: (1) that in a variety of cultural contexts, gold has become a site for a very particular semiotic claim—that of not signifying at all; (2) that in the contemporary instance of physical gold in relation to other assets based on gold, this is expressed in an attention to gold's material, tactile qualities (represented both iconically and indexically), and its extrasocial character; (3) that similar claims are made for Bitcoin, often drawing on a "digital metallism," and idiom of gold; and (4) that the self-reflexive semiotic properties of gold have a long and diverse cultural history. In concluding, I speculate on how gold's particular semiotic stance reflects one possible articulation of nature and convention as sources of meaning.

In an interview in December 2014, a manager for a prominent gold bullion investment fund said to me that the financial instrument closest to gold was, in fact, Bitcoin, the decentralized cryptocurrency invented in an essay written by the likely pseudonymous cryptographer Satoshi Nakamoto in 2008. "Gold is nature's bitcoin. The tech savvy folks have discovered the benefits of something like gold. They can't wrap their minds about the bricks so they have to have an elegant solution."

He is not alone in this opinion. Nicholas Colas, chief market strategist at Convergenx, a global brokerage and trading services firm, remarked in April 2013,

---

Contact Elizabeth Ferry at Department of Anthropology, Brown Social Science Center 226, 415 South Street, Waltham, MA 02453 (ferry@brandeis.edu).

Funding for this research was provided by the Norman Fund for Faculty Research, Brandeis University. I am grateful to Richard Parmentier; Brett Scott; audiences at the Rutgers Center for Historical Analysis; the "Spaces, Scales, and Routes: Region Formation in Anthropology and History" conference, Harvard University, May 4–5, 2015; the "Speculation: New Vistas on Capitalism" workshop at the London School of Economics, May 29–31, 2015; and two reviewers for *Signs and Society*.

---

*Signs and Society*, vol. 4, no. 1 (Spring 2016). © 2016 Semiosis Research Center at Hankuk University of Foreign Studies. All rights reserved. 2326-4489/2016/0401-0003\$10.00

“Gold is bitcoin for nerds.”<sup>1</sup> James Grant, writer and editor of the financial journal *Grant’s Interest Rate Observer*, himself observed in early 2014, “Gold is nature’s true bitcoin.”<sup>2</sup>

This seems at first like a very strange analogy. For one thing, in the eyes of many observers and users gold owes its utility as a currency to its physical and so-called natural properties: malleability, portability, divisibility, rarity, and nobility (the fact that it does not rust or otherwise alter in the presence of other elements and compounds). In Marx’s words, the precious metals, in which category he includes gold, silver, platinum, and mercury, “present themselves as that which they are” (Marx 1857, pt. 2, chap. 3, sec. *a*; see also Bernstein 2000).<sup>3</sup> As has been noticed by a number of scholars, in many Euroamerican contexts gold stands as a sign for value as quintessentially substantial, material, and natural (in the sense of not being created by humans; Shell 1982; Michaels 1987). In addition, in the form of the “gold standard,” gold seems to stand for earlier economic systems, sometimes thought of less “civilized,” more “barbaric” or characteristic of less technologically advanced societies, or those less capable of abstract thought. Because of these strongly and broadly held cultural presumptions concerning gold, it may seem surprising to hear it equated with bitcoin, which seems to stand at the opposite end of a continuum from substantial to abstract value, and from material to virtual economic and financial systems.

However, upon closer examination, some pertinent similarities between the two forms of wealth reveal themselves. These have to do with the conditions under and through which gold and bitcoin assert their value and exhort their use. These conditions are artfully constructed and highly explicit in the case of bitcoin, and less immediately recognized in the case of gold. Examining them allows us to talk about the assumptions about meaning and value that underwrite gold. In particular, a discussion of the claims to value for both bitcoin and gold shows how gold’s much more enduring, widespread, and culturally dense claims are based on a very particular semiotic stance: gold’s value comes from its immediacy, in the literal sense (Mazzarella 2006); that is, it does not mediate, nor does (or perhaps, nor should) anything mediate on its behalf. There is no acknowledged space between sign and referent. The assertion of

1. See <http://www.bloomberg.com/video/bitcoin-is-gold-for-nerds-convergenx-s-colas-says-zumT6iCSQBujJPB3Nhonrw.html>.

2. See <http://www.zerohedge.com/news/2014-02-11/jim-grant-gold-natures-bitcoin>.

3. Marx goes on to note that of these, only gold and silver are suitable as money—because mercury is liquid, and also toxic, and platinum is very rare and was discovered much more recently.

value for gold is based not on the nature of its representative claim but rather on the fact that it claims not to represent anything other than itself. It does not stand for value; it is value. Its semiotic stance is that it is not a sign. We can see the results of this stance not only in the role gold plays in neoclassical and contemporary finance, but also in such things as gold's use in religious icons and its role as a literary trope for substance and truth beyond, before, or in contrast to language.

In this article I examine gold's semiotic claims in the context of an emerging research project on perceptions of gold in global financial markets. This project investigates this idea in the context of contemporary finance through an ethnographic examination of gold's meanings for participants in gold investment and wealth preservation. In these markets circulate not only types of "physical gold," such as bullion and coins, but also other assets based on gold, such as gold futures, options, and other derivatives, as well as a range of new financial products called "exchange traded funds" (ETFs). My research focuses on the perceptions of market participants (fund managers, commodity analysts, traders, and industry representatives) about the relationship between the value of physical gold and that of other gold-based assets. This research, based on in-depth, semistructured interviews, site visits and observations, and online research, will add to discussions of gold and its meanings in history, literary studies and anthropology through ethnographic research on the perceptions of contemporary market actors, a topic almost completely ignored by scholars until now.<sup>4</sup>

Over the past ten years, there has been an upsurge in anthropological studies of mining. You could call it a bonanza, and indeed, this increase has tracked the rise in prices for mined commodities and particularly gold. This sounds like a cynical remark, but in fact it is not. Over the past ten years, mining companies have expanded their operations tremendously, frequently in regions of classical anthropological interest. Moreover, mining and related forms of resource extraction engages questions at the forefront of contemporary anthropological discussions, such as NGOs, social movements and social conflict (Ballard and Banks 2003; Kirsch 2014), the corporation (Rajak 2011; Welker 2014), ontological politics (de la Cadena 2010; Li 2015) and gendered forms of labor, property, and commodity relations (Ferry 2005; Rolston 2014).

