# Soft currencies, cash economies, new monies: Past and present

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Current variation in the forms of money challenges economic anthropologists and historians to review theory and comparative findings on multiple currency systems. There are four main sections to the paper devoted to (i) the present continuum of hard to soft currencies as an instance of multiplicity, including discussion of different combinations of the classic four functions of money, especially the relationship between store of value and medium of exchange; (ii) the logic of anthropological inquiry into multiple currency economies; (iii) the case of the monies of Atlantic Africa, applying the analytics of exchange rates as conversions to African transactions; and (iv) the return to economic life in a present day Nigerian economy lived in soft currency and cash. The paper identifies five findings that suggest foci for future research. (i) The widespread occurrence of conversions, which bring together ranking principles within transactions. (ii) Several types of positional ranking ranging from simple stepwise ordinal scales to iconic ordinality that creates a parabolic curve of value. (iii) Fictional units of account that serve to mediate both the memorization of nonreductive transactions and their nature as conversions. (iv) The importance of the temporal reach of what constitutes wealth: over the short run, the life span, intergenerational succession, and in (legal) perpetuity (as for corporate and sovereign debts and specified assets). (v) The social niches in which these qualities are brought together in transactional regimes. In conclusion, the paper returns to the exchange function of cash, soft currencies, and new money forms.

n online currency converter (1) lists over 180 world currencies A along with certain precious metals—gold (the ancient value par excellence), silver, and platinum-presently in circulation in the global economy. Since the rise of money markets in the 1970s, they are often referred to in terms of relative hardness (that is, their capacity to hold value over time). At the soft end of the spectrum are not only the national soft currencies with fluctuating value on the money markets, but monetary forms created by private businesses for their own clients: moneys for online games, mobile money forms, and special purpose coupons and vouchers. Very large numbers of ordinary people-the clients, customers, citizens, and workers in the nonincorporated domains of economies and through all of the passing vicissitudes of life-live largely in soft currencies or cash forms of hard currencies. Economic theory has largely concentrated on hard currencies, with reserve functions. For anthropologists, the description and theorization of monetary practices in soft currencies, cash, and new forms has become a compelling topic beyond the classic comparative study of the widely varied systems of the past.

The so-called special purpose moneys of the anthropological record were once seen as evolutionary precursors of the modern all purpose money in which all of Aristotle's classic four functions—as medium of exchange, mode of payment, unit of account, and store of value—were unified. Recently, variability in the functional combinations and the coexistence of different moneys within transaction systems have been more closely studied and have begun to offer analytical and comparative sources to apply to the newly heterogeneous present. Borders, thresholds, and historical shifts can then be seen as sites of active

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mediation to be examined in their own terms, alongside economic analyses based on the reductive assumptions of currency uniformity and frictionless equivalence established through competitive market processes. The borders that we focus on are social and between communities of currency users. The thresholds are conceptual and institutional between distinctive capacities of different moneys, often implicating different moral economies of fairness (in the short run) and transcendence (in the long run). The historical shifts are moments when combinations of attributes are brought into open question and submitted to deliberate reconfiguration.

Bringing together all of the potentially relevant sources on the multiplicity and coexistence of moneys is a tall order for a small subdiscipline such as economic anthropology, and therefore, the sharpening of empirical focus and the recrafting of the analytical repertoire become imperative. In the spirit of an inaugural paper, this essay retraces my own trajectory of research, alluding less fully than they deserve to my many and continuing colleagues in our own community of critique among anthropologists, historians, and economists, but also hopes to use this text to promote wider engagements within and across the relevant disciplines.

## **Multiple Currencies of the Present**

Before turning to an anthropological perspective on popular monetary practices, the most recent phase of differentiation among national currencies and forms needs a brief review in terms of borders, thresholds, and shifts. After World War II, gold was gradually moved out of its role as the primary reserve, and the great empires were broken up into separate nation states, each with its own currency. In 1969, the system of Special Drawing Rights of the International Monetary Fund was instituted as a component of the world reserve system. Soon after, in 1971, gold backing of fiat money was finally abandoned. The Special Drawing Rights, initially valued against the dollar, eventually became valued in terms of four reserve currencies: the dollar, the pound sterling, the euro, and the yen.

