The Anthropology of Money

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Abstract

This review surveys anthropological and other social research on money and finance. It emphasizes money's social roles and meanings as well as its pragmatics in different modalities of exchange and circulation. It reviews scholarly emphasis on modern money's distinctive qualities of commensuration, abstraction, quantification, and reification. It also addresses recent work that seeks to understand the social, semiotic, and performative dimensions of finance. Although anthropology has contributed finely grained, historicized accounts of the impact of modern money, it too often repeats the same story of the "great transformation" from socially embedded to disembedded and abstracted economic forms. This review speculates about why money's fictions continue to surprise.

INTRODUCTION: THE COIN'S MANY SIDES

A special difficulty arises when reviewing the anthropology of money. It concerns the form of the review itself. Review articles gather diverse exemplars and perspectives to provide an ordered and, at least momentarily, stable account of the topic at hand. They are supposed to provide a unifying framework and a rubric against which to calibrate and evaluate specific works in relation to wider bodies of scholarship. By definition they oscillate between the general and the specific to generate intellectual value. In so doing, review articles function something like modern money, and something like anthropology. Modern money, at least as it is described in the classical accounts of Marx, Weber, and Simmel, provides a universal yardstick against which to measure and evaluate the universe of objects, relations, services, and persons. It "commensurates incommensurabilities" (Carruthers & Espeland 1998, p. 1400) and "makes impossibilities fraternize" (Marx 1844, p. 110) by bringing things under a common rubric. Anthropology, at least as it has been practiced since the disciplinary stabilization of academic knowledge, provides generalizations about social and cultural life using detailed descriptions of particular incommensurate worlds. It makes the strange familiar. This, like money, is a fantastical endeavor (see Strathern 2005, p. vii). The chapter before you, therefore, necessarily operates as if in a hall of mirrors because the terms it would bring under the prescriptions of the review format exist in an awkward relationship of doubling with each other and with the review form. In assessing the classical account of money against recent scholarship in the human sciences, this review finds considerable openness and paradox, and it does not work to "solve" so much as to prod and to irritate. In this it may thus be more true to the character of modern money (and contemporary anthropology) than the classical accounts would have it.

The difficulty in reviewing the anthropology of money is compounded by the reliance of much anthropological research on theories of meaning and symbol that derived analytical precision through monetary metaphors. Thus, Saussure's structuralist semiotics, on the notion of linguistic value as a function of relations of difference, borrowed from Swiss colleague Vilfredo Pareto's marginalist economics of price (see Maurer 2005b, pp. 159–60):

> To determine what a five-franc piece is worth one must therefore know: (1) that it can be exchanged for a fixed quantity of a different thing, e.g., bread; and (2) that it can be compared with a similar value of the same system, e.g., a one-franc piece, or with coins of another system (a dollar, etc.). In the same way a word can be exchanged for something dissimilar, an idea; besides, it can be compared with something of the same nature, another word. (Saussure 1966, p. 115)

Goux (1973) sees in Saussurian linguistics an isomorphism and psychic homology between economic exchange and linguistic exchange, both animated by the lack of a transcendental signified (the general equivalent in Marx, the murdered father in Freud, the phallus in Lacan). "Between money and language," he writes, "one finds in the history of Western philosophy the insistence of a comparison that is not exterior. . .but is the local, fragmentary perception of a real, historical-social coherence" (Goux 1973, p. 183; see Maurer 2005b, p. 162). If the language is interior to the money form, and vice versa, it is difficult to say anything meaningful about money at all that is not immediately and already part of money itself (Sohn-Rethel 1978). And this review could end here.

I am not particularly taken by the logic of interiors and exteriors, and as this review should make evident, I am much more concerned with money's pragmatics than its semiotics, at least in the structuralist sense. I am also, however, deeply interested in anthropology's pragmatic contribution to money and scholarly discussions about it. The emerging social studies of finance literature that brings together scholars from anthropology, geography, sociology, international political economy, and science studies has spotlighted academic theories' constitutive relationships to their objects of study (de Goede 2005a). Given the wide dissemination of older anthropological assessments of money, value, and exchange, it would be surprising not to find anthropology's performative effects on money itself, if only we would look.

In a recent review, Gilbert (2005) argues persuasively for "drawing out the paradoxes of money as always a symbolic referent, a social system, *and* a material practice" (p. 361, emphasis in original). None of these three characteristics, she asserts, can be separated from the others. The anthropology of money occupies a familiar place in her review. First, it provides a narrative foil: the anthropology of money reinforces the conventional evolutionary account of the transition from barter to special purpose, socially embedded moneys to general purpose, disembedded, and depersonalized moneys (Weatherford 1998), which Gilbert rightly criticizes (and which recent anthropological research on the "return" of barter in postsocialist states seriously challenges) (Humphrey 2002). Second, anthropology contributes methodological rigor and empirical specificity. It provides ethnographic studies of monetary practices on the ground, which, in demonstrating the social embeddedness of nonmodern money, provides methodological suggestions for investigating the embeddedness of modern money, too.

Yet why is the anthropology of money still so often a retelling of the "great transformation" postulated by Polanyi (1944), a compendium of exotica coupled with a morality tale about the world that "we" have lost? In part, at least, this is a fault of our fidelity. One might just as well ask why we keep teaching Mauss (1954), Bohannan (1959), and Taussig (1980). We are remarkably faithful to that which we still claim as our unique contribution to knowledge: "the ethnographic record," and the manner in which it makes us "think different" about our own situation.