Until just the past couple of years, this work has been overwhelmingly focused on production. I believe there are two reasons for this: first, that the

4. See, among others, Shell 1982; Michaels 1987; Wortham 1996; Graeber 2002; Maurer 2005; and Vilar 2011.

fungible, and fundible, characteristics of mined commodities means that it is very difficult to trace the products of any particular mine and thus to tell the kind of commodity chain story in anthropology as well as the nonacademic press. Second, and especially in the case of gold, the urge to uncover the exploitation, inequality, and pollution associated with mining seem to make focusing on the glittering final products a mark of false consciousness, a succumbing to the fetishizing power of these substances (see Davidoff 2013). Whatever the reasons may be, anthropologists (other than archaeologists) have only very recently looked at contemporary gold consumption (Maurer 2005; Gandhi 2013; Moors 2013; Truitt 2013)

Meanwhile, social studies of finance within sociology and anthropology have taken on markets and financial actors and spaces as objects of material and cultural study. Influenced by Michel Callon and others working within science and technology studies, and Donald McKenzie and others from economic sociology, scholars have begun to trace the performative and calculative capacities of finance and economics. Ethnographies of Wall Street investment banks, derivatives trading, and commodities exchanges (Zaloom 2006; Ho 2009; Lépinay 2011) bring a newly substantivist perspective by showing how these are embedded within cultural process.<sup>5</sup>

Yet even though these two fields have been among the most vibrant within anthropology, private and public investment demand accounts for approximately 30 percent of gold demand (without factoring in the degree to which jewelry purchases can also be considered a form of investment, especially in India and the Middle East), and financial capital forms an increasing important role in mining (as when, for instance, mining company stocks are held by financial investment funds, or commodities traders take on futures contracts in gold and silver), there has been almost no scholarly analysis of the links between mining and finance.

In the project I am especially interested in the material qualities of gold in finance. This includes both physical gold with its qualities of mass, luster, and malleability, other assets based on gold, glossed by some participants as “paper

5. The term *substantivism* comes from the highly influential work of the economic historian Karl Polanyi, who distinguished between formal and substantive definitions of the economy. The formal definition is concerned with the use of limited means toward alternative ends, and is most entirely applicable with in an economic system characterized by a putatively “disembedded” (disconnected from other norms and institutions) price-setting market. In other more “embedded” contexts, the substantive needs of humans are met through exchange linked to kinship and other cultural norms and institutions. Newer anthropological scholarship on capitalism, such as those works I cite here, shows that markets, too, are embedded within norms, institutions, and affective relationships.

gold,” and of electronically generated records for either of these. The semiotic work of physical gold described in this article depends on the material presence and substance of the metal gold, as opposed to paper, but not necessarily opposed to its electronic presence.

We see this especially clearly in the analogy to Bitcoin with which I began this essay. Maurer et al.'s (2013) article on the “practical materiality” of Bitcoin usefully unpacks the way in which Bitcoin users deploy a semiotics of materiality, and particularly an analogy with metallic monies. In a sense my article can be seen as a counterpart to their argument: where Maurer et al. concern themselves with the semiotics of Bitcoin in relation to gold and silver, I look at gold in relation to Bitcoin. In my case, I use this analogy to consider how gold semiotically bases its claim to value not on being a particular form of sign, but on not being a sign at all. I trace how this claim appears first in the opinions of my research subjects in finance and later, more briefly, in other uses of gold, such as chrysography and religious art.

### **“The Gold Space”**

In 1971, Richard Nixon ended the US government's agreement to redeem dollars for gold at \$35.00 an ounce. This agreement, part of the Bretton Woods Agreement, was a modified version of the gold standard that had been in operation in the United States, England, and most other European countries between 1880 and 1914. The ending of the dollar's convertibility to gold is broadly understood as one of the defining moments of contemporary capitalism. As Gregory puts it, “Gold . . . has escaped the domesticating forces of imperial powers for the longest period of time in hundreds of years . . . and has resumed its free commodity form” (1997, 2). After 1971, gold began to be traded on commodities exchanges such as the Chicago Board of Trade in the same manner as other commodities (e.g., the iconic pork belly). This trading included trading in derivatives such as futures and options, contracts to buy or sell (or to have the option to do so) gold at a determined point in the future. Since that time the price of gold has been notably volatile, with two “bull markets” in the early to mid-1980s and in the 2000s. This most recent market saw gold go from \$271.30 in May 2000 to \$1,895.00 in September 2011.

Not surprisingly, this surge in prices both fueled and was fueled by new interests and activity in gold investment. Mining corporations expanded their operations worldwide, opening hundreds of new projects in all regions of the world but especially Latin America, Central Asia and Australia (this is a rel-

actively recent phenomenon, as from the late nineteenth century to the 1980s, South Africa produced two-thirds or more of the world's gold each year).<sup>6</sup>

In the mid-2000s a new tool for investment in gold was introduced called an "exchange traded fund" (ETF). These are vehicles that investors can buy shares in that track the price of a given commodity, equity, or sectors of the market, generally through the purchase of these assets by banks designated as an "authorized participant"; ETFs have been in existence since the early 1990, but in 2005 the World Gold Council worked with State Street Global Advisors, HSBC, and Bank of New York to put together SPDR<sup>®</sup> Gold Shares, known by its stock ticker abbreviation GLD. By 2011 GLD was the fifth largest holder of gold in the world, right between the central banks of France and China. Because ETFs can be bought and sold throughout the day, they allow for much smoother avenues for investing in gold, which previously could only be done by buying or selling, and then paying to store, physical bars or coins. The financial crisis of 2008–9 both helped push up the gold price and spurred interest in physical gold as an investment, for two reasons. First, many investors believe that the price of gold is inversely correlated to the stock market, thus making it an appealing haven during downturns. Second, low interest rates, instituted by the Federal Reserve in an effort to stimulate the economy, are also correlated to the price of gold.

The rise in the price of gold was checked in April 2013, triggered partly by a large short sell in the commodities markets. The gold price continued its decline as the Federal Reserve gradually phased out its policy of "quantitative easing" (in which the Federal Reserve buys back its bonds, putting more money into circulation). The average London PM fix price of gold in March 2016 was \$1,246.34. The total holdings of GLD in gold went from 1,342 tons in November 2012 to 817 tons in April 2016.