In a brilliantly illuminating review of the dynamics of the fiat money markets in the decade since 1971, Milton Friedman (2) noted the rise in "the demand for money as an aspect of wealth/ asset theory" rather than exchange theory (ref. 2, p. 23). He wrote that "exchange rates have supposedly been free to float and to be determined by private markets. In practice, however, governments still intervene in an attempt to affect the exchange rates of their currencies" (ref. 2, p. 19). What he called "highpowered" money (ref. 2, p. 10), having international reserve functions, became distinguished from moneys with primarily exchange functions over short time frames in relatively unstable

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political contexts. The dollar was already the world's safe haven, store of value currency, and it also fulfilled certain key accounting functions. For example, the interest rate on US treasury bills is the standard risk-free rate against which others are measured in portfolio management; derivatives are valued in dollars, and the global oil economy is accounted in dollars. The centrality of the dollar since the 1970s has also offered economists a common denominator comparison—as Collins et al. (3) show in Portfolios of the Poor: How the World's Poor Live on \$2 a Day-although deeper analysis of poverty also attends to purchasing power parity (PPP). The work by Collins et al. (3) discusses the importance but also the difficulty of making and applying PPP calculations (ref. 3, pp. 5-7). In many places, however, holding dollars and holding the equivalent soft currency at either the going exchange rate or PPP, offer their holders different time horizons for conserving value in money form, which must then affect their projection of futures.

The current multiple currency system of hard (reserve) and soft (exchange) currencies that Friedman (2) indicated is only about 40 y old. It went through additional changes after the revolutions of 1989 in the socialist world, which also gave momentum to the creation of new financial instruments in the 1990s. The wars in the aftermath of the Cold War have siphoned cash dollars into other regions; illegal extraction in the accelerated global search for resources has created clandestine monetary practices; labor migration has expanded the remittance economy; and international online transactions have surged. Therefore, the difficulties of empirical research and theorybuilding with respect to the use of money by the billions of people now living largely in soft currencies and cash emanate, in part, from the brevity, turbulence, magnitude, and apparent irreversibility of these shifts. At the same time, academic theories of decision-making have so closely focused on the technical innovations and financial margins to be made on the assumption of the solid platform provided by the dollar, the strong state, financial institutions, information technologies, and precision modeling that theoretical attention to the ongoing composition and erosion of the highly varied platforms for decision-making in monetary terms in the rest of the world, as complex sites of human agency, has lagged behind.

Bringing explicit theoretical attention to the soft end of the monetary range, economist Yotopoulos (4) notes that countries "bear an additional risk of devaluation of their currencies by the positional-good nature of reputational asymmetry" (ref. 4, p. 15). A positional good is one with value as a function of ranking (5). According to Yotopoulos (4), a low political reputation can become a self-fulfilling prophecy, because exchange rate shifts, perceptions, and actual political conditions influence one another in feedback loops that can produce unpredictable lurches. Soft currencies' limitation to exchange functions can ensure the restriction of their zones of use and make sudden shifts in purchasing power more likely, in turn ensuring their restriction to those people with little or no choice (that is, the national citizenry at the poor end of the wealth hierarchy).

Within this syndrome of coexisting and interconnected hard and soft currencies, chronic uncertainty can be generated by the money system itself. Take an example of concurrent soft-currency dynamics in the lives of the people. The price of petrol in Nigeria is a complex function of the price of crude oil (the major Nigerian export that brings national earnings in dollars), the price of refined petroleum products on the world market (denominated in dollars and imported back into Nigeria for domestic purchase in naira), and the exchange rate of the naira against the dollar. These variables move against each other in indeterminate ways, whereas the whole artisanal economy and urban food supply depends crucially on the steady supply of gasoline, kerosene, diesel oil, and natural gas for vehicles, generators, home cooking stoves, and light. Under structural adjustment, price subsidy was viewed negatively; however, public debate could never settle on an acceptable definition of subsidy, because exchange rate fluctuations produced their own deviations between world and domestic prices, sometimes referred to as implicit subsidies. As a result, the domestic petrol supply and the terms for understanding it have been a major theme in social and political unrest for 30 years from military to civilian government and up to the present (2011).

Study of domestic prices and markets, therefore, has to take in all of the relevant thresholds between hard- and soft-currency domains: from international commodity and currency dynamics to people's own remittances, small-scale trade across national borders, and global trade diasporas. Additionally, we have to examine how the soft-currency economy manages functional analogs to reserves and futures. We recuperate and take further the classic article by anthropologist Mintz (6) on Gresham's Law in Jamaica in the 18th century, where he advocates "cross-cultural comparison of dissimilar economies ... [in the] many contemporary situations [that] afford better testing grounds" of how bad and good moneys coexist and interact (ref. 6, p. 262). British policies in Jamaica were negligent of the people's need for usable cash. The work by Mintz (6) suggests that, "More can be revealed by the specification of the loci of exchange, and the equivalences between media as well as anything which is known about how the equivalences were put in force" (ref. 6, p. 262). Key features across the "dissimilar economies" of "contemporary situations" as well as historical cases may emerge through the configurational logic by which theory, concepts, cases, and comparison are brought together in anthropology (6).

