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Article

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# What Money Is and Ought To Be

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**Abstract:** Teleological thinking about money reasons from what money is for to both how it ought to be used and what forms it should take. One type, found in Aristotle's argument against usury, takes teleological considerations alone to decisively settle normative questions. Another type, found in Locke's argument about monetary durability, takes teleological considerations to contribute to the settling of normative questions, but sees them as one consideration among many. This paper endorses the type made by Locke while rejecting the type made by Aristotle, and identifies further teleological tendencies in the work of Adam Smith and other philosophers.

**Keywords:** money, ethics, social ontology, teleology, currency, Aristotle, John Locke, chartalism

## 1 Introduction

Philosophical thinking about money often proceeds teleologically. That is, it reasons from what money is *for* to both how it ought to be used and what forms it can and ought to take. Such teleological reasoning can be better or worse, so it is worthwhile to clarify and distinguish the different types of teleological arguments that are at play either implicitly or explicitly in our thinking about the proper use and form of money.

One type of teleological argument, exemplified by Aristotle's influential argument against usury, takes teleological considerations to always offer decisive normative reasons. Another type, one that can be found in one of John Locke's discussions of money, finds teleological considerations compelling, but only in combination with other facts and practical considerations. This paper rejects the sorts of teleological arguments about money like those made by Aristotle while

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endorsing the sorts like those made by Locke. This is not to say that the paper argues for Locke's conclusions about how money should be used and fashioned; it is only to say that Locke's form of teleological argument is potentially compelling while Aristotle's is not. After identifying these arguments in Aristotle and Locke, and using them to distinguish these two types of teleological arguments about money, the paper goes on to identify some teleological tendencies in the work of several philosophers writing about money after Locke, from Adam Smith to philosophers writing in the present day. A single paper is no place to settle all the questions about these other authors' views, so it instead identifies these teleological tendencies as a direction for future scholarship, which could use the framework of the two types of teleological arguments as a guide for how those views might be interpreted or should be developed.

## 2 Aristotle on Money and Usury

The best place to start any discussion of teleology is with Aristotle, so the best place to start an examination of teleological thinking about money is with his influential argument against usury based on a consideration of money's purpose.

The very term "teleology" derives from the Greek word "telos," which, when Aristotle uses it, means "the *end* or purpose of action" (Liddell, Scott, and Jones 1940, p. 1772–1774). Aristotle thinks that objects, like actions, can have a telos as well, and that knowing what the telos of an object is can settle both what an object is and what makes it good. As he puts it in the *Nichomachean Ethics* "'a so-and so' and 'a good so-and-so' have a function which is the same in kind […] (for the function of the lyre-player is to play the lyre, and that of a good lyre-player is to do so well) […]" (McKeon 1941, p. 943). The same is true of pretty much everything for Aristotle, from animals to artifacts, including humans and the universe itself.[1] Teleologically, knives are just things whose function is to cut, and the good knives are those that cut well. Knowing that the telos of a knife is to cut settles the ontological question about which things are knives and the normative questions about both what makes a knife good and what ought to be done with it. If a thing's purpose is to cut, then it is a knife; and if it is a knife, it ought to cut well and it ought to be used for cutting.

1 The *Nichomachean Ethics* gives a teleological analysis of human life, and the *Metaphysics* gives a teleological analysis of the universe. Freeland (1994) notes the way Aristotle thinks of women as "incomplete" or "deformed" men, which suggests that Aristotle takes the telos of the human form to be male (p. 145–146).

For Aristotle, precisely the same thing is true of money. Once its function is properly grasped, we will understand both what money is and how it ought to be used. In the *Politics*, Aristotle declares the telos of money to be a medium of exchange, which is all we need to know to see both what money is and why it should not be lent at interest. “Money was intended to be used in exchange,” Aristotle explains, “but not to increase at interest.” Since money’s function is to serve as a way to facilitate exchanges whose end is the trade of useful and necessary commodities, those who exchange it not for goods, but instead for more money, pervert the end that money was created to serve, and so engage in “unnatural” exchanges “of the most hated sort.” “[U]sury, which makes a gain out of money itself, and not from the natural object of it,” is “of all modes of getting wealth […] the most unnatural” (McKeon 1941, p. 1141).