The following are the main gold and gold-based assets for investment: "Physical gold" is mined, processed, and shipped to gold refiners. Recycled scrap gold is also sent to these places. The refiners smelt the gold into bars and coins and send these to bullion banks, mints, and other distributors. In these forms, gold is bought by central banks, institutions, and individuals and is stored in bank or private security vaults. More modestly, investors can buy physical gold from large bullion banks and retail dealers, dozens of which have sprung up in the past ten years. In the last few years, several retail dealers have set up electronic platforms for buying physical gold, which is then stored on behalf

6. See "World's Largest Gold Producing Countries: South Africa," <http://www.forbes.com/sites/kitconews/2014/06/20/worlds-largest-gold-producing-countries-south-africa/>.

of clients in vaults in Switzerland, Singapore, and elsewhere. Regular banks also store gold for investors, as either “allocated” (reserved for that investor and unavailable for other uses) or “unallocated” (a loan to the bank like deposits in other forms, such as cash). There are large physical markets in the Middle East, India, and China, where gold is sold in the form of bars and, in the case of India, jewelry given at marriage and during the Diwali festival.

Until the mid-2000s, the only other way for individual investors to “gain exposure” to gold was through buying stock in mining companies (“equities”). These also have gained tremendously over the past twenty years, particularly in what is called the “junior” sector of small companies consisting only of a few mining properties. Junior miners tend to have a reputation for volatile prices, because of instability and risks in operations, political and social environment, and costs. In 1998 the Bre-X hoax, in which investors lost millions by speculating in a putative gold mine in Indonesia, dampened the junior miners’ market for about five years (one mining official described this as the “nuclear winter” of gold mining), but higher gold prices in the 2000s reignited it until approximately 2011. Rising costs in mining production, considerable pushback and conflict from environmental, indigenous and human rights groups, and the drop in price have forced many mining companies to pull back their planned production and expansion of properties.

Of course, commodities traders also deal in gold just as they deal in other precious and nonprecious metals, oil, and agricultural commodities. Commodities exchanges such as the Chicago Board of Trade were originally formed, and are still used to some extent, as places where producers or others dependent on commodity prices (such as airline companies whose profit margins are closely tied to the price of jet fuel) can “hedge” or offset potential losses by locking in a certain price with futures contracts. They are also places for traders to engage in speculation using “futures and options” (known as “derivatives” because they are contracts “derived” from the predicted future prices of commodities). As has been noted, commodities traders have no particular commitment to any one commodity and would be surprised and dismayed to receive delivery on a contract in the form of actual barrels of oil or bales of wheat (Zaloom 2006). Until the early 2000s much commodities trading was done in person, in physical “pits,” but more recently the bulk of trades are made through computers, including high frequency trading based on preset algorithms.

Investors can now, in the parlance, “gain exposure to gold” through ETFs such as the previously mentioned SPDR GLD, a type of investment fund (that pools together large numbers of investors) that is based on the price of a given

set of assets. ETFs allow investors to use a brokerage account to purchase shares that are, in the case of GLD, fully backed by gold. ETFs are “passively managed” funds that seek to meet rather than exceed the price of gold and that can be bought and sold throughout the trading day. Finally, there are “actively managed” gold funds that seek to outperform the price of gold through a combination of assets including equities, ETFs, and physical gold.

Not surprisingly, people and institutions invest in these different forms of gold for many reasons. This essay comes out of a research project on how market participants in different positions of what is known as “the gold space” see the relationship between physical gold and other financial assets that are based on gold in some way (derivatives, equities, ETFs, and other funds). Those who are invested in physical gold or who work for funds or retail bullion dealers, not surprisingly, see (or claim) a bigger and more significant difference between the physical object and derived assets. These people, who maintain that physical gold is in some way intrinsically or situationally different from paper gold, are the focus of this essay.

Those who invest in the physical market also tend to see a longer time horizon for their investments, to be interested primarily in wealth preservation rather than returns (at least for the part of their portfolio that is in gold), and to see physical gold as valuable primarily for the stability of its purchasing power. Some of these people (though not all), as we will see, also tend to mistrust governmental action, particularly governmental action on the money supply and sometimes the banking system as well. As I will argue, this group of people also tends to see gold’s value as distinctively nonrepresentational.

I have been interviewing participants in gold investing, including bullion bankers, ETF sales people, representatives of the World Gold Council (a membership organization of gold producers) and the London Bullion Market Association (membership organization of participants in the London physical market), commodities researchers, fund managers, and commentators on gold and finance. These people span much of the range of investors and commentators on physical gold and other assets. In this article, I primarily focus on responses from a subset of my research subjects, those involved in the physical market, as investors, bullion dealers, and gold fund managers.

Interviews with these people followed a semistructured format, and aimed at eliciting perceptions of how markets in gold bullion related to ETFs, mining equities, derivatives, and other gold based assets. In addition to focusing on these questions, I also asked interviewees to interpret the past fifteen years of the gold market to me, including any factors they say as important in influ-

encing supply, demand, price, and the interaction of different gold-based assets. I also asked whether gold acted primarily as a commodity, currency, bond, or other asset class, and more general questions concerning their interpretation of gold's value in the past and present. Interviews lasted between forty minutes and two hours and were conducted either in interviewees' offices in Boston, London, and New York City or by telephone. In the larger project, I am also conducting site visits and participant observation in conferences, offices, and online, and data from some of these also appear in this essay.

### **Paper Promises**

Many of my informants—especially those whom I include in this article, who are directly invested in physical gold or who make their living from physical investors—draw the distinction between physical gold and paper gold as one between actual value and the promise of value. This distinction mirrors the older one between “commodity money” (as in currencies based on gold or silver) and “credit money” (in which money is issued by some central authority such as a treasury or bank and constitutes a claim on that authority, signified by the term “legal tender”) (Caffentzis 1989; Maurer 2005; Vilar 2011). For these people, the tangible possession of physical gold itself is more trustworthy than a “paper promise” on a bank or government. The following instances give some sense of how this opposition between gold and paper promises emerges in context: “The wealth transfer to the East through the sale of physical gold is mindboggling—if you believe in gold as opposed to promises. . . . The problem [with ETFs] is that they become another promise. Gold's is nobody's promise.”<sup>7</sup> This statement comes from an interview with former bullion banker, from a major British-European banking family and gold mining company director, and a prominent commentator on the virtues of investing in physical gold. He was recommended to me by several other interviewees as someone who believed strongly in the power of physical gold. This statement was made as part of his explanation of the outflow from physical gold from ETFs into China. For this interviewee, the movement of physical gold from West to East represents a major geopolitical shift (or threat), and one that is made possible through the waystation of ETFs. The apparent ability for ETFs to stand in for physical gold is belied both by its status as a “promise” and its use as a mechanism of wealth transfer: “The moment gold is lent, it's no longer gold because it's someone else's liability. When you get a bit of paper—that's a

7. Interview, October 7, 2014.

promise.”<sup>8</sup> This interview was recommended for similar reasons as the previous one, as a major British investor in physical gold who also acts as a commentator. Like the person quoted above, he has a background both in gold mining (in South Africa, in his case) and in wholesale bullion dealing in the London bullion market. He made this statement in the context of discussions about leasing gold, which is a way of financializing gold when large banks (Goldman Sachs, JPMorgan Chase, etc.) borrow gold, usually from central banks). This is a controversial practice among those who see the virtue of gold’s immediate presence in central banks as a sign of national integrity and security, as I discuss below.

