

Discussion Article

What's a Good Value? A Review of Hindriks, Passinsky, and Dick in *The Philosophy of Money and Finance*

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There are ready explanations for the uptick in scholarly interest in money over the past decade and a half. In 2008, the Great Financial Crisis brought the global economy to the brink; that same year, a white paper authored by Satoshi Nakamoto announced the birth of Bitcoin. Since then, the question “What is money?” has emerged from the corners of a handful of social sciences to be given serious consideration by anthropologists, political theorists, historians of law and religion, and even economists.¹ Analytic philosophers are also a part of this party. Although money has served as an example for social ontology at least since John Searle’s *The Construction of Social Reality* (1995),

¹ The central 21st-century work on money prior to the post-2008 explosion is economic sociologist Geoffrey Ingham’s *The Nature of Money* (2004). Ingham’s interlocutors include economist John Smithin, ancient monetary historian Michael Hudson, and self-described Modern Monetary Theorists such as L. Randal Wray and Stephanie Kelton (née Bell). See, for example, the essays in Smithin (2003) and in Wray (2004). High points post-2008 include economic anthropologist David Graeber’s *Debt: The First 5000 Years* (2011), legal historian Christine Desan’s *Making Money* (2014), religious scholar Devin Singh’s *Divine Currency* (2018), political historian Stefan Eich’s *The Currency of Politics* (2022), economist Perry Mehrling’s *The New Lombard Street* (2010), economist Michael Beggs’s “The State as a Creature of Money” (2017), and economist and banker Felix Martin’s *Money: The Unauthorized Biography* (2014). I will return to several of these theorists below.

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its metaphysics is now a topic of its own, as can be seen in the opening chapters of Oxford University Press's recent *The Philosophy of Money and Finance* (2024). This essay will critically review those chapters, highlighting both their common foci and their shared blindspots.

A central concern of each essay is whether and how cryptocurrency can be money, given the various ways that units of cryptocurrency are unlike individual metallic coins, money's purported paradigm. Frank Hindriks's "The Social Ontology of Money" leads things off. Historically, Hindriks notes, concrete objects such as pieces of metal and paper have proven to be excellent monetary media, but nowadays "electronic money and cryptocurrency" also function as money, and "[a]lthough electronic money has been around for some time now, philosophers have still not come to terms with it" (Hindriks 2024, 15). His essay seeks to remedy this shortcoming through a criteria-of-adequacy analysis: he presents three claims, which he takes to describe facts, with which an account of money must be compatible if that account is to be acceptable. The first of these claims concerns money's causality. It can cause events such as recessions, bank runs, and wars, Hindriks says, so whatever sort of thing money is, its instances must be capable of having causal properties. Second, at least some sorts of money, such as bills and coins, can go unowned. I may leave a \$20 bill on a park bench as a surprise to whoever finds it. During the time that it sits there unclaimed, it does not belong to anyone, but it is still money. On any adequate account of money, then, it must be possible for at least some of its instances to exist without being owned. The final claim is that instances of electronic money and cryptocurrency are money but are not concrete objects. An account of money that rules out the possibility of non-concrete money is thus unacceptable.

This may be an unexpected list of criteria around which to structure a theory of money, but with them Hindriks is able to rule out several views in the current literature. For money to be capable of entering into causal relations, he argues, it cannot be an abstract object, because abstract objects cannot enter into such relations. J.P. Smit, Filip Buekens, and Stan Du Plessis (2011, 2014, 2016) argue that money is an abstract object, so their view must be rejected.² For the same reason, the hybrid view of Francesco Guala (2016, 2021) must also be rejected. Guala argues that money can either be a concrete object or an abstract object. His view can thus make sense of the causality of some money—namely, any money that is concrete—but every bit of money, Hindriks thinks, has causal properties. Guala's view does no better than Smit et. al.'s of accounting for those properties as they are found in non-concrete

2 My reconstruction of Hindriks's argument does not precisely follow his own presentation. Here are quotes that vindicate my reading: "Smit, Buekens, and Du Plessis take money to be an abstract object" (Hindriks 2024, 21); "The abstract-object view cannot account for the fact that money can enter into causal relations" (Hindriks 2024, 23).