Elsewhere, in both the *Politics*[2] and the *Nicomachean Ethics*,[3] Aristotle also suggests that money’s function is to serve as a unit of account. This complicates both the project of reconciling this argument against usury with all Aristotle has to say about money and the project of vindicating the argument against usury which seems to depend on money having one and only one governing purpose.[4] But since our project here is simply to understand this influential teleological argument against usury attributed to Aristotle, we can set these complications aside.

Whether it can be reconciled with all he had to say about money or not, Aristotle’s teleological argument against usury was known and criticized for centuries, even if it was not always properly understood. Langholm (1984) points out that critics of Aristotle, from medieval scholastics to Jeremy Bentham, misunderstood Aristotle’s argument against usury as a silly claim about a physical impossibility, asserting that usury is unnatural because it attempts to “breed” money from money, and then observing that since coins are barren artifacts not fecund animals, they cannot reproduce.[5] This interpretation derives from Aristotle’s turn of phrase where he employs “this term interest, which means the birth of money from money,” and applies it “to the breeding of money because the

2 “[C]oin is the unit of exchange and the measure or limit of it […]” (McKeon 1941, p. 1139).

3 See (McKeon 1941, p. 1010–1012).

4 For more on this see Meikle (1994).

5 In Bentham’s Letter X in his *Defense of Usury*, he writes “Aristotle, […] that great philosopher, with all his industry, and all his penetration, notwithstanding the great number of pieces of money that had passed through his hands (more perhaps than ever passed through the hands of philosopher before or since), and notwithstanding the uncommon pains he had bestowed on the subject of generation, had never been able to discover, in any one piece of money, any organs for generating any other such piece. Emboldened by so strong a body of negative proof, he ventured at last to usher into the world the result of his observations, in the form of an universal proposition, *that all money is in its nature barren*.” (Bentham 1818, p. 99–100).

offspring resembles the parent" (McKeon 1941, p. 1141). Understanding Aristotle's argument against usury in this way, however, is to mistake his illustration for his explanation. As Langholm puts it,

> When Aristotle takes up the question of the social function of money in the *Politics*, what weighs on him is the danger of a perversion of the *purpose* for which it was invented. Money, like all things Greek, has a *telos*. It is man-made, but it is made to serve a natural end. However, it can also be misused for perverse, man-made ends. [...] [H]is real point is not that usury is an unnatural use of money because money *cannot* breed (which is what the usurer tries to make it do); rather his point is that money *should not* be made to breed (a simile of what it does in usury) because usury is an unnatural use of money. What this would indicate is that Aristotle in fact recognized the productivity of money. He did not think money sterile at all, he just hated its fruits (Langholm 1984, p. 62).

In his argument against usury, Aristotle provides us a paradigm teleological argument about money. The teleological function of money is to serve as a medium of exchange between useful and necessary commodities, so this condemns usury as the "most hated" and "unnatural" use of money because it treats what ought to be the medium of an exchange as the end of it. Because money was made *for* exchange, it is wrong to use it for any other purposes, and it is *most* wrong to use it for a purpose that is precisely the opposite of what its telos requires. On Aristotle's teleological understanding of it, since money is for exchanging for other things, the exchanges that aim at simply obtaining more money run directly contrary to the way money is to be used, and this is why usury is wrong.[6]

But how strong is such an argument? Even the author of one of its most sympathetic reconstructions notes that "the *telos* of a thing does not sound like a very convincing moral criterion. Granted that money was invented in order to be used in one way, why should it be wrong to use it in another way?" (Langholm 1984, p. 64).