My final example for this section comes from a more modest player in the physical markets, a portfolio manager employed by a large Boston-based bank. In explaining the virtues of owning gold in an individual portfolio, he said, “We have all moved to a fiat monetary system—a promise. As those promises rack up, somewhere somebody will move back to gold.” The term “fiat currency” already indicates a particular position with respect to gold’s materiality, as the term is used to denote credit-based (as opposed to commodity-based) money, in disparaging terms. It relies on the idea that such money is declared “by fiat”—“let there be money,” with a connotation of illegitimacy and even of “playing God” (since the term recalls God’s phrase in the book of Genesis “fiat lux” or “let there be light.”

These objections to fiat currency as paper promises point to anxieties concerning the presence of intermediaries between the paper promise and gold as repository of true value. Essentially, these instruments are agreements or contracts of different kinds, such as a futures contract, in which the parties agree to exchange a certain amount of a commodity at a certain price, a bank deposit, a bond, and even a piece of paper currency. All rely on the idea that the holder of the “piece of paper” (which, these days, is often not paper but electronic information in a computer) has a claim on the issuer, usually as a kind of loan (Maurer 2005).

Those who compare gold’s intrinsic value to paper’s less trustworthy form are treading familiar ground in opposing value as located in “nature” as opposed to society. They tend to see two aspects of sociality as potentially problematic. The first of these is known as “counterparty risk” or the risk that one of the parties to a contract will be unable to fulfill the terms of the contract. The 2008–9

8. Interview, September 3, 2014.

9. Interview, April 21, 2014.

global financial crisis brought this type of risk to the forefront of peoples' minds, when institutions such as Bear Stearns and Lehman Bros. proved unable to meet the obligations of their outstanding contracts, and when it became clear that new financial instruments such as credit derivatives and "collateralized debt obligations" had multiplied the number of counterparties—and thus the amount of counterparty risk—for each contract. The concept "paper promises" draws attention to this form of risk, both through the flimsy connotation of the materiality of paper, the image of a contract as "just an IOU," as one interviewee said to me, and through the word "promise" which can be easily imagined as something that can potentially be "broken." "Bits of paper" and broken promises are aspects of sociality gone wrong to which some physical gold investors object. The dismissive language about paper promises plays on a distinction between the physical presence of gold as something immediate, actual, and physical, as opposed to a semiotic, communicative, or "conventional" arrangement—a "promise" or a "liability." In their essay on Bitcoin, Maurer, Nelms, and Swartz point out that "this basic debate over whether money is a 'creature' of law or promises, or of its own 'intrinsic' properties is one that recurs throughout the intellectual history of money" as exemplified in eighteenth-century British debates about coin clipping and nineteenth-century US disputes between "greenbackers" and "bullionists" (Maurer et al. 2013, 269; see also Michaels 1987; Caffentzis 1989; Vilar 2011). This ideology reproduces an ancient distinction between matters of fact as located in nature and conventions established by agreement (Parmentier 1994, 179–80).

The other extra-social aspect of gold that appeals to some physical investors is that its supply cannot be "artificially" inflated. Many physical investors object to the policies of central banks to increase or limit the federal money supply in order to control inflation and deflation.<sup>10</sup> The departure of token (or "fiat") money from a fixed underlying commodity like gold appears to some physical investors as the height of human hubris and the foundation of a "house of cards," as one said to me. Others maintained that "printing money is kicking the can down the road"; "[central banks] use fiat currency as a policy tool to influence nominal interest rates, as opposed to real growth"; and "if people have the option to print money, they will." Those who espoused these opinions do not necessarily advocate a return to the gold standard (though some do). Rather they diagnose financialization in terms of an ever-increasing process of

10. This distaste for "printing money" forms part of a centuries-long discussion of the quantity theory of money and its applicability over the short and long term, but it has particular bearing on interpretations of central bank policy since the removal of dollar-gold convertibility in 1971 (Gregory 1997).

derivation from real assets, and they emphasize this in terms of the flimsiness of paper. Gold appeals to them because of its “inherently” limited supply and its origin outside of society. As Brett Scott, financial commentator and author of *The Heretic’s Guide to Global Finance: Hacking the Future of Money* (2013), put it, “with gold, the earth is the central banker.”<sup>11</sup> Indeed, Nakamoto himself made this connection in his foundational piece: “The steady addition of a constant amount of new coins is analogous to gold miners expending resources to add gold to circulation” (quoted in Maurer et al. 2013, 270).

### “They look like toffee”

These statements expressing the dangers of mediation and institutions of sociality are often linked to language that emphasizes the physical substance of gold. The author of the first quotation above went on to say, “It is extraordinary—there’s a close association with chocolate. Gold bars and chocolate bars have a similarly warm feeling about them. Their conductivity makes them warm up in your hand. They look like toffee; they give you a feeling of security, they’re warm and they’re nice.”<sup>12</sup>

Others noted the importance of the physical location of gold, and the ability to “put your hands on it.” A particularly pertinent example of this emphasis on gold’s tactility comes from debates over the holdings of physical gold by central banks. The central banks of most nation-states hold some quantity of gold, with the United States topping the list, followed by Germany, according to World Gold Council figures for 2014.<sup>13</sup> How much of their financial reserves a country should hold in gold is a matter of fierce debate, turning on questions of national stability and sovereignty. These issues have made central bank gold policy rather sensitive, so that the publicity surrounding gold policy decisions is carefully managed. One economist in the market operations department of a central bank noted that decisions about gold have to be referred to the bank’s directors, whereas equivalent decisions for other bank assets can be handled at a lower level. Furthermore, there is increasing concern in some European countries (particularly Switzerland, Germany, and France) that the gold reserves for the country be actually physically present within the country (much of the world’s gold is stored in vaults in London, Switzerland, and New York and increasingly in Singapore and Shanghai). This public concern—which tends to be held by the right or extreme right, as in the case of a letter sent by the

11. Personal communication, February 2015.

12. Interview with the former bullion banker and mine owner quoted above, October 7, 2014.

13. See <http://www.futuresmag.com/2014/08/28/top-gold-reserves-by-country-2014-edition>.

National Front's Marine Le Pen in November 2014 demanding the "repatriation" of French gold reserves—expressed nativism through the idiom of gold.