money, including and especially electronic money. Hindriks argues that views of money as social power fare better on this score than Smit et. al.'s or Guala's, for the relevant social power is best understood as a property of agents, and "[c]auses are property exemplifications. This implies that, if money is a property, its instantiations can be causes" (Hindriks 2024, 23). G. A. Cohen (2011) maintains that money is just such a social power. The problem with Cohen's view, Hindriks argues, is that it cannot make sense of unowned money. If every instance of money is a power of an agent, and unowned money belongs to no agent, then unowned money cannot exist, or, to put the same point differently, it isn't "really" money. This, however, is a mistake—unowned money is legitimately money as much as owned money is.

If his three criteria are to be satisfied, Hindriks thinks, an account will need to incorporate Guala's and Cohen's insights while avoiding their respective errors. Guala is right to pursue a hybrid account, but, Hindriks argues, it manifests the wrong sort of dualism. He describes Guala's as an "abstract-concrete dualism," which falters, again, because money can never be an abstract object. Cohen on the other hand is right to characterize non-concrete money as a property of agents instead of an abstract object, but he goes too far in thinking that all money is this sort of property. Putting together what he thinks each of these gets right, Hindriks endorses a hybrid account that explains money as an "object-property dualism." According to this view, money is either a concrete object, or it is a property. This sort of hybrid, Hindriks thinks, can account for all the relevant phenomena. Because money can be a concrete object, it can go unowned; because it can be a property of persons, it does not exclude the possibility of electronic money; and, because both concrete objects and properties can lie in causal relations, it accounts for the possible causality of all instances of money. "The upshot," Hindriks concludes, "is that object-property dualism is more plausible than abstract-concrete dualism" (Hindriks 2024, 28).

There are three things I want to note about Hindriks's account. The first is that, although it is explicitly motivated by a desire to come to grips with electronic money, the phenomenon that is characterized by the "property" half of his "object-property dualism" is not exclusively electronic. Any money that is tracked in a record, as opposed to being realized in a circulable token, fits Hindriks's property-of-a-person description, whether that record is kept electronically, on paper, on hardened clay, or any other way. This generality might be seen as a virtue of the account, but Hindriks offers his view as a way to "come to terms" with electronic money; if electronic money poses an explanandum that is not already presented by ledger money in general, then his account does not address it. Second, given the argumentative weight born by the claim that instances of money have causal powers, it would be good to hear more about what this means. Why not think that money itself has no causal powers and that all causation related to money occurs because of the attitudes that agents take

towards money?³ Hindriks says nothing to address this question, but he does cite Uskali Mäki on the matter. To demonstrate money's causal powers, Mäki invites us to think of someone who holds what, unbeknownst to them, is a counterfeit banknote and who tries but fails to make a purchase with the note because the cashier detects its inauthenticity. The holder of the note, Mäki says, "turned out to be in error concerning the causal powers of the item" (Mäki 2020, 257). This description is, at minimum, incomplete. The holder's mistake was that *this cashier* would accept the note; a less observant cashier might have accepted that very note. This suggests that, if we want to speak of money as having causal powers, we do well to conceive of these powers on the model of doorkeys: the key to my home has the power of unlocking my door but not of unlocking yours, much as counterfeit money has the power of completing a sale with an inattentive clerk but not with an attentive one. If we speak of money as having causal powers—and nothing about Mäki's example shows we must speak this way rather than limiting causal ascriptions just to the agents involved—then the powers we are conceiving are always and necessarily *recipient-relative*. This fact underlies Hyman Minsky's remark that, in principle, anyone "...can 'create' money—the only problem for the creator [is] to get it 'accepted' " (Minsky 1986, 78–79). I will return to this point in my discussion of David Dick's essay.