I do not want to deny the great transformation: It is a good story, and it works pedagogical wonders in our classrooms and can still stop some economists and sociologists in their tracks. Still, anthropologists and other social scientists have been remarkably adept at reinventing the wheel where the study of money is concerned. We have also been good at containing our more exciting insights about money (conveyed in several exemplary edited collections, e.g., Akin & Robbins 1999, Guyer 1995b, Parry & Bloch 1989), while presenting to the outside world the comforting plotline we are always expected to relate, about the impact of money on "traditional" societies and the dehumanizing and homogenizing effects of monetary incursion on all aspects of life in our own society. We do this even as we rediscover the moral, embedded, and special-purpose functions of our "own" money and the calculative and rational dimensions of nonmodern money (Appadurai 1986). I wonder whether the repetition compulsion to circle back to the classical account of the invention and impact of modern money is a crucial component of that money form itself. Social inquiry provides both an analysis and a folk theory about money in the capitalist West. And that folk theory has effects: The telling of the tale and the criticisms of the tale—for neglecting the embeddedness of the economy (Granovetter 1985), for overlooking money's earmarking for special purposes (Zelizer 1994), for obviating the diverse and multiple monetary repertoires with which people engage and create spaces and times of value (Guyer 2004)—may in fact constitute money today, its indeterminacy, its openness.

This is not to put wholly to one side the claim that the state of anthropological and indeed broader social scientific discussion about money is at an impasse. The notion of spheres of exchange continues to be reformed (Hutchinson 1992, Piot 1991, Strathern & Stewart 1999). The relative weight of money's different "functions" continues to be debated, with some scholars emphasizing its function as a means of exchange (Robbins & Akin 1999), others stressing its function as a unit of account (Ingham 2004, after Grierson 1977), and others refining the Marxist tradition on money as the ur-commodity (Lapavitsas 2005; compare LiPuma 1999). One could easily argue that not much has happened since Bloch & Parry's (1989) signal intervention, which sought to unseat the old distinctions between primitive and modern, special-purpose and general-purpose moneys by redirecting analytical attention to the different time scales according to which transactions take place (discussed further below). And even Bloch & Parry's contribution has not been fully absorbed (but see Gamburd 2004, Znoj 1998).

Recent years have seen new attention to money, however, even more than in the heyday of the debate in economic anthropology between the formalists and substantivists. Perhaps this is because the past three decades have witnessed the advent of what Gregory (1997) calls "savage money": money increasingly detached from political control as well as from the material goods and labor that supposedly provide its backing. In the early 1970s, the international monetary regime created through the Bretton Woods agreements ended. In 1971, U.S. President Richard Nixon "closed the gold window," halting the U.S. dollar's fixed relationship to that precious metal and ushering in an era of flexible exchange rates. Deregulation in banking and finance permitted an explosion of new financial products and relationships; post-Fordist, just-in-time, and flexible production strategies required speedy movements of capital and new extensions of credit and debt to the point at which credit, exchange, and circulation displaced production, at least in the social imaginary (and in cultural theory) (Spivak 1988). Offshore finance blossomed (Hampton & Christensen 2002; Hudson 2000; Maurer 2001; Palan 2003; Rawlings 2005a,b; Roberts 1994). Financial derivatives hit the headlines, mainly in scandal (Pryke & Allen 2000, Tickell 2000), and scholars started paying serious attention to the new culture of risk in financial markets (Garsten & Hasselström 2003, Green 2000). A vast literature exists in geography and international political economy on the rise and fall of Bretton Woods (see Cohen 1998, Corbridge & Thrift 1994, Helleiner 1994, Leyshon & Thrift 1997, Strange 1998, Tickell 2003).

Perhaps anthropologists are now fascinated again with money because it is their new exotic. Most living anthropologists today have grown up and were trained during or immediately after the Bretton Woods era. The end of that era has made a direct impact on our lives as academic employees and citizens of nation-states. We are increasingly called on to "enterprise up" our contributions to knowledge and demonstrate the value-added of anthropological research in the corporatizing university (Poovey 2001, Strathern 2004). And we are increasingly made responsible not only for accounts-keeping at work but also for portfolio management at home, as the possibility of retirement hinges on our financial investments, not our affective attachments to a lifetime employer or a national welfare state.

If in his Malinowski lecture Hart (1986) could put forward an analysis of money's two sides—heads, the creation of value by state fiat, and tails, the marking of value to the market—the world today seems ever more determined by markets outside the control of any state or, indeed, any human agents at all. Finance's formulae, once unleashed in distributed calculative networks of human and technological agents (Callon & Muniesa 2005), seem to work all by themselves and rework the world. The fictions of finance, the "economy of appearances" (Tsing 2000), the "cultures of circulation" (LiPuma & Lee 2004; compare Eiss 2002), wizard worlds at once abstract, distant and mesmerizing. Ethnographic inquiry founders when it attempts to capture these fantastic fictions; our attachment to certain forms of empiricism encourages skepticism (Moore

1999). Yet ethnography meanwhile discovers traces of these financial confabulations in the worldwide resurgence of occult economies of witchcraft (Geschiere 1997), zombie stories, and the interplay of transparency and conspiracy (Comaroff & Comaroff 1999, 2000; West & Sanders 2003). Where anthropology once contributed reports of special-purpose moneys that were grounded in social relations of rank and prestige, it now records the responses of people on the ground to the abstractions of finance circulating over their heads. In both sets of accounts, however, money and the violence of its abstractions erode the sociability subtending human existence, and the very idea of society itself. Money's baaaaaaaaaad.

It was precisely this emphasis on the amoral or actively immoral aspects of modern money that Bloch & Parry (1989) sought to correct. They attempted to refocus anthropological attention away from Western folk theories of monetary transformation (the root of all evil, the camel through the eye of the needle...) embodied in influential accounts from Aristotle to Marx, Weber, and Simmel. Instead of money changing everything, they suggested, existing world views give "rise to particular ways of representing money" (p. 19). This was not, strictly speaking, a relativizing gesture: Once the focus is shifted to "whole transactional systems" Bloch & Parry found "significant regularities which strongly qualify the highly relativistic conclusions" brought about by a consideration of money's meanings in isolation (p. 23). These regularities concern the time scale of monetary transactions: Short-term gain is generally morally permissible so long as it does not interfere with the long-term stability of an "enduring social and cosmic order" (p. 28). Money determines the morality of exchange only insofar as previously existing moral orders maintain, in the long run, their durability in the face of short-term individual competition.