The debate around the presence and location of gold owned by the Deutsche Bundesbank, Germany's central bank has been especially heated. At the launch of the CPM Gold Yearbook, the most important annual publication on gold supply and demand, held at the Bloomberg offices on Park Avenue at 42nd Street in New York, Henner Asche, Deputy Head of Markets at the Deutsche Bundesbank (Germany's central bank) reported on a decade long process to bring gold held in New York, London, and Paris to Frankfurt, in response to public (mostly right-wing) concerns that a large percentage of Germany's gold was not held in country, as is true for many central banks. Mr. Asche described the process by which the gold was remelted into bars that met the London Good Delivery Standard (they had been originally cast before the existence of that standard) and independently assayed "to make sure that the German gold does not mix with other gold" in Frankfurt's vaults.

The presentation at the CPM launch by Henner Asche from the Deutsche Bundesbank was an attempt to report not so much to the immediate audience (who were amused and mildly disdainful of this concern) as to the media that the Bundesbank is proceeding to bring its gold to Germany, along with a categorical statement that the bank "do[es] not transfer the gold to Germany because we have doubts about whether the gold actually exists." This concern over the physical presence of a country's gold reserves as directly connected to the sovereignty and security of the nation constitutes another way in the materiality at the heart of financial markets carves out and fixes space. Images of the return of gold to the Bundesbank focus on hands (clearly those of white men) handling gold bars, meant to indicate security and reassurance through bodily contiguity and tactility in particular gendered and racialized forms (fig. 1).

In the offices and websites of bullion bankers, the World Gold Council, the London Bullion Market Association, and others in the "physical gold space," an attention to the physical characteristics of gold and to the ability to get close to it, see it, and touch it, echoes this connection between materiality, immediacy, and the real. In an interview with a small bullion dealer in the Boston area, I was almost immediately shown a briefcase of different gold bars and coins and invited to feel and hold them. Images and discursive practices around gold often foreground its elemental physical qualities, showing gold being melted and poured, shaped into bars or coins, and stamped with numbers, maple leaves, eagles, and other symbols. Numerous images on the web and in brochures and reports show gold being stacked, moved around a vault, and stored, empha-



**Figure 1.** Deutsche Bundesbank. © LISI NIESNER/Reuters/Corbis; reprinted with permission.

sizing both weightiness and security. In some places, even gold's edibility is foregrounded, as in the analogies with toffee and chocolate. At the World Gold Council offices in New York, I was given a small jar of "edible gold petals." When they first produced this particular bit of swag, the official told me, they were required to put an expiration date on it. "It's a bit absurd," he said. "We put 2023, but we could just as easily have put 3023, because gold always stays the same."<sup>14</sup> Here, then, are key instances of my point concerning semiotic claims to immediacy—its value beyond or before semiosis—as these images and performances of "real" visible, tactile gold are themselves classic indexical signs that assert meaning on the basis of contiguity, while claiming themselves as intrinsic and nonsemiotic.

My informants contrasted physical gold not with the immateriality of gold-based financial assets like ETFs but to their different materiality, their "paperiness." The repeated emphasis on paper promises and "bits of paper" gives a particular kind of material presence to the semiotics of finance (Lee and Lipuma 2004). Paper and things written on paper are the worldly representative

14. This connection can backfire as it smacks of frivolity and conspicuous consumption (also, gold's path through the human digestive system links it to another elemental substance, namely, feces).

presence of communication and social agreements, “promises.” In his ethnography of Islamabad, *Government of Paper*, Matthew Hull uses the concept of “graphic ideology” to describe the ways paper artifacts behave and communicate. He adapts the concept from Webb Keane’s (2003) idea of “semiotic ideology,” which argues for a further consideration of the semiosis as material-social practice. Hull defines graphic ideologies as “sets of conceptions about graphic artifacts held by their users, including about what material qualities about artifacts are to count as signs,” and “more general conceptions regarding the ontology and authority of graphic artifacts, including their capacity (or incapacity) to represent or produce truth, spirit, presence, life, and so forth” (Hull 2012, 14). Hull traces many dimensions within which paper artifacts circulate in Pakistani bureaucracy and consistently draws our attention to the ways in which such artifacts constitute a range of social interactions and scales, and project diverse ideological positions. Nevertheless, many of the semiotic claims surrounding paper in Islamabad have to do with authority, facticity, reliability, and durability. In contrast, the paper artifacts invoked by those who ascribe to physical gold suggest falseness, flimsiness, unreliability, and transience.

### **Bitcoin’s Nature and Nature’s Bitcoin**

Though this article is primarily about gold and not Bitcoin, some discussion of how Bitcoin works can help us understand why the analogy between this most techy, forward-looking currency and what some (misquoting John Maynard Keynes) call a “barbarous relic” makes sense and what it can tell us about gold’s semiotic stance.<sup>15</sup> The “crypto-currency” (i.e., a currency based on the cryptographic encoding of electronic information) Bitcoin was invented in 2008 by the pseudonymous figure Satoshi Nakamoto, who disappeared thereafter and has not returned under that name. It is a code-based currency that differs from most other currencies in that it does not depend on a government, bank or other centralized authority for payments, but on the “peer-to-peer” generation of mathematical codes. Bitcoin is structured around what Maurer et al. describe as a “decentralized, peer-to-peer network of computerized nodes generating mathematical codes that secure value stored in one’s digital ‘wallet’ and facilitate the exchange of that value between wallets” (2013, 263). Because of this structure, “for Bitcoin to work, one does not have to trust Nakamoto, a bank, or any other person or institution. One must simply trust the code or, more precisely, the cryptographic algorithm” (264).