## 3 Two Types of Teleology

One way to understand Aristotle's argument against usury is as one that includes both a teleological claim and a normative premise that such teleological claims always provide decisive normative reasons:[7]

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**6** It is also why "retail trade" (the investing in products to sell for more money than invested) is wrong according to Aristotle, but it is not the "most hated" since it at least has the decency to involve the useful commodities that ought to be involved in such exchanges (McKeon 1941, p. 1141). Since they are structurally identical, I focus in this paper, for the sake of simplicity, on just Aristotle's more influential argument against usury.

**7** I am grateful to an anonymous reviewer for suggesting this way of formulating these arguments.

1) The purpose of money is to be the medium of exchange between useful commodities.
2) A thing should be used only for its purpose and not otherwise.
   Therefore,
3) Money should be used only as the medium of exchange between useful commodities and not otherwise.

Even granting the first teleological premise of this valid argument, we would be right to doubt its soundness, because there is ample reason to think its second normative premise is false. While it is no doubt easy to imagine cases where something should be used only for its purpose and not otherwise, it is hard to imagine that this is true in all cases. Perhaps in the kitchen, the garlic press should be used only to press garlic and not otherwise because it is so well suited to that one kitchen task and so poorly suited to all others. Using it only for its intended purpose here helps us achieve our goals in the kitchen and using it otherwise might only frustrate them. But in the office, in need of a paperweight where any heavy object will do, why not use the spare garlic press to hold down one's papers? Though it was not designed for the task, it will still perform it perfectly well, and might, all things considered, be the best choice for performing it in this case.

Matthew Silverstein's diagnosis for why the purpose of something like a garlic press should sometimes be ignored to allow for other uses is that teleological claims, on their own, provide no normative reasons at all since they are merely descriptive claims about the world:

> Many philosophers think of normative standards (and normativity more generally) primarily in terms of reasons. And yet nothing about anyone's reasons for action follows from [a teleological claim such as] good knives cut effectively (Silverstein 2016, p. 226).

If they were normative, teleological claims would be prescriptive, and recommend particular courses of action to us. On their own, however, Silverstein argues that teleological claims are merely descriptive and only generate prescriptions in combination with other things:

> I am not recommending or prescribing anything when I acknowledge that a good knife is one that cuts effectively. Of course, if you have a pressing need for something that cuts well, then I may very well recommend a quality knife. But once again, it is your need that is pulling the normative weight here. By itself, my judgment that some particular specimen is a good knife is just a description (Silverstein 2016, p. 226–227).

As Silverstein readily acknowledges, his view of teleology as purely descriptive is not universally shared among philosophers, not even those working in modern times. For example, Judith Jarvis Thomson has recently disagreed with this view, finding teleological claims to generate independent normative force in everything from organs to artifacts: "The pancreas ought to secrete digestive enzymes. […] A toaster ought to toast bread […]" (Thomson 2008, p. 207).

Silverstein and Thomson disagree over the metaethical question of whether teleology can be a fundamental source of normativity, generating normative reasons all on its own. Neither denies that it can play a proper role as part of a normative argument, either guiding or creating normative reasons. But whatever one's position is on that metaethical question, no proponent from either camp should advocate for the view that teleology alone provides automatic and decisive normative reasons in all cases, particularly when it comes to artifacts. The proponent of such a view would have to insist that it is the purpose for which an artifact was crafted that settles the proper use of it in all circumstances, and a view like this is subject to no end of counterexamples. Such a view would be unreasonably moralistic when it came to forbidding innocuous unintended uses such as using a garlic press as a paperweight, and it would be morally wrong when it came to forbidding lifesaving unintended uses such as using the hollow barrel of a pen for an emergency tracheotomy. The view that teleology alone gives final and decisive normative reasons concerning the use of any given artifact will have to demand that we not only sacrifice the conveniences of innocuous improvised uses to ensure that we use artifacts properly, but that we also will sometimes have to sacrifice lives. This consequence should be *reductio* enough for any teleological argument that has the form of Aristotle's argument against usury, inferring final and decisive normative reasons for the use of an artifact from nothing more than a consideration of its intended purpose.