## Theory and Logic of Inquiry

The topics and findings in my own fieldwork, museum and archival studies, and library research in Africa (which are taken up later) have led to a central focus on a kind of transaction that a classic anthropological source (7) referred to as "conversion," a transaction where a fundamental incommensurability is recognized and preserved. Bohannan (7) took the conventional definition of conversion-as a transaction translating one national currency into another-and applied it to certain transactions internal to a single society. Drawing on the work of Franz Steiner (8) in the early 1950s, Bohannan (7) applied the concept of morally and politically ranked spheres of exchange to the Tiv economy of central Nigeria. Each sphere had its own measure of value and medium of exchange. Exchange within a sphere was termed conveyance and across spheres was conversion. It was difficult, and even morally suspect, to convert up from mundane short-term goods to prestige goods and from prestige goods to the rights in people that alone embodied dependable value in the present, mediated the extent of alliances in space, and generated the potential to reach forward in time. West and Central African systems have been termed a wealth in people model, where the enduring values were embodied: people's skills, their capacity to forge alliances, and their power to reproduce across the generations (reviews in refs. 9 and 10). The work by Shipton (11) on East Africa inserts the concept of entrustment for long-term asset-building for economies where land and livestock also represent and enable the endurance of value and social identity through time. By now, there are several decades of ethnographic study of comparable economies.

The much larger multiple currency economies of world history have left written records for both money practices and moral philosophies of wealth. The pioneering work on multiple currencies by economic historian Akinobu Kuroda (12, 13) extends the comparative base through detailed archival studies of China, Japan, Central Asia, and parts of Europe. In this approach, which is now widely shared, the classic four functions are disaggregated, and any evolutionary implications of the special to all purpose trajectory are abandoned in favor of empirical

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attention to specific practices of legal framing, asset-holding, accounting, and transacting across currencies. Where records allow, historical change can also be traced, such as the movement of silver across Asia in the 13th and 14th centuries (14). In this comparative context, Friedman (2) can be seen as reflecting a historical reprofiling of Aristotle's four functions when he focused on the reserve function of money as the most high powered. Aristotle considered the medium of exchange function to be the most important, and wealth was appropriately held in intangibles such as honor and virtue. Therefore, the continuing rise of the reserve function, placing liquidity rather than exchange at the center, would be a historic innovation.

Modernity liberated whole sections of populations from exclusion from one or another kind or function of money, while opening up money itself to having wealth/capital as its primary function: in private and corporate accumulation, the public financial nexus, and the relationship between the two areas. According to the work by Ferguson (15), it was the invention of the public debt, based on modern sovereign capacities to raise money through taxation and bond issue, that provided the deep pockets from which the state could invest in public goods at home and use military force for wider purposes abroad. In our own era, the work by Ferguson (15) defines these purposes as "making the world safe for capitalism and democracy" (ref. 15, p. 418). (We make note of the long temporal reach of the key qualities offered by this kind of wealth: safety, capitalism, and democracy.)

In another recent history of the qualities and functions of money in the west over almost five centuries, the work by Amato and Fantacci (16) shows in detail how this growing primacy of the store of wealth function was instituted and theorized and how it has been recurrently elaborated and preserved by central banking, the national debt, and corporate law. The backing of the strongly institutionalized state allowed some debt to join the store of wealth nexus, amenable to deferral and accumulation and stretching indefinitely beyond the moral frames of personal life cycle debt under the primacy of the medium of exchange function. The work by Amato and Fantacci (16) reminds us that the term finance derives from the Latin finis, meaning end. Making endpoints more varied in length, calculation, and management is an advancing technology with intricacies that are partly hidden by the simplicity of the customary terminologies that are enshrined in long-existing law and precedent: "the very concepts of credit and money become hazy" (ref. 16, p. 24).