The third thing I want to note is that the view Hindriks works himself into seems less of a dualism than a chimera. What else in the universe can be either an object or a property of an object? It would help make Hindriks's account more plausible if he offered some remarks on how any kind might comprise both objects and properties. He needs to do more than just make the general case for this possibility, however; because his specific topic is money, he further needs to explain how an instance of an object and an instance of a property can be *equal* to one another, in the way that a dollar bill is equal to a dollar of ledger money (electronic or otherwise). For these two to be equal, there must be something in virtue of which they are equal, and whatever *that* is, an account of money's metaphysics would do well to explain it. We know the name of this thing: we call it monetary *value*. As we will see, unaddressed questions about monetary value linger for all of the authors' accounts.

Cryptocurrency is front and center in the volume's second essay, Asya Passinsky's "Cryptocurrency: Commodity or Credit?" Passinsky sees herself as offering a hybrid account, but not one along Hindriks's lines: she shares my worry that "[i]t is hard to see what, if anything, ontologically unifies dollar bills and electronic money in Hindriks's view" (Passinsky 2024, 50). On her account, this unity is supplied by treating all money as hylomorphic, that is, as a combination of matter and form. Taking each in turn: the matter of money, according to Passinsky, can be either a

3 For more on this line of thought, see Wahlberg (2020).

material or an abstract object. For coins and bills, the matter is material; in other cases, “numbers may serve as the matter of abstract ‘points,’ and bits or blocks of data may serve as the matter of electronic dollars or bitcoins” (Passinsky 2024, 46). Constituted by this matter, electronic dollars or cryptocurrency exhibit characteristic properties of objects, including (a) coming into existence from a condition of non-existence, (b) being “located” at a point in time, and (c) undergoing change (Passinsky 2024, 40). I will call these “thingy” characteristics. Money’s form, she tells us, “is a relational normative property, specifically a property involving a claim on or credit with some other individual or entities” (Passinsky 2024, 46). Every instance of money thus has “thingy” character, which allows it to bear the relational normative property just described.

Passinsky sees her view as a hybrid of two competing theories of the ontology of money, *viz.*, the commodity theory and the credit theory. The labels “commodity theory” and “credit theory” are often taken as sufficient and sufficiently clear markers of two mutually exclusive accounts of money’s ontology, which, moreover, are the only two possible theories of this ontology. A principal source of this way of mapping the theoretical space is Joseph Schumpeter, who in 1917 wrote that these are “only two theories of money worthy of that name. The basic ideas of these two theories are not compatible” (Schumpeter 1917/1918, 163). Passinsky starts her essay by quoting Schumpeter on the matter. One of her aims is to show that he is wrong that there are only two incompatible theories deserving of the name. She argues that each is inadequate on its own, and she offers her hylopmorphic account as third way that draws on elements of each while overcoming their flaws.

Passinsky’s attempt to battle these views is like fighting in a hall of mirrors. The history of 20th- and 21st-century debates between self-avowed “commodity theorists” and “credit theorists”—the latter sometimes also or alternately called “claim theorists” or “chartalists” (from the Latin *charta*, meaning “token” or “ticket”)—is confusing and confused, with little self-awareness amongst its participants about the various ways the labels are used. Geoffrey Ingham, for example, is perhaps the person most responsible for reintroducing Schumpeter’s distinction into current discussions of money’s ontology. His *The Nature of Money* (2004), itself not widely read outside of academic circles, is the conduit through which the distinction passed to David Graeber and his internationally popular *Debt: The First 5000 Years* (2011). Ingham builds the early chapters of *The Nature of Money* around his understanding of Schumpeter’s view and approvingly cites Schumpeter’s quote, which can easily lead one to think that the two are operating with the same dichotomy. They are not. The defining claim of the commodity theory, according to Schumpeter, is that “the value of money depends on the value of the material of which money is made, that it is simply the exchange value of the money material” (Schumpeter 1917/1918, 157). Fittingly, the other name he

uses for this view is “metalism.” The only other theory of money that Schumpeter deems “worthy of the name” maintains instead that the value of a bit of money resides in its status as a claim on something. For Ingham, by contrast, the distinction between the two theories is one of explanatory order. His commodity theory asserts that money is first and foremost a general medium of exchange and then explains all of its other properties in terms of this function. His credit theory, by contrast, takes money’s role as a unit of account as its defining function and explains the rest of its properties in terms of it (Ingham 2004, 6). Other ways of defining the distinction emerge if one wades attentively through the debates.⁴ It is a mistake, then, for anyone to write as if there is exactly one “commodity theory” contending with exactly one “credit theory.”