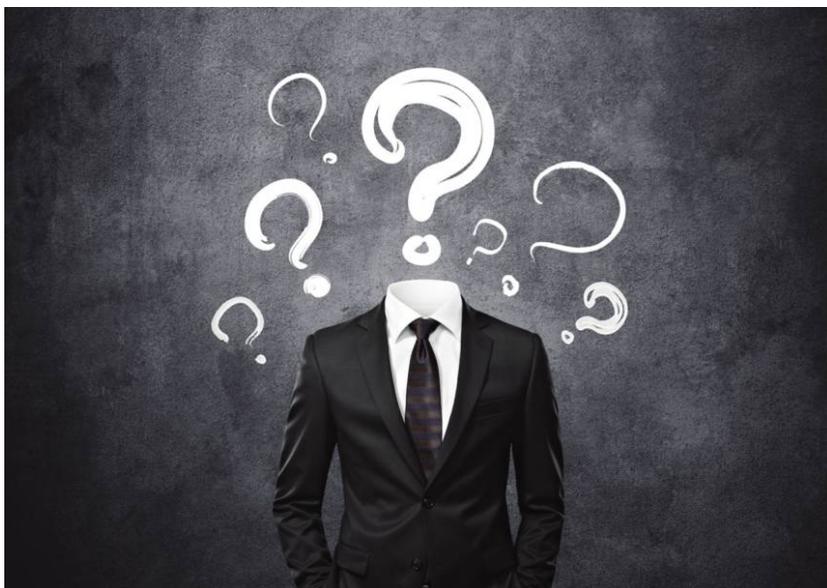
15. Keynes was in fact referring to the gold standard (1924).

Bitcoin's advocates (and they are staunch) like it for two main reasons; the first is this one of the putative avoidance of the problem of trust, which is at base a social problem. In place of the need to trust institutions or people, one need only "trust the code." As many observers of Bitcoin have pointed out, this is a bit of an illusion, for although trust may be distributed rather than centralized, the currency still depends on the consensus that it is in fact worth something (Maurer et al. 2013; Karlstrøm 2014). This consensus is a form of trust and therefore a social process. As Brett Scott points out in an online post "How to explain Bitcoin to your grandmother," explaining how Bitcoin works doesn't actually explain why it has value.<sup>16</sup> In an earlier post, "The Block-Chain of infinite mystery: What the hell is Bitcoin?," Scott speculates that it is the shadowy, mystical figure of Nakamoto that "gives the currency soul, and that's crucial because currency that is not legally mandated needs to be imbued with soul in order to start working."<sup>17</sup> Building on this insight, one might characterize this "soul" as a beautifully Durkheimian example of the collective constitution of society as divinity (fig. 2).

This leads to the second feature of Bitcoin that its adherents find appealing and to its most direct connection to gold. In an algorithmic imitation of the limited supply of metallic currencies, Bitcoin users can "mine" new Bitcoins through the labor of recording and checking transactions in the public ledger, but the rewards for mining reduce over time, and the total supply is fixed at 21 million Bitcoins, which, it is predicted, will be reached around 2040. Like the aspect of Bitcoin discussed above, its reliance on distributed rather than centralized intermediaries, the inability to create Bitcoin beyond an established limit attracts particular publics to the currency, often either anarchist or libertarian in politics, and generally mistrustful of institutionalized forms of authority and of the motivations and behavior of those with political power. In this their inclinations resemble those of my research subjects who advocate physical over paper gold. For instance, a number of my interviewees, in discussing the drawbacks of "fiat" currency, point to the pressure on central bankers to increase the money supply, and the disastrous effects of their tendency to yield to this pressure. Those who advocate for physical gold point to the "natural" limitation of the supply that avoids the risks of human fallibility or venality. As Scott remarked in conversation with me on the topic, "with gold, the earth is the cen-

16. See <http://suitpossum.blogspot.com/2013/04/how-to-explain-bitcoin-to-your.html>.

17. See <http://suitpossum.blogspot.co.uk/2012/06/block-chain-of-infinite-mystery-what.html>.



**Figure 2.** “Who is Satoshi Najamoto?” Reprinted with the permission of CoinDesk.com.

tral banker.”<sup>18</sup> Likewise, one could say that with Bitcoin, the code is the central banker (fig. 3).<sup>19</sup>

As is already evident, Bitcoin users and proponents frequently draw analogies between Bitcoin and precious metals and especially gold. Maurer et al. explore this aspect of Bitcoin in detail, noting not only the inspiration of gold standard economics in Bitcoin’s infrastructure, and the language of “mining” and “rigs” but also images such as an instructional website that “illustrates the production of new Bitcoins with animations of a pickaxe chipping at increasingly larger chunks of semitransparent rock, eventually freeing a Bitcoin, represented as an actual golden-colored coin with the Bitcoin symbol inscribed on its surface” (2013, 8–9). This gold imagery proliferates online depictions and discussions of the currency. And as Maurer et al. note, these forms of digital metallism express a theory of money based on intrinsic rather than socially mediated forms of value, such that “that which makes Bitcoin meaningful—that is, its value—is exactly that which is intrinsic to it” (10). Since that has been

18. Personal communication, February 2015.

19. Those who turn to Bitcoin, and gold, may or may not subscribe to a pure efficient markets doctrine, under which the market already works as a set of natural laws. Many do so, but see the role of governments, and especially central banks, as constituting undue “distortion” in the market. Under such circumstances, the code, or the earth, provides the ground on which the distorting influence of people can be circumventing.



**Figure 3.** In Cryptography We Trust. Reprinted with the permission of ClickOn GmbH.

gold's claim for centuries, it makes sense that this theory would be expressed through an idiom of gold. Building, then, on Maurer et al.'s analysis, I argue that Bitcoin's claims to intrinsic value, and the way its proponents use gold as analogy to make these claims, depend on, in its turn, gold's claims that it is not a sign of value, but value itself.

The connection between gold and Bitcoin, and the assertion that their similarities lie in their refusal to engage in semiotic forms of value, is perhaps best demonstrated in a bullion bitcoin exchange founded in London in 2014. Adam Cleary, the exchange's founder, describes its superiority over other exchanges as based in the fact that it has "no fiat currency constraints. . . . It's directly gold for money."<sup>20</sup> That is, gold and bitcoin can trade directly without ever going through the (in their view, flawed) forms of money created by the banking system. In a presentation on Bitcoin to the 14-10 Club in London in September 2014, Cleary showed a slide that facetiously compared "fiat currencies" to tokens in a video arcade, emphasizing their frivolous and flimsy relationship to intrinsic value.<sup>21</sup> As of August 2015, Bullion Bitcoin was no longer in operation, but Cleary (and others) continue to see ways to integrate gold and Bitcoin or to use the blockchain as a way to "digitize gold."