Amato, Fantacci, and other historians also bring attention to how the cash and markets of the ordinary people's exchange, accounting, and payment functions have been related to the state and wealth function: "[b]locked in its function as a store of value, money can no longer function properly as a way of paying off debt" (ref. 16, p. 24). The practical conditions of life lived in all purpose money have been contested in various ways. The English people in the 16th and 17th centuries were short on sufficient money to mediate new trades (ref. 17, p. 57) as was the fledgling American colony in its early centuries (18, 19). People, and even local governments, invented and adopted other things (such as wampum) for a monetary function. Illegal practices included clipping coins and counterfeiting bills, and informal practices included proliferating personal promissory notes and also developing a shared political currency of rhetoric to contest the mercantilist colonial policy of enforced penury in the money supply for the exchange economy. Even under modern conditions, the people have created ear-marking practices and alternative monetary institutions (20, 21), and within reserve money policy-making circles, there have been debates about how money should function as a unit of account. During the formative 1970s and 1980s, Friedman (2) envisaged "a still more radical series of proposals ... that the unit of account be separated from the medium of exchange function, in the belief that

financial innovation will establish an efficient payment system dispensing entirely with the use of cash" (ref. 2, p. 36). Keynes had unsuccessfully suggested such a unit of account, the bancor, at the Bretton Woods Conference in 1944.

The prediction by Friedman (2) of financial innovation in the hard-currency economies has indeed come about, although focused particularly on the elaboration of the wealth/reserve functional nexus and developed on the tracks of the payment nexus in an expanded world of credit and insurance applied to private assets and the expansion of public asset backing in bond markets. The consequent growth of the US national money supply through the financial sector has been, as one set of experts put it, "vertiginous" (22) since around 1990. Among the kinds of money recognized by the Federal Reserve, a small and declining proportion of the total money supply is in the categories defined as currency (issued by government) and M1 (demand deposits backed by government-regulated liquidity ratios). Currency and M1 are the monies directly manipulable by the people). It is still unclear how mobile moneys will be tracked, regulated, and accounted, and the more inventive online monies can have rules of their own, because they are not (yet) official moneys (23–25). The gain in money supply since 1990 has been predominantly in M2 and M3 (that is, financial instruments).

All these histories show processes of mediation within a world of increasing multiplicity. The focus on conversion can be extended then from the old conventional meaning as currency exchange on national borders to transactions between spheres of exchange in small societies on trade routes out into world historical studies of aspects of Western (15) and global (26, 27) monetary history and back to mediations in present economies with their newly fractionated rankings, functions, spheres, and communities of money use in a hard- and soft-currencies world. Concern with the experience and sociocultural creativity of the people within the nexus of institutions returns us to empirical research on conversions and their associated ideas and practices through fieldwork.

The next section of the paper moves back to monetary conversions in the vast region of Atlantic Africa: first, for properties forged during the era of the slave and primary commodity trades and second, for the management of soft currency in the present global economy. As a guide through the following ethnography and to prefigure topics that call for additional analytical attention, I list five inferences briefly here.

First, conversionary transactions take place across many relatively nuanced positional differences and not only at major borders and thresholds.

Second, this finding draws us into the study of coexisting positional ranking principles and their intersections: from qualitative difference on nominal variables to simple stepwise ordinal scales to quantified interval scales with arithmetical practices implicated in conversion to iconic ordinality on an exponential logic, where value concentrates at the top of a parabolic curve (a form that seems characteristic of certain ranking principles of the global present) (28).

Third, fictional units of account have served to mediate both the recording of transactions across differently ranked goods and their nature as conversions rather than strict equivalents.

Fourth, the temporal reach of whatever qualifies as wealth is particularly important, especially with respect to horizons along the life span vs. spans that are intergenerational, such as legal perpetuity (as with corporations) or reaching even farther into a sovereign future (as with the financial obligations of states) and the life everlasting (in religious terms).

Fifth, the concept of niche serves as an apposite metaphor for the social nexus, where combinations of conversionary concepts, valuation practices, operative time horizons, ethical qualities, and moral-legal commitments are generated (29).

# Moneys of Atlantic Africa

I return to the Equatorial African history where I started my work on money in the early 1980s. Until then, the other main strand of my research had been the productive economies of Africa. In the context of studying the growth of urban food supply (30, 31), I found a gap between the historians' studies of political economies of regional and international trade and the development economists' analysis of urban provisioning in terms of price-setting markets. The institutions and pervasive practices of valuation and exchange, within and across differently organized societies, were hardly in evidence in the studies of the present. Because markets long predate colonial rule, I turned to the archives and museum collections of indigenous currencies to renew anthropological attention to market value creation in Africa and the localized use of currencies as media of exchange.