Aristotle's own teleological argument against usury might not require that we sacrifice lives, exactly, to avoid the mistreatment of money, but it will require that we sacrifice a multitude of potential benefits that could come from a practice of lending money at interest. Despite the many disasters and downfalls that the practice of usury might involve, forbidding it entirely would prevent mass swaths of people from buying cars and homes, and for paying for their educations. It would block banks from offering loans for new businesses, and it would stifle the financial security of all the people who wish to save and grow their money with interest-bearing investments. Overall, it seems plausible to think that the practice results in far more benefits than harms, and so simply from a consequentialist perspective, the practice seems justifiable. Furthermore, a consequentialist argument for usury is not the only one available. For example, Meyer (2018) argues for the practice based on a "right to credit" which he takes to follow from "any justifiable private property regime" (p. 305). Here, the justification for the practice comes not from a consideration of overall social welfare, but rather from what obligations are owed to individuals in a system of private property.

Whether a practice of lending at interest is ultimately justifiable is, as far as this paper goes, still an open question, since what matters for it is to notice that the issue is not and should not be settled by an argument like Aristotle's, which draws a final and decisive normative conclusion on the point from a consideration of nothing more than the purpose for which money was created.

This does not mean, however, that there is no proper role for teleological considerations in our thinking about money. The major flaw with Aristotle's argument against usury was its inflexible insistence that teleology alone always delivers decisive normative reasons, regardless of other considerations. If this commitment is softened to simply acknowledge the way that teleological claims can contribute to decisive normative reasons in some cases but not in others, then we find a type of teleological argument that could be compelling. A particularistic version of a teleological argument that is sensitive to circumstances could succeed where the universal version that is indifferent to circumstances could not. So while the fact that money has a given purpose may not *always* give us decisive reason to treat it in some way or other, it *can* give us such reason in combination with other considerations in any given case.

As it happens, just such an argument can be found in John Locke's claims about money in the *Second Treatise of Government*.

# 4 Locke on Money and Preservation

Aristotle gives us an explicit teleological argument about the proper use of money deriving from the claim that the purpose of money is to be a medium of exchange. John Locke gives us an implicit teleological argument about the proper form of money deriving from the claim that money's purpose is to be a store of value. But for our purposes here, the most important difference between their two arguments is the way Aristotle derives normative conclusions from the purpose of money alone, and Locke derives them from money's purpose in conjunction with other considerations. This makes Locke's teleological argument about money particular where Aristotle's is universal, and it is what makes Locke's argument a model of the second and better type of teleological argument about money, which rests on a more plausible teleological premise.

Economics textbooks are fond of identifying three defining features of money instead of just one, and even use the language of "purpose" to describe them: "Money has three purposes: it is a store of value, a unit of account, and a medium of exchange" (Mankiw 2009, p. 80). In the *Nicomachean Ethics* alone, Aristotle indicates that money has two of these purposes as a unit of account and a medium of exchange, but Locke, in the *Second Treatise*, obviously thinks that the primary purpose of money is to serve as a store of value.[8]

In the *Second Treatise*, Locke's chapter on property with a puzzle. As we know from scripture at the 115th Psalm, God created the earth and "*has given the earth to the children of men;* given it to mankind in common" (Locke 1980, p. 18). But if the earth and all that is on it is owned collectively by all of humanity, how could anyone ever come to have a private property right in any particular part of it? Locke's famous and influential answer is that it is the investment of a person's labor that creates a private property right in something. For any given thing it is the "*labor* that was mine, removing them out of that common state they were in, [that] hath *fixed* my *property* in them" (Locke 1980, p. 20).

Given this, it seems that we might be free to then gather as much property as we can, as far as our mixture of labor can spread. To this, Locke replies

> Not so. The same law of nature, that does by this means give us property, does also *bound* that *property* too. [...] As much as anyone can make use of to any advantage of life before it spoils, so much he may by his labour fix a property in: whatever is beyond this, is more than his share, and belongs to others. Nothing was made by God for man to spoil or destroy (Locke 1980, p. 20–21).