The comparison between gold and Bitcoin may at first seem unlikely, but I hope I have shown several important ways in which the two forms of wealth

20. Interesting slippage between Bitcoin and money; suggestion that Bitcoin is "pure money" ratified by the code.

21. See <https://www.youtube.com/watch?v=b6wesMJF480&feature=youtu.be>.

coincide, and in particular the ways they make similar semiotic claims: they each claim not to signify but to embody value. That Bitcoin makes this claim in part through its “digital metallism,” that is, the discursive and visual practices through which it links itself to gold is particularly relevant to my argument, for it suggests that the historical weight of gold’s claims to intrinsic value are strong enough that they become available for analogical claims, even to describe a form of value whose electronic materiality would seem to place it at the opposite end of the continuum from gold. In the final section of this article, I sketch out a few historical and literary examples in which gold has worked as the incarnate sign of value, in order to show the ground in which such claims are rooted.

### **Gold, Money, and Semiotics**

The history of gold as money lies far beyond the scope of this article, but a few gestures may help us at least to make the connection to the semiotic claims and effects of gold in coins and that of contemporary concerns about physical and paper gold. However, a word of qualification is in order. The definitive work on such a history in the European contexts, Pierre Vilar’s *A History of Gold and Money* (2011), places gold coinage in the context of silver and copper coinage, and traces the relationships between production, coinage, prices, and the development of coinage from 1450 to 1920, with a sizable introduction on the late Byzantine and medieval contexts. Vilar makes it clear that gold was by no means the single or even reliably dominant form of metallic currency for most of European history. He surmises that in 1500 the amount of gold in Europe would occupy about two cubic meters—an astonishing small amount.<sup>22</sup> Gold was more plentiful in the Islamic world through much of the medieval period, a fact which Vilar argues contributed to economic depression in Europe.

The discovery of gold in the New World fired imaginations, to be sure, as in the myth of El Dorado, the legendary, nonexistent golden city; but in fact silver had a much more transformative effect of the world, leading to price revolutions extensively discussed both at the time and later (Vilar 2011), depression in Spain and Portugal, and the rise of manufacturing and of banking in Northern Europe. Debates over intrinsic and face value in addressing the problem of coin “clipping” and the volatility of gold and silver in the seven-

22. In 2013 the total amount of gold ever mined was estimated, according to the annual gold survey of the commodities research firm Thomson Reuters GFMS, to be the equivalent of a cube measuring twenty meters on each side. See <http://www.bbc.com/news/magazine-21969100>.

teenth century, described above, were about both gold and silver. So, in terms of its actual monetary role, gold does not stand out.

Culturally speaking, however, it does. Let me give a couple of instances. In his ethnography on alternative monetary systems in the United States and Indonesia, Maurer (2005) draws on the work of the literary scholar and philosopher Marc Shell (1982, 186–92) to engage the ontological quandaries that occur at the intersection of material gold and its linguistic representation through a discussion of the practice of chrysography (the art of writing in gold) that emerged along with coinage and continued to be practiced by Abrahamic scribes until the twelfth or thirteenth centuries. Maurer asks: “what happens when . . . the imitation reaches the epistemological and mathematical limit of likeness, when, as a copy, it becomes both believable and empirically accurate?” (120). This overlapping of essence and representation can happen with anything. The same question is raised when a block of wood carves out the word “wood,” for instance, or when a stuffed rabbit is made with rabbit fur. But the effect of dissonance seems perhaps more pointed with gold. With gold it seems that this doubling back on itself of copy and original is especially duplicitous, risky or otherwise problematic. This may be because chrysography and related practices call to mind gold’s semiotic claims that already double back in this way: gold does not only look like value, it is value.

The place of gold in medieval Byzantine icons provides an example of how gold’s facility and material qualities work as “qualisigns” (Munn 1986; Meneley 2008; Chumley and Harkness 2013) for power: that is, qualities, as Peirce defines the term, that function as signifying expressions apart from the physical objects in which they adhere (although they cannot be experienced except as manifested in objects). Religious icons in both these periods used multiple materials to achieve a “synaesthetic” affect, whereby the icon acted as a “surface that resonates with sound, wind, touch, light, and smell” (Pentcheva 2006, 631). While this “performative” effect of sensory engagement through material was not limited to gold, gold was one of the most important media through which to indicate luxury and divine power. According to Pentcheva, Byzantine theories of the icon turned on the question of appearance versus essence. Non-essentialist theories held that the icon bore the image or imprint of the divine, but not its essence. The figure and the actual material process of seal making was the model for these nonessentialist positions, so that the “icon and Christ represent the same identity but differ in nature” (639). Competing theories of icons and representation broke out periodically in episodes of iconoclasm in the Byzantine period, as when Emperor Justinian II put a full-faced image of Christ

on the obverse of his gold coins. The quintessential biblical example of a false idol in the Bible was that of the golden calf, frequently referenced in debates over icons.

In his essay "The Gold Standard and the Logic of Naturalism," Walter Benn Michaels looks at Frank Norris's novel *McTeague* in the context of post-Civil War debates over the gold and silver standards and paper money. Commenting on the character of Trina McTeague, who saves gold without knowing why she does so, Michaels writes that the "commitment to precious metals . . . insist[s] that there is value in nature, and . . . suggest[s] that should the value in nature run out, then indeed there would be no value left anywhere. Thus stories about the origin of money tend to be stories about the remarkable physical properties of gold and about the natural 'instinct' that leads men to appreciate them" (1987, 154). This commitment to what I have been calling the "immediacy" of value in gold and the emphasis of gold's physical qualities as ratification of that immediate value, strongly resembles the commitment shown by market participants in physical gold markets in the twenty-first century. Once again, we can see the paradox of gold's semiotic claims to value beyond semiosis. As with the indices described above in the Bundesbank and offices of the World Gold Council and bullion banks, the icons of tactility do the semiotic work of establishing gold's claim to exist beyond signification. These two instances, widely divergent in space and time, show us that gold's capacity as substance to evoke the paradox of the sign whose value is based on its claim not to signify, has a persistent though certainly not continuous history.

In this article, I have made several interrelated arguments: (1) that in a variety cultural contexts, gold has become a site for a very particular semiotic claim—that of not signifying at all; (2) that in the contemporary instance of physical gold in relation to other assets based on gold, this is expressed in an attention to gold's material, tactile qualities (represented both iconically and indexically), and its extrasocial character; (3) that we can see these claims in the analogy made between gold and Bitcoin; and (4) that the self-reflexive semiotic properties of gold have a long and diverse cultural history.