I started on an ethnographic history of African currencies and exchange through studies of the varied miniature spear-shaped iron bikie of precolonial Equatorial Africa collected in the 19th and early 20th centuries and deposited in large numbers in ethnographic museums (such as the Peabody Museum at Harvard University). I had run across references to bikie in field research on the history of food production in Southern Cameroon. Made locally from iron ore by iron smelters and blacksmiths, they were said to be used primarily for marriage payments but also for regional trade in other items. In the wider equatorial region, European manufactured currency items had entered through trade over several centuries: copper mitakos, wire, and other idiosyncratic metal forms such as out of date French rifles, which in some places, became standards of value in payment systems (ref. 32, p. 43-44). Thirty years ago, I was still able to show museum photographs to old people in Cameroon who could remember how the currency items had been manufactured, controlled, and transacted (33, 34). Taking advantage of anthropology's multidisciplinarity, we could then follow up with metallurgical analysis of individual museum objects and linguistic attention to the numerical and calculation systems to bring into profile the social experience, technical expertise, and cultural imagination of the whole currency complex. For example, metallurgical analysis from the collections allowed us to estimate the quality and quantity of the iron that was being devoted to moneys and tools. We could then infer the relatively high importance of the exchange and payment economies by comparing the quality and amounts of the iron used for currency in transactions with the iron used for the metal toolkit.

Photographs from several collections allowed the different shapes and their geographical and ethnic distributions to be mapped out (Fig. 1) to allow for identification of borders in the multiple currency regional system. Additional geographical, ethnographic, and museum analysis (including collections and acquisitions data from the Royal Museum of Central Africa in Tervuren, Belgium) allowed definition of other zones, where differently shaped and bundled currencies circulated. Therefore, two areas could be compared: the forest regions of Southern Cameroon and the vast riverine network of the Ngiri River, a tributary of the Congo. From there, I could reposition the Tiv spheres in regional trade through new historical works (35), then apply these insights to a reconsideration of less fully described systems, and finally, work out to commonalities and variations in the whole multiple currency economic zone of historical Atlantic Africa as it grew and changed in the context of the slave and commodities trades (32). The basic finding was that, after the mercantilist logic of retaining one's own reserve treasure, the European traders paid at the coast in inconvertible items such as cowries (from the Maldive Islands), brass manillas (manufactured in Birmingham and Nantes), and other items made

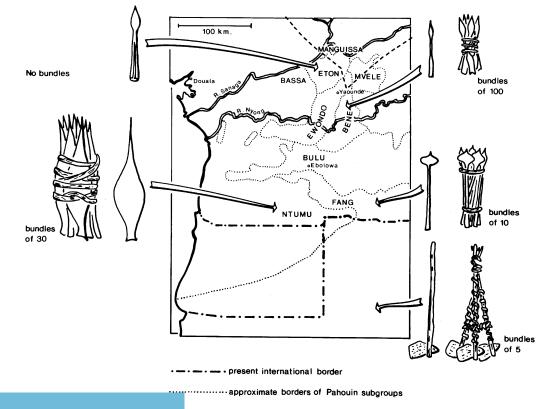


Fig. 1. Southern Cameroon currency zones in the 19th century. Modified from Guyer (33).

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Fig. 2. Ntet: bundle of iron currency, two sizes. [Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University (Peabody ID: 2004.24.30679, Digital file: 154040208), http://www.peabody.harvard.edu/.]

expressly for the Africa trade. These currency goods made their way inland into regional trade networks, crossing many borders between societies and thresholds within them as they traveled. An intricate multiple currency system of borders, thresholds, and conversions was created.

It became clear that the internal conversions across the thresholds between spheres that Bohannan (7) saw within the Tiv system could also be made by working conveyances stepwise, in smaller increments by exchanging across the borders into the regional economy and then back again. For example, one could purchase cattle and brass rods from the northwest with domestically produced tugudu cloth. All of these goods exchanged as conveyances within the prestige sphere. Cattle could then be converted up into wealth in people, such as bridewealth in marriages to the northeast, whereas brass rods could purchase firearms from the south. Tiv tugudu cloth was in demand as one



**Fig. 3.** Ntet: basket and headpad. [Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University (Peabody ID: 2004.24.6671, Digital file: 132250004), http://www.peabody.harvard.edu/.]

of the currencies of trade throughout the wider region, and therefore, it could be used to acquire a variety of trade goods. Small transactions in the lowest sphere could support the cloth production. Therefore, converting up could be worked stepwise through the labor regime and trade networks. Similarly, in the Equatorial region, there were small shifts in currency use and value as items moved incrementally upriver: each novelty item carried a premium at the interface on the inland border. Cultural terms reflected the shifts in conditions. In Western Nigeria, money was a stranger, coming and going at will (36). After I could bring more systems, currencies, and kinds of transaction into view, this kind of small-step conversion became clearly more generalized than equivalence in conveyances.