Hart's (1999) "memory bank" of the history of monetary ideas and practices contains within it a certain hope for a new money that would reground economic exchange and value creation and storage in moral and social relationships and nurture a long-term cosmological order based on trust and justice. I am not interested in the normative, prescriptive aspects of Hart's work except in so far as they serve as an exemplar of discussions about socially embedded and embedding moneys in other domains. It is no coincidence that alternative currencies and local exchange and trading systems (LETS) have emerged—and sparked intense intellectual interest—in the same historical moment as the rise of high finance and the increasing mathematical abstraction and complexity of international monetary transactions. Attention to dominant forms of money had led to a neglect of "subalternate" moneys (Gregory 1997). But why is it seen as an unqualified good that money should be regrounded in sociality, community, and regard? What can such moral moneys like LETS (see Helleiner 2000, Karatani 2003, Lee 1996, North 1999) tell us about the state of money itself as well as the state of the academic and popular imagination about money? Bloch & Parry (1989) identified money's depersonalizing effects as a Western folk theory of money; money's role in commensuration, abstraction, and quantification is also a Western folk theory, even if it is instantiated (performed, if you will) in monetary practices.

GREAT TRANSFORMATIONS? ABSTRACTION AND COMMENSURATION

In Simmel's (1907) account, money's abstraction and anonymity liberated humans from age-old distinctions of status and fostered a double-edged egalitarianism: Money freed people from corporate statuses but left them with nothing but money itself with which to evaluate and judge the social and natural worlds around them (Turner 1986). It is cause and consequence of the transformation from gemeinschaft to gesellschaft (Keister 2002, p. 40), the disembedding of the economy from society that sparked the "great transformation."

It was from Polanyi that Bohannan (1959) introduced to anthropology the concepts of general-purpose and special-purpose money. General-purpose money serves three (or four, or five, depending on who is consulted) functions: means of exchange, method of payment, standard of value (and store of wealth, and unit of account). Special-purpose moneys serve only one or two of these functions, and, in Bohannan's exposition of the Tiv economy, only within specific spheres of exchange. Morally neutral "conveyances" occurred within the spheres of exchange and morally charged "conversions" occurred between them (p. 496). With the introduction of Western, general-purpose money, the brass rods used in the prestige sphere increasingly came to assume the other functions. General-purpose money allowed conversions between the spheres. The increasing access to and circulation of general-purpose money sparked inflationary pressure on bridewealth because the amount of general-purpose money increased while the number of marriageable women remained constant (p. 502; see Strathern 2005, p. 124). Those with access to general-purpose money could thus thwart the older distinctions of rank. Such inflation has been widely reported in the anthropological literature on the interaction between special-purpose moneys like wampum, cowries and coppers, and colonial currencies (Dalton 1965, pp. 60–61; Graeber 2001; Hogendorn & Johnson 1986; Law 1995; see also the contributions to Guyer 1995b), even as colonial and postcolonial peoples often actively resisted the adoption of colonial currencies (Saul 2004). Meanwhile, what came to be called the currency revolution in Africa was variously taken up (Hopkins 1966, Ofonagoro 1979) and criticized for being insufficiently attentive to history and regional trading networks (Dalton 1999, Dorward 1976, Guyer 1995a, Guyer 2004). Those brass rods, after all, were imported from Europe.

The Polanyist position was carried forward by substantivist economic anthropologists like Dalton (1965). Dalton faulted Malinowski and Firth for basing their models of money on their own general-purpose kind. They therefore found that the Trobrianders and others lacked money because their tokens of wealth and strings of shell disks did not serve all the functions of money. Dalton argued that because our own economy uses the same stuff for commercial and noncommercial exchanges, Malinowski and Firth did not understand "primitive" special-purpose moneys used for noncommercial exchanges to be "money." For Dalton, the key variable in understanding "primitive money" is the degree of a society's integration into the commercial market. This places some moneys in a new light: Dalton's reanalysis of Rossel Island shell money hinged on the fact that the shells were not media of commercial exchange, but were ranked into a hierarchy for the purposes of noncommercial exchange. They thus did not have to possess some of the qualities generally associated with money, such as divisibility and portability. Now, when Western moneys started being used for noncommercial payments like bridewealth, Dalton argued, they constituted a "structural link. . .between spheres of exchange" with "inevitable repercussions on traditional social organization and practice" (Dalton 1965, p. 61).

Classic anthropological accounts of money thus stressed its peculiarity among exchangeable objects, a peculiarity brought into sharp relief when modern, capitalist, state-backed moneys began to circulate in the nonmonetized economies of so-called primitive societies. According to Marx, Simmel, and Weber, capitalist moneys render everything quantifiable according to one scale of value and permit previously unthinkable comparisons among objects, persons, and activities. Uniscalar valuation (Kelly 1992) and universal commodification (Taussig 1980) were seen as the hallmarks of modern, capitalist money, and as eroding other societies' systems of value, flattening the dense and complex networks of value formation that had previously been built on distinctions of gender, rank, age, and status. Money makes inanimate things reproduce and confounds categories among human, spirit, and natural worlds, and so "primitive" and peasant societies encountering money in the colonial transformation of labor experienced it as Aristotle did at the time of the ascendance of the Greek democratic polis against the symposia of hierarchical elites (Kurke 1999, Taussig 1980).