This is Locke's "spoilage proviso" limiting the amount of property that can be gathered through the mixture of labor, and he takes it seriously enough to repeat it at length later on in the chapter:

> he who gathered as much of the wild fruit, killed, caught, or tamed as many of the beasts, as he could [...] [did so] [...] *by* placing any of his *labour* on them, did thereby *acquire a propriety in them:* but if they perished, in his possession, without their due use; if the fruits rotted, or the venison putrified, before he could spend it, he offended against the common law of nature, and was liable to be punished; he invaded his neighbor's share, for he had *no right*, farther than his use called for any of them, and they might serve to afford him the conveniences of life (Locke 1980, p. 24).

In this context, there is no incentive to gather more than you can use before it spoils, since doing so risks committing an offense "against the common law of nature" that warrants punishment. Taking a share so great that some of it spoils in your possession counts as a kind of "robbery" from others, but there is a way to gather more than one immediately needs legitimately. If a person is able to "give away a part to any body else, so that it perished not uselessly in his possession, these he also made use of," and made no offense against the common law (Locke

**8** Locke wrote *extensively* on money, and the description of his views on it here may not be consistent with all he had to say on the matter (See Kelly [1991] for this.) The sketch of Locke's view here is confined to his discussion of it in the *Second Treatise of Government*.

1980, p. 28). This could be accomplished by trading away the portion that is more than you will use for other goods that you will use before they spoil. For example, if you trade your plums

> that would have rotted in a week, for nuts that would last good for [your] eating a whole year, [you] did no injury; [and] wasted not the common stock; destroyed no part of the portion of goods that belonged to others, so long as nothing perished uselessly in [your] hands (Locke 1980, p. 28).

Nuts are a better commodity than plums because they have a longer shelf life, but other commodities are even better because they are even less perishable. So a person might exchange those nuts for “a piece of metal, pleased with its color; or exchange his sheep with shells, or wool for a sparkling pebble or diamond, and keep those by him all his life, he [thereby] invaded not the rights of others” (Locke 1980, p. 28).

Once people settled on trading such imperishable things “thus *came in the use of money*, some lasting thing that men might keep without spoiling, and that by mutual consent men would take in exchange for the truly useful, but perishable supports of life” (Locke 1980, p. 28). The labor that is invested in something from the commons accounts for “nine tenths,” or in “most” cases “ninety-nine hundredths” of the useful value of property, but that value risks destruction if left in property rights in perishable goods, which themselves are not allowed to spoil uselessly in the hands of their possessors (Locke 1980, p. 25). Money allows people to preserve the value of their labor and avoid violating the common law because it allows the transfer of property rights from perishable goods to imperishable things. Money’s primary function for Locke is to act as a store of value, allowing people to gather more wealth than they could otherwise without violating the spoilage proviso. Pebbles and shells will do, but the best forms for money to take will have minimal “commonness or perishableness,” and so this marks out precious metals like “gold and silver, which may be hoarded up without injury to any one; these metals not spoiling or decaying in the hands of the possessor” (Locke 1980, p. 29).

On Locke’s account, then, the telos of money is to serve as store of value, preserving the labor value invested in excess property without risking violation of the spoilage proviso and so offending against God’s law. Given that this is its purpose, it seems money ought to be as imperishable as possible. Thus, in terms of the forms it might take, nuts are good, but shells are better, and precious metals are best.

The teleological direction of Locke’s argument about the form that money should take is obvious. Money is for preserving value, so it therefore ought to take the most durable form that it can. Locke’s argument concerns the proper form of money where Aristotle’s concerns its proper use, but more importantly it differs in that its conclusion that money ought to take the most durable form does not derive solely from a consideration of money's purpose. Money ought to take the most durable form possible, on Locke's view, because its doing so helps us reconcile our desire to gather more wealth than we can immediately use with our obligation not to violate the spoilage proviso and risk God's wrath. Money was invented for storing value, but we only have decisive reason to use and fashion it for this purpose because it helps us achieve our goals in the particular circumstances we are in. Lacking either a spoilage proviso or a desire to gather beyond what such a proviso permits, we might have no reason to use money to store value or to fashion money to do so as well as it can. In conditions of plenty where waste does not carry a threat of divine punishment, exerting such efforts for the preservation of value might simply be a waste of time.