This preservation of distinction differs in kind from the formally legalized and mathematized modern reduction to common denominators. On classification, I was first instructed by the saying mekyae, mekyae in the Beti language: "there are many kinds" of everything. Number itself contained benchmarks and tropic concepts for the operation of ordinal as distinct from simple counting functions. Numbers such as 20 and 200 had evocative collective qualities, and some large numbers had memorable musical form through the tonality of the language. These tropic points acted as connectors between the rankings that had to be brought together to make a transaction. They allowed unequal equations to be made through matching the same word in different languages rather than matching the exact amounts indicated by that word within its own language. For example, the combination of textual, photographic, and object collections from Cameroon suddenly solved a puzzle of numeration, namely the strange reference to many different bundled amounts of bikie (Fig. 2) by a term now meaning 100 (ntet). Bundles of as few as 5 (as referred to in archives) and as variable in number (when counted in the museum) as 65 were all mintet (plural). Then, an archival photograph and a dictionary both designated ntet as a kind of basket (Fig. 3) and therefore, perhaps a term for the style of raffia binding around the bundle rather than the number of items that it contained.

These small accounting techniques—names for sortings of diverse goods, formulaic numbers, and types of exchange—retained the transactional history of exchange as conversion. The work by Verran (37) provides a deeper analysis of the scientific logic here.

The African sources indicate ordinal scales for all goods, with this kind of tropic numbering mediating among them. Criteria for the distinction and ranking in currency-mediated exchange include the kind of good; within one kind, a variety of criteria, including in recent times, a benchmark quality marker (as the original) with named deviations from it; the geographical direction of the trade and the distance of the transaction to or away from the coast; and conventionalized ways of applying numbers to different transactions (cardinal, ordinal, linguistic, and poetic/musical). Precision in the time factor seems to not have been strongly institutionalized, even for delayed transactions. Time itself was managed largely in rhythmic terms rather than on calendars. It was counted in market weeks and seasons, with patterns of auspicious days on their own sequence. Some terms may themselves have stabilized temporal understandings, although such terms are hard to reconstruct empirically. The attachments between scales and the margins gained there did become conventionalized and stabilized in named practices, large and small, within widespread trade and markets without, however, people losing the sense of a marginal gain (32) and an embedded history. For example, in the Southern Cameroonian ceremonial exchange called bilaba, trade goods were exchanged between neighboring leaders in a way that performed the nonequivalence of the goods relative to their trajectory to or away from the coast and between the parties to the transaction relative

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to their prominence as minkukuma (usually translated as headman but more literally, owner of wealth or akuma).

History and ethnography both suggest that, more broadly, naming was one of the conceptual tools for market response, change, and innovation. A novel good, practice, crop variety, or currency type was brought into scalar and exchange dynamics by giving it a new identity that both differentiated it from existing goods and also grouped it into an existing class. The users then selectively applied existing knowledge and social templates to the question of how that good or currency would enter into regional and local circulation. In the poetic, oratorical, and musical cultures of Africa, where people performed great feats of memory, naming is particularly powerful for establishing conditions for action in the world.

Formalized fictional units of account are found in the historical record on the coastal trade of West Africa in the era of the slave trade. Fiction means that a currency of account has no material referent or counterpart. The most famous is the trade ounce, which once reflected the value of an ounce of gold. By the height of the trade, it indicated varied sortings of goods according to preferences in the regions (39, 40). Economic historians find that such fictional units of account have been a widespread practice in other areas (12, 13). There is still much work to be theoretically assimilated here, especially from studies of accounting in the historical practices of Asia, India, the Near East, and Mediterranean worlds, which are the source of mathematical abstractions such as the zero (cipher) and other practices that were brought into Europe by Fibonacci in the 13th century and credited with supplying the basis for the modern numerical and monetary systems. Indeed, West Africa's integration into Muslim trade through the Sahel and trans-Sahara caravans may well be an important influence on their own number practices, including fictional units of account.

There is one systemic factor of which we can be fairly sure: the preservation of currency items as stores of wealth was indeed framed by the moral ranking to which Bohannan (7) referred to preclude heritability beyond the personal life cycle. In Ashanti, even masterpieces of gold artisanship were melted down and made over between owners (38). There is an adequate historical record for drawing inferences about money as wealth in Atlantic Africa only (so far) for the manilla economy of Eastern Nigeria (summary in ref. 32). Manillas endured for trade in export crops into industrial Europe until the British withdrew them from circulation in 1948. Within the societies of that area, manillas figured in a formalized political ranking process through title societies. Successful people, both men and women, were encouraged to achieve, save, and then convert their manilla currency into the prestige of a stepwise rise in ranked title holding. Their celebrations of advance up the hierarchical ladder then periodically returned the currency to circulation to pay the large numbers of craftspeople, musicians, religious functionaries, and so on who created the arts and architectures of social prominence. Savings and credit were strongly developed but on cycles of years between titles: therefore, beyond the punctual microcredit kind of response to crisis, utilitarian income smoothing over the annual cycle, and small investment but also far short of the in perpetuity asset building of the modern reserve function.