Passinsky is not to be faulted for failing to see the mess that lies beneath this apparently tidy terminology—no one to date has worked out its details.⁵ A separate issue for her view, which returns us to the topic of monetary value, is her description of money’s matter. Again, in the case of bills and coins, Passinsky claims that the matter is concrete, paper and metal. Cryptocurrency is not concrete yet “seem[s] to belong to the ontological category of a thing or an object,” she argues, because it too has thingy characteristics: a “bitcoin persists through time as it is transferred from one owner to another. And it can undergo change over time, such as fluctuations in its value” (Passinsky 2024, 40). The changes that identify a Bitcoin transfer are alterations to Bitcoin’s blockchain, alterations which comprise changes of digital bits. For these bit-changes to count as changes to a ledger, they need to be interpreted as such—nothing about the bare existence of the digital bits makes them a ledger entry. Now on Passinsky’s view, are the bare uninterpreted bits supposed to be the matter of Bitcoin, or is there no monetary matter unless those bits are interpreted as ledger entries? She says the matter “consist[s] of immaterial or abstract objects, such as blocks of data” (Passinsky 2024, 49). This suggests she endorses the first of these options.

A comparison to the matter of language and words, however, gives us reason to adopt the latter view. Consider the words of this essay: if we want to speak of their matter, do we say it is the relevant tokens, *i.e.*, the pixels or ink you are looking at, or do we say instead it is their types? If you find my prose inelegant, you are evaluating something picked out by the pixels or ink, not the pixels or ink themselves.

4 As Passinsky notes, some authors argue as if the dispute concerns the historical origin of money, with commodity theorists asserting it was invented to ameliorate the inconveniences of trade and credit theorists claiming that it was originally a tool of political authority. See, for example, the way that Graeber describes the history of Mesopotamia as “the most shocking blow” to the characteristic commodity-theory origin story, which he calls “The Myth of Barter” (Graeber 2011, 38).

5 In an unpublished paper that Passinsky cites (Hubbs 2023; see Passinsky 2024, 38, footnote 13), I take preliminary steps towards sorting out the confusion. That paper has morphed into a book-length project, tentatively titled *Nil Citra Numerum*.

Bearing this in mind, consider the last thingy characteristic Passinsky ascribes to cryptocurrency: “it can undergo change over time, such as fluctuations in its value.” This thing whose value changes by being evaluated as more or less valuable: is it the bare uninterpreted bits of the blockchain, or is it units of the blockchain that have (already) been interpreted as ledger entries? The model of language and words seems like a useful guide here and recommends the latter answer. Just as it is word types that are judged to be inelegant, it is interpreted units and not bare blocks of bits that are judged to be more or less valuable. It is the ledger entries, qua entries, whose value can change, and they only count as entries in the first place because of the attitudes of those who use their corresponding blockchain bits.

The last paragraph is not intended as an argument against the possibility of ledger money or the idea that monetary thinginess can be attitude-dependent. To the contrary, once we accept this conception of thinginess, there is no bar to using it to characterize the matter of concrete money as well. It will be instructive at this point to take a detour through 16th-century France and consider its monetary scene. The unit of account then was the *livre tournois*, but there were no coins that circulated under that name or at its value. Many coins circulated, but the most prominent was the *écu soleil*. The nominal value of the *écu* was set by the king, and it could be changed—and was often changed—by royal decree. The king might raise the nominal value of the *écu*, for example, in an effort to combat price inflation. Prices were stated in *livre*, and to make them easier to pay, the king could simply decree that every *écu* was worth more *livre*. This practice rarely succeeded in achieving its anti-inflationary goal, in no small part because each *écu*, being coin, was made of precious metal, and that metal had its own exchange value outside of the *livre*’s monetary sphere. To explain the relevant phenomena here, the self-styled monetary theorist Jacques Colas thus described coins in 1566 as quantifiable in three distinct ways: by weight, by royally decreed “number,” and by “measure,” *i.e.*, by the amount a coin was accepted for in payment and exchange. To know the weight of a given *écu*, one put it on a scale; to know its number, one consulted the latest decree; to know its measure, one went to the market to figure out its purchasing power, which often diverged from the power indicated by its number. The trick to solving inflation, Colas thought, was to get these three quantities properly aligned according to a divinely determined ratio.⁶