For Locke, money's teleological purpose does give us reason to fashion it to be as durable as possible, but only in conjunction with other considerations as well. We need not grant Locke's other premises or find his argument to be ultimately sound to see that it rests on a sturdier sort of teleological premise that only asserts that an object's purpose can help provide decisive normative reasons depending on particular circumstances.

This kind of teleological argument about money is compatible with acknowledging that, even if money's purpose is to be a store of value, we might find ourselves in circumstances where we ought not fashion it to do so perfectly. A common anxiety about fiat currency is that its value can be manipulated by the body that issues it, making it less than perfect as a permanent store of value. While this feature of fiat currencies is usually seen as a weakness in them, we might find ourselves in cases where it seems like a feature rather than a bug, since we might have reason to prefer monetary forms that are less than maximally imperishable. Periods of both deflation and inflation could give us reason to prefer to put our money in forms that will not last forever. During periods of deflation, when prices are falling, this creates an incentive for people not to spend, as their money's buying power increases over time. One potential countermeasure against this would be to have money that itself would expire if not spent, and so block the incentive to avoid spending in a deflationary cycle. Periods of inflation can and have given reason to create perishable money as well. During a period of hyperinflation in Zimbabwe, bank notes were issued with explicit expiration dates to close a potential loophole in redenomination (Salmon 2009). During hyperinflation, prices increase exponentially, and prices can get so high that higher and higher denomination notes need to be printed. As the orders of magnitude start to get out of control on such notes, another strategy to deal with the hyperinflation is to "redenominate" the currency, where the value of all notes is divided by some power, such as 1000. The notes issued prior to an intended redenomination are stamped with expiration dates so that they must either be exchanged for the new notes of lower value or lose their value altogether. (Otherwise, people might just hold on to their old, higher-denomination notes in the hopes that redenomination will *multiply* their value by whatever power the notes are being divided by.) Finally, the qualities that make a form of money imperishable might cut against other desirable qualities that people, economies, or states might prefer. For example, "paper" dollar bills in the United States have continually fought off attempts to replace them with more durable metal coins, even though the lifespan of such notes is much shorter. Whether this has happened for good moral reason or out of sentimentality, inertia, or irrationality, it is still evidence of the kinds of cases in which money could be preferred to take a less than maximally imperishable form.

Locke himself might not think that any of these considerations are worth risking violation of the spoilage proviso and inciting God's wrath, but the implicit teleological argument he gives to make money as imperishable as possible would nevertheless have to place them on the scale to be weighed against other factors at play, because it takes the purpose of money to contribute to the answer of how it should be used and fashioned, not to automatically settle the question. In this, then, if not for its other premises, it should serve as our model for good teleological reasoning about money that takes money's purpose into account when deciding how to use and make it, but not taking that consideration to outweigh all others.

## 5 Teleological Tendencies

Aristotle provides us with an explicitly teleological argument about money while Locke provides us with an implicitly teleological one. This paper has so far argued that we ought to reject the teleological arguments like Aristotle's because they give teleological considerations decisive weight, but that we should consider the teleological arguments like Locke's because they balance teleology against other considerations. The teleological considerations in these two arguments are among the clearest and most influential in philosophical thinking about money, but that literature often includes teleological tendencies that we might evaluate and interpret using these two argument types as our guides.

Even lacking space for a full scholarly consideration of the work of all these philosophers, it is still worth our time to examine some of their arguments briefly to see these tendencies to appeal to the purpose of money to settle both practical questions about what money should be and ontological questions about what money can be. In what follows, I will first identify the teleological tendencies in Adam Smith's story about the way money became a better and better medium of exchange, and then trace the teleological tendencies of several modern authors considering the question of what money can be.