As anthropologists delved more deeply into the impact of money on subsistence economies, and as the societies' anthropologists studied themselves transformed under the impact of capitalist money, scholars became less certain that money's homogenizing effects were as complete as once believed. Melanesianists and Africanists provide important correctives to Bohannan's model. They note its emphasis on objects as "things in themselves" (Hutchinson 1996, p. 90) as opposed to social relationships (Piot 1991; Robbins & Akin 1999, p. 9). They also have insisted on identifying different modalities of exchange, including, in Melanesia, the exchange of "exact equivalents" (Robbins & Akin 1999, p. 9), as well as more familiar modalities of sharing, buying, and delayed-return exchange. In certain cases introduced moneys become associated with the foreign, but money can be either feared or, contra Simmel, incorporated, encompassed, and relocalized (Rutherford 2001) or sacralized (Eiss 2002). In some cases, introduced moneys become associated with exploitation (through wage labor or trade in imported goods, for example) while local moneys are taken anew to index "culture" or heritage (Akin 1999). Arno (2005) provides an interesting ethnography of "cultural currencies"—"performative expenditures," not money per se—that are deployed in the service of sentiment.

In an ample number of documented cases the introduction of modern money is met with a shrug, or at least with little of the anxiety the great transformation narrative would predict; modern moneys are often simply welcomed because they are, well, "modern" (Robbins 1999). Purportedly distinctive aspects of commodity exchange, such as the individualist concern with getting ahead at the expense of others, sometimes "resonates with aspects of the indigenous social system" (Brison 1999, p. 153). In "societies where individuals are preadapted to wanting to expand their material base in order to gain influence," such supposedly capitalist orientations to material gain can "catch on" quite quickly (Brison 1999, p. 152; Foster 1995a). In such situations, people are less likely to be concerned with the medium of exchange so much as with the dynamics of its blockage and flow (Foster 1999). Shifting the optic from exchange to flow or circulation also returns the objects of exchange to "the space and time of their genesis" (Eiss 2002, p. 293; Gilbert 2005; Keane 2001), revealing relationships missed by the reification of subjects and objects that is sometimes presumed by the analytical category of exchange. Anthropologists found that although money is powerful, its introduction is met with appreciation, fear, and even ennui [note that Robbins & Akin's (1999, p. 35) comment that "bitter money" (Shipton 1989) has "made few appearances in Melanesia"]. It has not always and everywhere displaced traditional currencies. It does not always gather to itself exclusively the functions social scientists have ascribed to it, as a means of exchange, store of wealth, measure of value, method of payment, or unit of account.

Similarly, in complicating the picture of the great transformation in the capitalist West, sociologists found instances during which money and finance seemed more dependent on their re-embedding in social relations than on their depersonalized abstraction (Keister 2002). It is not clear that money always flattens social relations, rather than creating new ones just as complex. Extensions and reformulations of the classic accounts of money's effects revolved around the reach of money's abstractions and the social dynamics of commensuration itself (Espeland & Stevens 1998). Sociologists note that modern money can be just as socially embedded and special purpose as so-called primitive money (Zelizer 1994, 1998).

None of this should be news, however. Writing in *American Anthropologist*, Melitz (1970) challenged the Polanyist paradigm by pointing out the ways in which general-purpose money is often rejected for some purposes (we do not indiscriminately accept just anyone's checks; we shun the receipt of pocketfuls of coin). He also noted that we engage in "baby-sitter exchanges, car pools, trade-ins, exchanges of free services within professions" and hold nonmonetized relationships of "allegiance, and good-will" that are convertible into goods without the intervention of money (Melitz 1970, p. 72). Although Melitz concluded with an economist's analysis of money as reducing transaction costs, he pointed to the social significance and differentiation of modern money and the fuzzy boundary between "primitive" and "modern," long before Appadurai stressed the calculative dimension of gift societies and the moral dimension of commodity societies or Zelizer drew attention to the social meanings and uses of modern money.

Part of the problem, as Bloch & Parry (1989) noted, is that monetary meanings and uses were often treated in isolation from wider transactional orders. Guyer's brilliant reformulation of Bohannan is based precisely on the wider view, both spatially and temporally. "One can simply lift off the boundedness of the model [of spheres of exchange] and connect each sphere to its regional trading networks," she writes (2004, p. 28). One then sees "not barriers [between spheres] but institutions that facilitated asymmetrical exchanges across value registers" (p. 28). A further difficulty arises, however, when we are confronted with "societies" in which the very question of "the larger social order...is itself highly and openly contested" (Robbins & Akin 1999, p. 35). Robbins & Akin (1999) are referring to Melanesia, but we might just as well consider postwelfare state Euro-American worlds in which, as Margaret Thatcher put it, there is no such thing as society, only individual men and women, and families. How are relationships objectified, indigenously and analytically, and what should the anthropologist do when indigenous and analytical objectifications converge (Riles 2000)?

Another part of the problem is we are dazzled by the act of commensuration that seems so central to modern money and the process of abstraction on which it depends. Popular and scholarly accounts of commensuration and abstraction express a fascination with boundary objects whose commodification and entry into the monetary calculus is often morally fraught, such as children, body parts, sex, ideas, and so-called cultural properties. How can such things be placed on one scale of value, the same scale of value as subsistence, labor, luxuries, or anything else? As Strathern argued, and I have discussed elsewhere in a different context (Maurer 2003), comparison demands the creation of numerical ratios between different goods to commensurate differences in value. Other operations, such as the exact substitution involved in some Melanesian exchange, create analogies rather than ratios. Thus finding equivalencies between objects in the exchange of gifts "will always (can only) appear as a matching of units" understood as analogues of one another (Strathern 1992, p. 171), not as a comparison of ratios. So, gift exchange does not depend on "how many ones make up 20 or 30" in an exchange of pig for sago, but "how many ones make up the right one" (p. 187, parentheses omitted). If we are dazzled by the counting in gift exchange, we are utterly blinded by the mathematics of monetary commensuration in "modern" societies, for we persist in viewing money as the "most quantifiable expression of the commodity," as the "expression, index, and measure of...commensurability" (LiPuma 1999, p. 198). It is, and it isn't. This paradox deserves scrutiny.