If we translate Colas’s view into Passinsky’s idiom, we will say that the weight of a given *écu* is a property of its matter, that its form is determined by the various attitudes that make it a relational normative claim, and that both its number and measure are properties of its hylomorphic whole, properties which can change while the coin remains a selfsame unit. The model here is the classic hylomorphic example,

6 For discussions of this, see Greengrass (2007) and Parsons (2014, chapter 3).

the statue, where the marble is the matter, the shape is its form, and its changeable accidents are, *e.g.*, the color it is painted, which can be altered without altering the identity of the statue. But we might, alternatively, treat weight as a changeable accident of the coin and see number and/or measure as the hylomorphic monetary whole. Focus just on number. Note that if a given coin loses a little weight because a bit of its metal is shaved off, that does not alter its number, even if it affects its measure (which, indeed, it might not). Instead of a statue, a fitting model here is a vessel of wine. The vessel itself is not wine; it merely contains it. The matter of the wine is mostly the matter of the grapes from which it is made, and its form is the arrangement of that matter, including the molecules of ethanol produced during fermentation. Analogously, the metal of a coin does not realize or manifest the monetary value quantified by number, but rather, like a vessel, contains that value. The coin's metal is obviously concrete, but on the wine-vessel model, the metal is a separate and separable object that merely contains the monetary thing. The thinginess of the monetary thing itself is non-concrete: both its form and monetary value are attitude-dependent, in the way that Passinsky characterizes the form and matter of cryptocurrency.

The wine-vessel model of money thus gives us reason to question whether a coin's metal or a bill's fibers are its monetary matter or if instead that monetary matter, like the matter of cryptocurrency, is non-concrete and attitude-dependent. The existence of bills and coins *as* money, the possibility that they could cease to exist *as* money, and the changes they undergo *as* money may all be the result, not of material composition, but of the attitudes of their users. This seems to be at least part of what Alfred Mitchell-Innes means when he says that "[t]he eye has never seen, nor the hand touched a dollar" (Mitchell-Innes 1914, 155). He thinks of instances of money as, at base, circulating IOUs. He demonstrates his view with a retelling of the double-coincidence of wants problem famously faced by Adam Smith's butcher, baker, and brewer. If the baker wants some beer but the brewer wants no bread, the baker need not wait for the invention of a generally accepted medium of exchange to overcome his problem—all he needs is for the brewer to accept an IOU for some bread at a later date. The note on which the IOU is written is obviously concrete, but the debt itself, which is recorded on the note, is not concrete but rather attitude-dependent. If the brewer then gives the IOU-note to the butcher for some meat, and the butcher gives the IOU-note to the cobbler for some cobbling, and on and on and on, that note has begun to circulate with the character of monetary notes, akin to a banknote. Again, no one can deny the concreteness of the note, but the debt it represents is attitude-dependent, not concrete.