## 5.1 Smith on Money and Exchange

Adam Smith's origin story about money importantly lacks any central designer deliberately granting money its purpose and then refining its form in light of that goal. It is instead another example of the way an invisible-hand-like process can create a sophisticated system out activities that are in no way intended to achieve such an overarching goal. Nevertheless, Smith's story pushes the development of money in a clear teleological direction, which is to become an increasingly efficient medium of exchange.

As he describes it in the chapter of the *Wealth of Nations* entitled "Of the Origin and Use of Money," the form that money takes is shaped by the fact that money aims at facilitating exchange. After the division of labor, once people no longer made all their necessities themselves, only "a very small part of" their wants could their "own labor supply." Instead, the majority of their supplies came from the labor of others and "[e]very man thus lives by exchanging, or becomes in some measure a merchant […]" (Smith 1976, p. 37).

These circumstances create a new problem, since people who "live by exchanging" depend on the desirability of what they have in order to get what they want. But these wants may not always coincide: bakers and brewers may seek meat from the butcher by offering bread or beer in trade, but if "the butcher is already provided with all the bread and beer which he has immediate occasion for […] [h]e cannot be their merchant, nor they his customers." Their powers of exchange are thereby "clogged and embarrassed" (Smith 1976, p. 37).

Given the frequency of such frustrations, "every prudent man in every period of society" made sure "to have at all times […] a certain quantity of some commodity or other, such as he imagined few people would be likely to refuse in exchange for the produce of their industry" (Smith 1976, p. 37–38). If the problem is that people often do not want what you are offering to trade, the solution is to keep things around that pretty much anyone would be happy to have, such as salt, sugar, or dried cod.[9] Such things are better to keep around because they are easier to exchange, since they are more widely desirable.

But of all these widely beloved commodities, nothing is as widely desired as metals, which won out as the preferred way to incarnate money "above every other

9 Smith's complete list of such generally desirable commodities includes cattle, salt, shells, dried cod, tobacco, sugar, hides or dressed leather, and nails (Smith 1976, p. 38).

commodity." Their wide desirability is complemented by other advantageous features as a medium of exchange. Metals can be divided into smaller amounts and "by fusion those parts can easily be re-united again" (Smith 1976, p. 38–39). This makes them a good form of money not because it helps metal serve as a unit of account, but because it makes it easier to offer a potential trading partner precisely the amount of it for which they are willing to trade. Features which are often invoked in the service of other functions of money are, for Smith, advantageous in metals only because they help facilitate exchange.

Metals became money because they were the commodities of widest desirability, and so were the best choice for anyone seeking to trade with any arbitrary person. Because it is the metal itself that is desirable, this led to a new problem that might clog and embarrass exchange if it was hard to tell what amount of metal was really being offered in trade. The "rude bars, without any stamp or coinage" that were first traded could only be trusted after the "inconveniences" of either weighing or assaying them, processes that were "tedious and difficult" (Smith 1976, p. 39–40). Explicitly in order "to facilitate exchanges […] it has been found necessary […] to affix a publick stamp on certain quantities of such particular metals. […] Hence the origin of coined money" (Smith 1976, p. 40).

The mints that create these coins evaluate the purity of the metals and guarantee it with their stamp do not create money as an abstract or symbolic object, instead they simply act as a kind of quality assurance for these parcels of the most widely desirable commodity. The mints are

> institutions exactly of the same nature with those of the aulnagers and stampmasters of woolen and linen cloth. All of them are equally meant to ascertain, by means of a publick stamp, the quantity and uniform goodness of those different commodities when brought to market (Smith 1976, p. 40–41).[10]