NUMBER AND QUANTIFICATION

Closely related to the question of commensuration and abstraction is the problem of money's mathematics—the kinds of calculation and equivalence it encourages. Helen Codere (1968) created a classification of money systems and monetary semiotics based on the extent and magnitude of the numbers involved. Her account interested Melitz because it seemed to "contrast abstract numerical manipulation with practical numerical application" (Melitz 1970, p. 1035). It was notable for its attempt to categorize moneys on the basis of the interrelationships among symbol, number, and use. Although earlier work such as this found a direct relationship between quantification, commensuration, and the "great transformation," money does not always divide up the world into quantifiable bits without remainder. Money may render everything calculable, but the systems of calculation and quantification on which it depends are not always as straightforwardly algebraic as one might imagine. Number, like money, is representationally complex (Foster 1999). Numbers do not always point to enumerable objects in the world (Rotman 1997) but can, for example, also signify the divine, the transcendent, the ineffable (Maurer 2002). And even where calculation seems dominant, it can be put to new uses and effects, as when people use the mathematics of money outside the sphere of the economy proper, to make sense of their lives, loves, and longings in other domains (Miyazaki 2003).

Consider Crump's (1978) analysis of money, number, and market relations in the state of Chiapas in southern Mexico in the 1970s. Market transactions using money, he argued, introduced notions of number and classification that were alien to Tzotzil counting and linguistic classifier systems. Money and number were thus the leading edge of linguistic conversion and cultural assimilation. As he put it, "the equivalence property of money. . .converts two unlike things into each other, and so money, in its own terms, effaces the distinctions inherent in any system of classification, so you can mix chalk with cheese" (p. 507). This echoes the common idea in the sociology of money, via Marx and Simmel, that money commensurates, flattens, and homogenizes.

A number of other case studies reach similar conclusions. Ferreira's study of counting among some Brazilian indigenous groups finds that monetized market transactions reshape number so that money and number together become the chief means of quantitative comparison, measurement, and evaluation and create a "conflict with other value systems" (Ferreira 1997, p. 135). Hutchinson's study of the Nuer demonstrates how money's commensuration of values increasingly flattens relationships and simultaneously invests personal possessions with deeper importance and meaning.

> If modern man is free—free because he can sell everything, and free because he can buy everything—then he now seeks. . .in the objects themselves that vigor, stability, and inner unity which he has lost because of the changed money-conditioned relationships that he has with them. (Simmel, quoted in Hutchinson 1992, p. 294).

When monetary exchange is anonymous and anonymizing, the social identities of transacting parties are irrelevant to the value of the objects mediated by money (Graeber 1996, p. 6), and so the things take on the powers of the fetish described by Marx and the object of desire discussed by Lacan, Žižek, and others.

This does not mean that numbers always do what we think they do, or that numbers really are abstract and disembodied entities from a realm of pure form (Rotman 1997). We should aim to develop richer vocabularies of numerical scale and quantification techniques and procedures, even borrowing such vocabularies from the realm of statistics and mathematics themselves. We should also examine the interaction of the different scales, for example, of time and money in wage labor and the new disciplines of loan repayments in colonial and postcolonial contexts (Berry 1995; Elyachar 2002; Falola 1995; Stiansen & Guyer 1999, p. 10). And we might want to leave Marx to one side while we do this. As Guyer writes in the conclusion to her study of monetary repertoires in West Africa, "we need to increasingly incorporate attention to thought [i.e., processes of abstraction and analysis common to economic practice and to social description and explanation] and calculation.... [O]ne needs to 'think other' precisely about number, measurement, and money in the awkward and dangerous present because they are such powerful constructions in a quantified and insurgently commercial world" (Guyer 2004, pp. 174–75).

I part with Guyer only on the last phrase. Here Guyer, like many others, indicates a concern that the quantitative function of money "downplays, or even ignores those aspects of value that cannot be reduced to a single number" (Carruthers & Espeland 1998, p. 1401). We should not fear numbers simply because they are numbers and we think we know what numbers do, always and everywhere. I have written elsewhere that the anxiety about number is based on a bringing together of the equivalence function of modern money with the Simmelian money-as-acid hypothesis, and the folk theory that presumes that whenever we see numbers and math we see something that counts, calculates, equates, desacralizes, and rationalizes (Maurer 2005). The anthropology of number and counting belies the common sense of calculation (Mimica 1988, Urton 1997, Verran 2001). Does number actually always permit "a generalized abstraction of value across otherwise incommensurable domains" (Maurer 2005b, p. 104)? This is a research question. When does it do so, and when does it do something else?

In numerous instances, quantification and money, together, resacralize exchanges and conversions, although this is rarely drawn out in the literature with the detail one would like: with the dead, for example, in the burning of ghost moneys (which have taken on special significance in the wake of economic transition in China and Vietnam; see Jones 2003; Kwon 2006; Yang 2000; see also Feuchtwang 1992), in prosperity cults (Jackson 1999), in rotating credit associations (Kurtz & Showman 1978), and in a host of other religious practices (Belk & Wallendorf 1990, Werner & Bell 2004). One suspects that moral assessments of certain adjectivally marked moneys—dirty money, hot money (Znoj 1998), bitter money (Shipton 1989), money that burns like oil (Gamburd 2004), "liquid" money (literally, Rogers 2005; and figuratively, Ho 2005)—derive from those moneys' positions as hinges between short-term and long-term transactional orders (Bloch & Parry 1989). Guyer provides an analytical vocabulary that can help anthropologists begin to flesh out their analyses of the relationship between morally marked moneys, transactional orders, and different numerical scales. Even specifying whether we are dealing with nominal, ordinal, interval, or ratio scales when we see money's numbers in specific exchange modalities would go far toward moving the discussion of calculation away from the money-as-acid hypothesis (see Guyer 2004, p. 49).