Passinsky sees her account as an alternative to Mitchell-Innes's view, but his account satisfies her definition of hylomorphism. She quotes Mitchell-Innes's "eye has not seen" quip during her explanation of the credit theory's ontology of money, which

she defines as follows: “Money itself is an abstract credit/debt relation, and a unit of money is an abstract unit of measurement which measures the size of a credit/debt” (Passinsky 2024, 43). As a characterization of Mitchell-Innes’s view, which she takes to be an exemplar of the credit theory, this is partially imprecise and partially wrong. First, monetary *value* is *determined by* credit/debt relations: the value of the circulating baker-IOU-note is ultimately determined by the bread it promises, and that promise is a debt-relation between the IOU’s holder and the baker. The unit of debt, however, is not a measurement of the debt’s size but rather is the size of the debt *itself*. This debt is thingy, coming in and out of existence and existing at a point in time. Its value can also change over time in just the manner that Passinsky describes money’s value fluctuating: if the baker’s bread wins some awards, the IOU may be more highly valued, and if it makes people sick, its value may drop. The form and the matter of debt, then, give units of debt the hylomorphic character she attributes to units of cryptocurrency. Given how well her framework fits with Mitchell-Innes’s account, we might just as well take Passinsky’s view as an explication of the credit theory instead of as an alternative. Doing so allows us, moreover, to avoid an internal tension in her view. As we noted above, she questions what ontologically unifies dollar bills and electronic money on Hindriks’s hybrid view; we might ask the same question about her conception of monetary matter, wondering about the ontological unity of metal and paper and numbers and bits, such that any of these might bear money’s form. On the credit-theory reading of Passinsky’s hylomorphism, the worry disappears: all monetary matter is commonly attitude-dependent and non-concrete.

Mitchell-Innes’s account also gives us reason to wonder about the thesis of David Dick’s essay, “How Many People Does It Take to Make a Dollar?” This sounds like the set-up to a joke, and his answer in turn sounds like the start of a punchline: two. Dick is serious, however, both about the question and his answer. Regarding the question: he wants to respond to those who say that most (if not all) cryptocurrencies fail to be money because they do not have enough users. To address their charge, we need to know how many users are required for something to be a money; hence Dick’s project. Whatever the answer to the “how many users?” question, establishing that something is money does not imply, Dick thinks, that it is *good* money. To examine monetary goodness, Dick thinks, we must separate the ontological question of whether something is money from normative questions about its quality as money. Dick’s analysis of the question of how many users are needed for something to be a money thus serves as a way to address broader issues about the ontology and normativity of money.

To answer the “how many users?” question, we first need to know what attitudes and behaviors are involved in the constitution of money. Dick takes up this line of inquiry as Hindriks does, *viz.*, via a critique of Guala (2016) and of Smit et. al. (2011,

2014, 2016). Dick characterizes all of these authors' views, including Hindriks's, as "function accounts" of money. All of them define money as a tool designed to overcome the double-coincidence of wants and thus, according to Dick, build etiology into their definitions. The views are also all behaviorist, in that their definitions are given in terms of publicly observable uses of money and make no mention of the attitudes of the users. Dick criticizes both of these presuppositions. On them, he argues, money that is established by fiat for any purpose other than resolving the double-coincidence of wants does not count as money, and barter cannot be distinguished from bona fide monetary payments (Dick 2024, 63–64). These positions are intolerable. Etiology does not matter when determining whether something is money; what matters according to Dick is whether an item is accepted for its exchange value and not for any other use value.⁷ This activity, partially defined by its accompanying attitudes, can be carried out by two people, so only two people are needed to make something money. Such a thing might not be a very good money, but, Dick asserts, it nevertheless is money. One can hear an echo of Minsky in this account. Any of us can make money: the trick is getting it accepted, and on Dick's view, only one other person needs to accept it to pull the trick off.

If we test Dick's view against Mitchell-Innes's version of the butcher, baker, and brewer story, we get some surprising results. Suppose the butcher gives the brewer a note that promises meat at a future date and that the brewer accepts the note for its exchange value and not for any other use. Suppose further that the brewer returns to the butcher the following week to redeem the IOU for the meat. It would be peculiar to say that the IOU has been used as money; it is more natural to say, simply, that it has been used as an IOU. For the IOU to take on the character of money, it would seem to need to circulate in payment for other goods, becoming more moneylike the more it circulates. Dick's approach, however, does not allow one to describe something as becoming more moneylike. He appears committed to saying that when the butcher issues the note, it is used as money, because, as per above, the baker accepts it only for its exchange value and not for any other use value. On Dick's view, the more a note circulates, the *better* it is at being money, but its status as money is discrete and is established the instant it is issued and accepted. That status, however, can disappear the instant that the note is issued. Continuing our story: suppose no one besides the brewer wants the butcher's note, so even if the brewer tries to get it accepted for some good or service, they find no takers. The IOU is, as the economists say, illiquid; the brewer is stuck with it. On Dick's view, this means the note can no longer be used as money. Only the butcher will take it, and when the butcher takes it, they do not