We could see gold as a particular—maybe particularly extreme—case of what Parmentier describes as the "naturalization of convention," the tendency for social actors to see the motivating ground for semiotic activity as situated in the realm of nature rather than convention. Parmentier describes this process as part of a range of articulations of nature and convention in the social embedding of signs, noting that "the relationship between nature and convention [works as] a dynamic process in both social theory and social reality

(1994, 178). I see the semiotic work surrounding gold as a maximal, and maximally explicit, naturalization of convention. This vociferous iteration of value in nature over value by convention makes gold especially apt for the kinds of meaning making and contestation so prevalent in debates over commodity money and “fiat currency,” the “realness” of gold and the perceived similarities of gold and Bitcoin.

## References

- Ballard, Chris, and Glenn Banks. 2003. “Resource Wars: The Anthropology of Mining.” *Annual Review of Anthropology* 32:287–313
- Bernstein, Peter L. 2000. *The Power of Gold: the History of an Obsession*. London: Wiley.
- Caffentzis, Constantine. 1989. *Clipped Coins, Abused Words, Civil Government: John Locke’s Philosophy of Money*. New York: Autonomedia.
- Chumley, Lily Hope, and Nicholas Harkness. 2013. “Introduction: Qualia.” *Anthropological Theory* 13 (1–2): 3–11.
- de la Cadena, Marisol. 2010. “Indigenous Cosmopolitics in the Andes: Conceptual Reflections beyond ‘Politics.’” *Cultural Anthropology* 25 (2): 334–70.
- Ferry, Elizabeth Emma. 2005. *Not Ours Alone: Patrimony, Value, and Collectivity in Contemporary Mexico*. New York: Columbia University Press.
- Gandhi, Ajay. 2013. “A Superlative Form: How Gold Mediates Personhood and Property in Mumbai.” *Etnofoor* 25 (1): 95–110.
- Graeber, David. 2002. *Toward an Anthropology of Value: The False Coin of Our Own Dreams*. London: Polity.
- Gregory, C. A. 1997. *Savage Money: The Anthropology and Politics of Commodity Exchange*. London: Taylor & Francis.
- Ho, Karen. 2009. *Liquidated: An Ethnography of Wall Street*. Durham, NC: Duke University Press.
- Hull, Matthew S. 2012. *Government of Paper: The Materiality of Bureaucracy in Urban Pakistan*. Berkeley: University of California Press.
- Karlstrøm, Henrik. 2014. “Do Libertarians Dream of Electric Coins? The Material Embeddedness of Bitcoin.” *Distinktion: Scandinavian Journal of Social Theory* 15 (1): 23–26.
- Keane, Webb. 2003. “Semiotics and the Social Analysis of Material Things.” *Language and Communication* 23:409–25.
- Keynes, John Maynard. 1924. *A Tract on Monetary Reform*. London: Macmillan.
- Kirsch, Stuart. 2014. *Mining Capitalism: The Relationship between Corporations and Their Critics*. Berkeley: University of California Press.
- Lee, Benjamin, and Edward LiPuma. 2004. *Financial Derivatives and the Globalization of Risk*. Durham, NC: Duke University Press.
- Lépinay, Vincent. 2011. *Codes of Finance: Engineering Derivatives in a Global Bank*. Princeton, NJ: Princeton University Press.
- Li, Fabiana. 2015. *Unearthing Conflict: Corporate Mining, Activism, and Expertise in Peru*. Durham, NC: Duke University Press.

- Marx, Karl. 1857. *Grundrisse*. www.marxists.org.
- Maurer, William. 2005. *Mutual Life, Limited: Islamic Banking, Alternative Currencies, Lateral Reason*. Princeton, NJ: Princeton University Press.
- Maurer, William, Taylor C. Nelms, and Lana Swartz. 2013. "When perhaps the real problem is money itself!": The Practical Materiality of Bitcoin." *Social Semiotics* 23 (2): 261–77.
- Mazzarella, William. 2006. "Internet X-Ray: E-Governance, Transparency and the Politics of Immediation in India." *Public Culture* 18 (3): 473–505.
- Meneley, Anne. 2008. "Oleo-Signs and Quali-Signs: The Qualities of Olive Oil." *Ethnos* 73 (3): 303–26.
- Michaels, Walter Benn. 1987. *The Gold Standard and the Logic of Naturalism: American Literature at the Turn of the Century*. Berkeley: University of California Press.
- Moors, Anneliese. 2013. "Wearing Gold, Owning Gold: The Multiple Meanings of Gold Jewelry." *Etnofoor* 25 (1): 79–110.
- Munn, Nancy. 1986. *The Fame of Gawa: A Symbolic Study of Value Transformation in a Massim Society*. Cambridge: Cambridge University Press.
- Parmentier, Richard J. 1994. *Signs in Society: Studies in Semiotic Anthropology*. Bloomington: Indiana University Press.
- Pentcheva, Bissera V. 2006. "The Performative Icon." *Art Bulletin* 88 (4): 631–55.
- Rajak, Dinah. 2011. *In Good Company: An Anatomy of Corporate Social Responsibility*. Stanford, CA: Stanford University Press.
- Rolston, Jessica Smith. 2014. *Mining Coal and Undermining Gender: Rhythms of Work and Family in the American West*. New Brunswick, NJ: Rutgers University Press.
- Scott, Brett. 2013. *The Heretic's Guide to International Finance*. London: Polity.
- Shell, Marc. 1982. *Money, Language, and Thought: Literary and Philosophic Economies from the Medieval to the Modern Era*. Baltimore: Johns Hopkins University Press.
- Truitt, Allison. 2013. *Dreaming of Gold in Ho Chi Minh City*. Seattle: University of Washington Press.
- Vilar, Pierre. 2011. *A History of Gold and Money, 1450–1920*. Trans. Judith White. New York: Verso.
- Welker, Marina. 2014. *Enacting the Corporation: An American Mining Firm in Post-authoritarian Indonesia*. Berkeley: University of California Press.
- Wortham, Simon. 1996. "Sovereign Counterfeits: The Trial of the Pyx." *Renaissance Quarterly* 49 (2): 334–59.
- Zaloom, Caitlin. 2006. *Out of the Pits: Traders and Technology from Chicago to London*. Chicago: University of Chicago Press.