To summarize, during the era when new currency goods flooded in from Europe, the moneys of Atlantic Africa were largely contained within the medium of exchange and mode of payment functions. They existed in multiple forms and were managed through practices that cultivated elaborate naming and ranking techniques that preserved gain in each transaction. For theoretical and comparative purposes, it is important not to conflate gain with profit in the standard capitalist sense, because it does not arise from production–sale dynamics or the accounting techniques of the state, although the actual amounts transacted in conversions may still fluctuate in response to regional market and trade conditions (41). These medium of exchange currencies flowed at a high velocity of circulation and were indexed to a clearing logic with respect to wealth. They were converted up into the long-term wealth of generational succession and political reach. This system was a system of Africa-generated scales and conversions that grew up in light of the inconvertibility tactics of Europe in the interface with Africa and became deeply embedded over centuries. Whether and in what sense there may be continuing dynamics of transformation in these practices, in the context of soft currencies, and the logics of new economic situations is a question for localized empirical research. Meanwhile, the case offers comparative insight into systems with variable convertibility. First, however, is the larger question of the nature of present day soft currencies as a category.

### Soft Currencies in Present Day Life

What determines the kind and quantity of money for exchange and payment in the soft-currency economies of the present? Units of account can be fictional. Reserves can be qualitative and even abstract. However, media of exchange generally have some tangibility and some framework for determining the total mass in circulation. Hence, I included cash, even in hard currency, in the comparative study. For people largely limited to currency, M1, and life cycle wealth, having one's ordinary life functions subject to the dynamics of the store of wealth function may have unforeseeable implications, especially when an increasing proportion is in private hands and therefore, not accessible through the democratic political process through the concept of the public purse. If the store of wealth is not used as a classic capitalist investment fund, which generates production and employment in the human economy, then people may ask what it is doing locked into inaccessible circuits. The alternative money movements have so far tended to be founded on a moral-political general objection to capitalist profit (19). One cannot necessarily assimilate all such oppositions to a general objection to capitalism. The oldest complaint of the ordinary populations in monetized economies is that the controllers of the money supply are not issuing enough into circulation to meet their exchange needs and demands. From plantation Jamaica to colonial America to present day Nigeria, popular rhetoric has focused explicitly on enemies of the money supply.

I have argued that the Western Nigerian growth trajectory in the popular economy during the latter one-half of the 20th century has followed a niche logic (29, 41). A niche economy grows by developing more and more specialist occupations and crop varieties in greater and greater synergies of collaboration, exchange and competition with each other across proliferating conveyance and conversion thresholds in response to market growth and improvements in transport, energy supply, and other crucial infrastructures. These niche processes make major contributions to feeding Lagos, one of the most rapidly growing cities in the world. Models based on a frictionless price dynamic cannot show how people move into the opportunities that a growing urban market opens up, because their responses depend on social templates, life careers, and constant circulation of the means of exchange. Whereas the concept of liquidity refers to the capacity of stores of wealth to cross the threshold between functions, the people have to be concerned with their propensity to do so. I have started to think of niche practices, taken together, as platforms, to compare with the hard/reserve currency platforms.

The responsiveness and growth of such a niche economy is deeply dependant on the exchange function of money. A situation of monetary penury for exchange purposes forces people to reexamine all their expectations across all of the lines of synergy and competition. The conventional quantity theory of money in economics concentrates most on the problem of too much money as a source of inflation and thereby, devaluation of longterm, reserve wealth in real terms. In an economy focused on money as a medium of exchange, the real threat is too little money as a stress on the exchange function, the productive economy, and the potential for conversion into the longer-term values in which reserves can be held. The following ethnographic case shows how negatively the failure to convert up by hanging on to money as a reserve can be judged in the kind of moral economy of exchange and niche creation that developed in Atlantic Africa over several centuries.