7 Aaron James has argued that Dick is right about the shortcomings of "function accounts" but that his (Dick's) own view fails to achieve the desired goal of "getting past barter" (James 2023, 5).

do so for its exchange value—indeed, they may intend to destroy the note upon its return.⁸ The note is thus money, but only for a moment, even though its only use is to facilitate an exchange between the butcher and the brewer.

If Dick wants to block this conclusion, he might deny that the brewer accepts the butcher's promissory note for *monetary*-exchange value. To be sure, the brewer does not intend to use the note for any of its concrete-material properties. The brewer intends at some point to exchange the note for some meat, but we can distinguish that sort of exchange value—to give it a label, call it *redemption* value—from monetary-exchange or *circulation* value.⁹ The latter sort of value allows money to be exchanged for a wide variety of goods, not just for some particular good specified by the IOU. Should Dick go this way, he would need to say whether the difference between redemption value and circulation value is a matter of money's metaphysics or of its normativity. I can imagine the first steps of either tack. To make it a metaphysical matter, he might refine his specification of the intentions involved in using something as money. Instead of saying that accepting something for its exchange value suffices to make that thing money, he might add that if the thing in question is a promissory note, the recipient must intend to transfer the note to someone besides the issuer in exchange for something other than the specified debt. If the baker takes the brewer's IOU with the intent of redeeming it for the brewer's beer, the note is not used as money, but if the baker intends to exchange that note with the cobbler for some cobbling, then it is used as money. Taking the other tack, Dick might say that a note accepted with the intent of exchange for its redemption value is not very good money, but it is money all the same. If a number of people accept the note with the intent of using it to exchange it for an unspecified object, that makes the note better money, but that is a normative matter, not a metaphysical one. Either option seems available.

A third option, however, is to reject this strict division between metaphysics and normativity. Doing this would allow us to speak of something as being more or less moneylike and to treat moneyiness as continuous, not discrete, property. It would also allow Dick's insights to be easily incorporated into Passinsky's hylomorphic view. It is central to the Aristotelian tradition to think of forms as better or worse realized. Dick is surely right that what we can call monetary attitudes must always be present for something to count as money; "[t]he question of whether something is money," he says, again echoing Minsky, "is always the question of whether there is someone *for whom* it is money" (Dick 2024, 66). The normative issues that arise about these users and their attitudes can be captured in a characterization of money's form, along the

⁸ Indeed, in the colonial United States, it was common to burn paper money upon its return via tax payment. On this, see the work of Farley Grubb (*e.g.*, Grubb 2023, esp. chapters 13–15).

⁹ For a helpful discussion of the differences between monetary redemption and circulation, see Tygmoine (2024, 14).

lines laid out by Passinsky. As she says, money's form is a sort of relational normativity, specifically that of a claim; the more generally it is accepted as a claim, the better, at least on one dimension, it is as money. The hylomorphic model thus allows us to understand money's normativity by and through its metaphysics.

With this we come full circle to the authors' common interest in cryptocurrency. They give us a variety of reasons to treat at least some cryptocurrencies as money at least some of the time, but Dick's essay invites us to ask: are they ever good sorts of money? Again: we can extend Passinsky's discussion of form to articulate the standard for answering this question; again: a full account of this form will explain what monetary value is, which is part of the standard we use when assessing whether a given bit of money is good or not. If, moreover, money's form includes not just monetary value but *stable* monetary value, one might look at the volatility of cryptocurrency prices and conclude that most of them are pretty bad money qua money. The opening essays in *The Philosophy of Money and Finance* demonstrate the potential social ontology has to address these fundamental issues concerning the value of money.

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