What interests me most about anxiety about quantification is the way the folk theory works. It is exemplified in the title of Crump's (1978) essay, "Money and Number: The Trojan Horse of Language." Counting money, an abstract scale for measuring value, spills over into other domains of enumeration because money itself brings ever more objects, entities, or activities from those domains into its calculus. The use of the sign of money outside the domain of the limited market for subsistence goods—in Crump's case—feeds back to warrant the whole sign-game of the economy itself.

The problem here concerns the theory of the sign. Guyer (2004) and Munn (1986) can help us see that the assumption that money enforces a kind of colonizing quantification misses that quantity is simultaneously a quality of things. Guyer argues that, in "Atlantic Africa," "number and kind were both scales, among others; none were anchored in a foundational invariant; all were at play" (2004, p. 12). Furthermore, the set of scales did "not constitute a cognitive map" but rather a "repertoire, the elements pegged to each other in performance" (p. 60). Guyer thus adopts a performative and pragmatic approach to number that has far-reaching implications for assessing the relationship between numeration and money.

In her deconstruction of cognitivist accounts of mathematics via Californians' comparisons of quantity and value in the supermarket, Lave argued that anthropologists and psychologists held a functionalist theory of knowledge. Knowledge was presumed to be "context-free, value-free, body-free and factual" (Lave 1988, p. 88); and cultural knowledge mirrored the academic "(professional) mind" in arranging knowledge in discrete and hierarchically nested domains (Lave 1988, p. 88). Her point was not simply that one needed to add the contexts and the bodies to come to a better appreciation of the facts. More centrally, she argued that problem solving is not a cognitive operation but an ongoing activity involving "other kinds of concerns" beyond the math problem per se; "relations of quantity are merged (or submerged) into ongoing activity" (p. 120). "What motivates problem-solving activity in everyday situations appears to be dilemmas that require resolution," not problems requiring definitive solutions (p. 139).

MATERIALITY AND THE FICTIONS OF FINANCE

Renewed attention is being given to quantification because of the highly complex and abstract mathematical operations of modern finance in the post–Bretton Woods world. The contrast between Crump on the one hand and Guyer and Lave on the other hand is replicated in the finance literature in the contrast between, say, LiPuma & Lee (2004), and Callon (1998) and MacKenzie (2001). LiPuma & Lee (2004) suggest that the ascendance of specific quantitative principles in contemporary capitalism is ipso facto transforming social imaginaries. "[N]ew financial instruments assume that particular forms of risk. . .can be aggregated as an abstract form, determinable by mathematical calculation" (p. 208). Taking to a new level the social statistics of nineteenth-century forms of knowledge and power—beyond the nation-bound form of such statistics and toward a vision of a global totality—the "contemporary objectification, calculation, and distribution of risk rely on larger and more accurate data sets and increased computer power, all driven by competition among mathematically sophisticated quantitative experts" (LiPuma & Lee 2004, p. 209).

Similarly, Poovey (2001) explicitly contrasts quantification with humanism, arguing in the case of university financing that the penetration of market values "erodes" humanity by disallowing "goods that are goods in themselves—that defy market evaluation because they are not quantifiable, thus not subject to commodification" (pp. 11–12). In making this contrast Poovey echoes Simmel, of course. In taking as its content only "the most objective practices, the most logical, purely mathematical norms," money also bequeaths "the absolute freedom from everything personal" (Simmel 1907, p. 128). This is a tale of the infinite extendibility of calculative abstraction. As with the Trojan horse of language and the transformation of the social imaginary caused by the extension of abstract quantification, that extendibility is presumed to just happen. Once the calculative agencies are unleashed, they cover the world and make all meanings of the same species, from sign to meaning to matter. There can be no going back.

Now, as Callon & Muniesa (2005) write, "economic calculation is not an anthropological fiction"; it is out there in the world and demands critical attention. But it is not the preserve of a set of technical experts bent on world domination. Rather, it is "distributed among human actors and material devices," and because of its distributed character across human and nonhuman agents, there are always "several ways of calculating values and reaching compromises" (p. 1254). This demands attention to how calculative agencies produce their effects, without assuming in advance what those effects might be. The approach is less semiotic and more pragmatic or performative; it stresses feedback loops between the worlds modeled and instantiated by finance theory. MacKenzie (2001) shows how even the activities of those who disbelieve the efficient markets hypothesis help make the market more efficient by seeking out and closing off arbitrage opportunities (p. 129), creating a world in the image of the mathematical models of finance (see also MacKenzie & Millo 2003). Over time, the effect has been to make "the typical assumptions of finance theory...empirically more realistic" (p. 132). Such feedback loops are "performative" and depend on their enactments and iterations rather than on their meanings (but see Miller 2002, Neiburg 2006; see also de Goede 2005a). There is surprisingly little research, however, on the impact of anthropological theories on their objects of study, although the recent turn toward ethnography among some financial and other professionals outside of academia may begin to generate anthropological interest (Holmes & Marcus 2005).

As Miyazaki (2005) points out, the performative approach derived from Callon (1998) holds fast to the assumption that quantification materializes an economy, rather than being open to the possibility that quantification makes other effects. He and Zaloom (2003) both demonstrate how the numbers and the calculations do not always refer to the commodities and contracts behind them, and they are not undertaken solely for the purposes of financial risk management or profit making. Zaloom finds among Chicago and London futures traders a corporeal investment in numbers, not just rational calculation. She documents the bodily practices traders develop around their work with numbers and how they develop affective relationships or a feel for them rather than seeing them entirely as a rational calculus. Indeed, for some, "the first step" of becoming a successful trader "is learning *not* to calculate" (Zaloom 2003, p. 264; see also Knorr-Cetina & Bruegger 2002). Miyazaki finds that among Japanese arbitrageurs, who exploit and in the process close off temporal gaps in global prices, the multiple and incongruous temporalities with which traders are involved also constitute their life trajectories; the numbers redound into their self-perceptions. Arbitrageurs come to view not only their careers but also their life course itself as a process of arbitrage and even plot out other domains of their lives on the model of the numerical spreadsheet (Miyazaki 2003). Here is a case in which the mathematical models of economics and finance create not only "the economy" but also traders' personal biographies.