In ongoing field research in Nigeria, I have been examining two topics that are inaccessible for the past. First is a quantity theory and practice of the money supply for soft currencies, with attention to all of the associated practices and institutions that account for the penury or surfeit in supply, including the velocity of circulation. In the area of Western Nigeria where I currently work, there have been episodes of penury in the money supply because of strikes when government workers were not being paid and-as seen from the people's perspectivedeprivation as a result of straight hoarding by the rich and those people in power. The niche economy institutions that maintain the velocity of circulation of the cash currency come under pressure, adapting and eroding in ways that also depend on the second process, namely manipulations of temporal horizons. Following in part from the velocity issue, the temporal horizons in the uses of cash money management come to the fore: the form of accounting and the timing of promissory notes, the deadlines for debt clearance, the moral judgment that shifts keeping or saving into hoarding, and the life paths of intergenerational expectations. Yoruba terms for debt make a clear distinction between delayed payment (awin), usually fixed on the market cycle, and debt (gbese), which is dated, incurs a fee, and is usually backed by a guarantor. Very longterm obligations fade into other categories. The terms that we might translate as saving distinguish between taking care of (toju), storing (pamo), and locking away from others (hawo). The first term is morally fine, the second term is tolerable but questionable, and the last term is reprehensible. People with money are under pressure to lend it out. Charging interest or fees is acceptable; locking money away, effectively reducing the stock of currency in circulation, is not acceptable. The reserve function returns as a topic for research, particularly in relation to the study of time horizons.

In the West, it was the theorization and institutionalization of the phases of a standard life cycle in the 1950s and 1960s that laid the basis for a new phase of Western financialization andsecuritization processes (42): student loans, 30-year mortgages, health insurance, and so on. How life-its arc, cycle, or pathway of many intermediate and cumulative or disrupted steps-is then lived in relation to reserve money instruments in the soft currency economies and cash-based niches of common practice is a topic that invites new attention. The coordination of the temporal multiplicities that make up life as sequences of entailments in between the short-run impulse of choice and the long run of an eventual deferred and abstract future is the theme of my paper on theoretical evacuation of the near future (43) in Western economic culture before the crisis of 2008. One key gain that upward conversions in this near future range can achieve is to buy time: not as quantity alone but as reach to future horizons of varying distance. Conversely, converting down foreshortens time. For anthropologists, the space of the near future and the operation of media of exchange and units of account in that space open up to additional empirical inquiry.

## Conclusion

By this logic, then, we must necessarily examine the novelties of present monetary systems in a broad and ever-widening historical and comparative perspective. Although some anthropologists do address the financialized segment of world monies-what the economics textbooks refer to as M2, M3, and now (sometimes included in the macroeconomic analyses), derivatives-there is also within anthropology an expanding attention to the monies of the people [that is, the currency and M1 (demand deposits) of money supply theory]. Maurer (21, 24, 25) comes to this domain through his increasing empirical focus on e-money and the poor, asking what this e-money is in the long history of money and how it is being domesticated by people in practices of their own, which may or may not come forward from the past. The work by Hart (26) reviews the long history of money and considerably sharpens our conceptual repertoire with his heads or tails of the coin distinction (44). The work by Graeber (27) examines debt over the first 5,000 y. I have continued to work at the day to day level of life as lived in Nigeria, with modern polymer bank notes, including attention to people's own concepts of value, means of numeration and calculation, management of the functions of money, and their moral economy of cash transactions and future promises under conditions that they recurrently define as kos'owo (Yoruba term for there's no money). Others work on the management of remittances and cash in both hard and soft versions and their conversion of value from one moral domain to another. East Asia is particularly interesting in this regard (China is discussed in ref. 45 and Vietnam is discussed in ref. 46). These are the mundane and legal practices of the people. The larger topic would include currencies in war zones (47) and among illegal mafia networks.

Hard currency systems do store and protect wealth in money. Their conditions of existence, however, are historically recent, particular, and rapidly changing, and therefore, they are not amenable to an assumption of normality across time and space. They can affect the functioning of currencies that are restricted to being media of exchange, and their real and symbolic power may also preclude new innovations in the kind of monies of account that historians have found in many past systems, Keynes envisaged for post-World War II, and Friedman (2) mentioned as a frontier for the world post-1971. When the monetary world is examined from the standpoint of those people who depend crucially on its medium of exchange function, the five topics prefigured earlier and illustrated here loom large: the many frontiers on which conversions take place (including but not limited to international exchange rates), the value scales that structure transactions as conversions among positional goods, the units of account that record transactions, the temporal horizons that different monies and financial instruments offer to their holders, and the niche-like communities of ethics and practice that conventionalize all of these factors into transactional regimes. Because so many of the world currencies are soft to some degree and so many people live within soft-currency systems and largely within the cash nexus of hard-currency systems, these topics coming out of the historical and anthropological archive become compelling frontiers for empirical study and analytical development.

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