I have reviewed the anthropology of finance at length elsewhere and do not repeat that work here (Maurer 2005a). However, new social scientific research on finance, such as Miyazaki's (2005) and Riles's (2004), is redirecting attention away from the obvious fictions of finance and toward its material instantiations in lives, documents, and worlds. The financialization of the world economy since the 1970s and the end of Bretton Woods era have made even professionals—bankers, financiers, lawyers—acutely aware of money's fictional qualities, its imaginative economies, and its ability to literalize its metaphorical possibilities. The anthropology of finance is illuminating the worlds of the stock market trading floors and of the financial engineers who seek to create new products, and new moneys, for a changing world (Garsten & Hasselström 2003, Hertz 1998, Ho 2005, Miyazaki 2003, Riles 2004, Zaloom 2003). It is doing so in conversation with sociologists (Knorr Cetina & Preda 2005), geographers (Clark Thrift & Tickell 2004), international political economy (de Goede 2005b), and scholars working in science and technology studies (MacKenzie and Millo 2003). Although there are some distinct disciplinary differences here (see de Goede 2005a; Maurer 2005a) the cross-fertilization between fields has been quite generative.

Money's materiality—the stuff of which it is made—has always been a source of fascination for those exposed to it anew and for social theorists. Against Plato's contention that money was a mere token, Aristotle and Locke argued that money had to possess certain substantive attributes (durability, transportability, as well as inherent value; compare Robbins & Akin 1999) to become a medium of exchange and payment. The history of these contending viewpoints is, in many respects, the history of the development of Western moneys themselves, from specie to specie marked with the stamp of the sovereign to specie-backed paper to notional ledger-ticks, electronic or otherwise. Between the electrum of ancient Lydian coins to the electronic currencies of the present day, money has been a metaphor for and exemplar of the problem of the relationship between sign and substance, thought and matter, abstract value and its instantiation in physical and mental labors and products (Shell 1982, 1995). This problem is at the center of much of the recent work on finance.

Anthropologists and other social theorists have long queried money's relation to political entities and to markets, the "two sides of the coin" around which Hart (1986) reoriented much discussion of money in the 1980s—a token backed by the state, commodity set in motion by the market. On the one hand, Hart's intervention directed anthropologists to the relationship between "market-mediated and state-regulated" monetary transactions (Guyer 1999, p. 245). The state side of the coin reflected hierarchical relationships of political authority; the market side reflected the putatively equal and horizontal relationships of the parties to market exchange. Hart postulated a historical process of oscillation between the two. As Guyer (1999) points out, Africanist studies of monetary transformations tended to take their lead from Hart, rather than from Bloch & Parry (1989). This may be because the emphasis on the state and political economy fit better with West African histories of social payments among unequals and the imposition of colonial currencies through state payments such as taxes as well as the oscillation between state payments and wider regional market networks.

The two sides of Hart's coin—state/market or token/commodity—map neatly onto the word/substance distinction central to longstanding Western monetary imaginaries (Shell 1982), if states create value by the strength of their word and markets create value through substantial exchange. Studies of monetary iconography (Gilbert 1998; Hewitt 1994, 1995) and money's symbolism have sought to understand how money comes to signify national identity, or how money is used in national projects to stitch together national sentiment and solidarity (Helleiner 1998, 1999, 2003).

Just as it is not news to anthropology that money is a social relation, a symbolic system, and a material reality, so too it is not news to other scholars of money that people freak out when the apparent hegemony of money's fictionality and abstraction is newly revealed. There are strong resonances between the contemporary discussions of money's increasing abstraction and finance's fantasies and that of postbellum arguments in the United States among Greenbackers, goldbugs, and bimetallists. Sociologists Carruthers & Babb (1996) argue that the contemporary discussion of money is far more muted than that of the nineteenth century—"family values," they write, "loom larger in the political consciousness than specie values" (p. 1582). Given all the attention to finance in the past ten years, the East Asian and Argentine currency crises, Enron, Barings Bank, the Orange County bankruptcy, the emerging U.S. pension crisis, etc., I am not so sure. Regardless, Carruthers

& Babb argue that when money's value becomes uncertain and exchange more difficult, its social construction is no longer hidden, its "naturalness" can no longer be taken for granted, and the "potential for a radical reconstruction becomes greater" (p. 1580; see Dominguez 1988 and Pedersen 2002).

Besides redefining the nature of the republic, Reconstruction aimed to redefine the nature of money. The debate over money culminated in the antimonopolist movement and the popularization of what was then termed the movement for free coinage of silver. This movement grew from farmer discontent in the American midwest with the coming of the railroads, which charged exorbitant rates for the transport of farm produce (Ritter 1997). Historian O'Malley (1994) argues that notions of natural kinds animated by the Darwinian species concept interdigitated with debates over monetary specie. The money question was "viewed in light of anxieties about value and identity in Victorian American male culture" brought to the fore in American racial formation after Emancipation (p. 395). This was at a time when seemingly insubstantial paper money, printed to fund the war effort, circulated just as the newly emancipated slaves entered the labor market. This populist movement culminated in William Jennings Bryan's run for the presidency in 1896. The latter third of the nineteenth century, thus, witnessed intense debate among the rank and file about the nature of money, the signifier of race, the value of (free) labor, the power of conglomerates, and the American financial system. L. Frank Baum, one of Bryan's compatriots, imagined a city where everyone wears green-tinted glasses and, as the Wizard tells Dorothy, "everyone must pay for everything he gets" (Baum 1900, p. 130). A little girl from Kansas, the populist midwest, unmasks the Wizard's deceptions, skipping in silver slippers down a road paved with gold, a symbol of bimetallism that any contemporary reader would have recognized.

Late Victorians and early twentieth-century modernists certainly thought that modern money, freed from the constraints of rank, reputation, and material reality in specie, was destroying social solidarity and epistemological certainty. Literary critics and historians have long noted that the monetary allegories of figures like Poe, Gide, and Baudelaire revolved around questions of identity, trust, and faith in the stability of that which is evident to the senses, questions raised by a money seemingly backed by nothing at all (Derrida 1992, Goux 1984, Michaels 1987, Shell 1978). And even earlier than the nineteenth century, Ingrassia (1998) documents the historical coemergence in the seventeenth century of finance and fiction writing and the gendering of each activity as female. Only women and feminized stock-jobbers could be seen as credulous enough to believe in the structurally similar and sociologically interconnected speculative follies of finance and fiction writing. If fictional accounts of riches in Argentina could spur frenzied trading, written stories about nonexistent people could generate income for authors in the new genre. The argument bears on the interconnected fictions of state: Brantlinger (1996) examines the literary, historical, and political history of the relationship between public credit and state authority from the late seventeenth century to the twentieth.

How should one think about this history repeating itself? Carruthers & Babb's (1996) argument would seem to hold: These are all moments when the link between the representation and reality of money and finance break down, denaturalizing the taken-for-granted monetary order, and place value in question. This idea certainly resonates with some of the Melanesian literature in which money's value derives not from its publicity but from its hidden qualities, where money reflects forms of social power like magic and sorcery (Graeber 1996; Mosko 1999; Robbins & Akin 1999, p. 28). When the not-seen is suddenly thrust into light, the agencies animating value can receive new social scrutiny.

On the one hand, anthropology and social studies of finance have been contributing needed research on the socio-technical arrangements that produce financial representations and their effects, on the trading floor and through new communications and visualization technologies (Buenza & Muniesa 2005; Buenza & Stark 2004; Knorr Cetina & Bruegger 2002, 2000; Zaloom 2003). On the other hand, however, there is risk that documenting the relationship between the techniques of representation in markets and the social imaginaries of money will result in either "the bottomless problem of the ontological status of particular practices or concepts" (Roitman 2005, p. 8) or in the replication of evolutionary stories of transition in the form of "a series of representations of the foundations of wealth that have been replaced, over time, by novel or radically transformed ones" (Roitman 2005, p. 202), as Roitman has argued regarding emergent forms of value and regulation in Cameroon and more generally.

"Seeing" may be a deconstructive, denaturalizing move (remember Dorothy, Toto, and the man behind the curtain), but seeing also depends on the relative stability of the empiricist gesture to know based on the evidence of the senses. Buenza & Muniesa (2005) discuss the crisis of figurative finance that has been taking place in financial domains and in social studies of finance, which have shifted from an emphasis on informal networks and gossip to the traders' and analysts' visual representations of financial markets. Those visual representations, however, are themselves the product of mathematical abstractions such as market indexes and do not unproblematically refer to anything backing them. So, although we "see" something in the spread plot, we are also engaging in a nonempirical modality of knowledge founded in "tricks of transparency" (p. 633). Still, that nonempirical modality is an effort for financial actors themselves to "see" and to shape value. Making visible does not denaturalize but contributes to a "staging [of] one of the more ferocious crises of representation since Shakespearian times: that of what things are worth" (p. 633).

CONCLUSION

Whether we look to the emergence of modern stock markets in northwestern Europe in the seventeenth century, or to postbellum greenbacks, or to the closing of the gold window in 1971 and the breakdown of the Bretton Woods agreements that lent an aura of stability to money through the middle of the twentieth century, we find similar debates about the relationship between "real" economic value and "insubstantial" fictions of fiat currencies and finance and a concern about the effects of the transition from "true" money to the promissory kind on the fabric of society itself. Anthropologists found the same sort of debates in the colonial imposition of capitalist currencies through wage labor, taxes, land rents, and commodity markets. One could argue that the differences among the assessments of money and finance in the seventeenth, nineteenth, and twenty-first centuries lie in their specific manifestations: from feminized, passionate frenzy, to the irreality of a world untethered from comfortable essentialisms of species and specie, to occult economies and conspiracies of abstraction. I would suggest that the new anthropology of money is taking a different tack. The continual "discovery" and then subsequent decomposition of money's supposedly unique attributes are themselves integral to money, to its own analytical abstractions, and to those social scientists trying to catch up behind it.

We will, however, continue to run in circles if we do not at least momentarily abandon the semiotic ideology that founds much of the history of reflection on money. This is the notion of the sign that posits that "signification offers the subject an escape from materiality" (Keane 2001, p. 87) and that denies an escape from "the ontological division of the world into 'spirit' and 'matter'" (Keane 2003, p. 409), or, one could add, word and substance, (state) fiat and (market) commodity, etc. Money can, after all, retain "indexical links to its sources and owners" (Keane 2001, p. 77), and not just in places like Sumba. After surveying the nineteenth-century American monetary debate, Foster concludes that Melanesians receive new national moneys in a manner that "exceeds the limits" of representation and abstraction, for "money can never represent or stand for anything else 'truly,' that is, fully and finally. . . .[T]he issue is no longer one of representation's arbitrariness, but rather its ultimate failure. In other words, money is always representationally flawed" (Foster 1999, pp. 230–31). Keane, Foster, Roitman, and Guyer help reorient the anthropology of money from meanings to repertoires, pragmatics, and indexicality.

Representational flaw does not mean representational failure, either for money or for anthropological accounts of it. Money "works" because of its failures. Analytically, this suggests a fidelity to the gaps between representation and reality and sign and substance, and their "unresolved antagonisms" (Žižek 2004, p. 134, writing on Karatani 2003). It is this kind of fidelity the anthropology of money is getting good at.

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