The state demonstrates that money is and ought to be just whatever the most widely desirable commodity is when it guarantees the purity and weight of its coins. States also demonstrate that it is the desirability of the metal itself that makes metal money work when it debases its coins. When "the avarice and injustice of princes and sovereign states" leads them to debase their coinage and diminish "the real quantity of metal … which had been originally contained in their coins," they thereby "defraud" their creditors "of a part of what was due to them" (Smith 1976, p. 43–44). Even when trading coins struck by a state, what creditors are owed is a certain amount of a desirable commodity, not an abstract symbol of value, because it is the wide desirability of particular metals that make

**10** Note here the way that Smith, contrary to his popular reputation, embraces this way in which the state aids the market through deliberate intervention and regulation.

them capable of being money since they can thereby best achieve its purpose of facilitating exchange.

For Smith, metal whose purity and weight is assured by stamp became money because it is *best at being* money. Since it is the commodity that is most widely desirable to the greatest number of people in the greatest variety of exchanges, it is the form that money ultimately took since it is the form that was best able to achieve its distinctive purpose. Debased coinage that contains less of “the real quantity of metal” than it purports to is *worse* money, because it is *worse at being* money, containing less of the stuff that is so widely desirable.

While he never states it explicitly, Smith’s teleological reasoning here is clear: money’s purpose is to solve the problem that, in barter economies, wants for the commodities that happen to be on hand do not coincide often enough for an efficient transactional economy. Given that purpose, money became just whatever commodity was most widely desirable, and this turns out to be metals.

While Smith’s story has a clear teleological direction, the sort of teleological argument Smith is making here is much more obscure. First of all, it is not obvious that Smith’s story is giving any normative prescription at all, since it is fundamentally a description of how money came to take the form that it did. Even if entirely accurate,[11] such a description need not make any positive recommendations at all, since genealogies can be given to damn as much as to praise. In Smith’s case in particular, it is a popular interpretive move to extrapolate a normative argument from any decentralized invisible-hand-like process by claiming that it is a superior system that produces optimal outputs better than any deliberately planned one ever could. Therefore, these processes should not be interfered with, and their outcomes should be considered the best ones possible. (This is certainly a popular interpretation of Smith when it comes to arguing for a laissez-faire approach to the economy involving no government intervention.) But even as his origin story for money shows, Smith finds a proper place for state intervention in the mints that vouch for the purity of coined metals, so whatever normative argument might be found here is likely more complicated than this popular gloss on Smith’s arguments.[12]

It is a project for a different paper to extract Smith’s full teleological argument here and to see how it fits with his larger project, but once it is properly interpreted, it can be evaluated by comparing it with the two types of teleological arguments identified in this paper. If Smith has a compelling normative argument here, it will

**11** Smith’s account of the origin of money is more likely a just-so story rather than an accurate historical account. See Graeber (2012) and Douglas (2015).

**12** For a nuanced discussion of Smith’s arguments and the various misinterpretations of them, see Fleischacker (2009).

have to be one akin to Locke's teleological argument about money rather than Aristotle's. Even if we grant that the purpose of money is to serve as a medium of exchange, we still might lack decisive normative reason to give it a form that is maximally exchangeable. For example, Scharding (2019) points out the way that Fichte thought nations were morally obliged to create and maintain exclusively national currencies that could not be traded outside the country, so as to shield its citizens from foreign market forces, and fulfill its obligation to provide them the necessities of life. Similarly, Alcantara and Dick (2017) detail the way that Indigenous societies in Canada are experimenting with creating their own cryptocurrencies specifically designed to not be exchanged outside their own societies and territories, in order to support their own sovereignty by freeing them from the influence of an outside currency. In each of these arguments, concerns for national sovereignty are taken to outweigh the interest in making money maximally exchangeable.

Whether Fichte is right in either his moral goals or macroeconomic premises, and whether efforts to create exclusive cryptocurrencies for Indigenous communities will achieve their stated goals is beside the point.[13] Instead, what matters here is that Fichte, Scharding, and the creators of Indigenous cryptocurrencies proceed in their arguments about money the proper way. Instead of simply concluding that money ought to take the form with maximal exchange value, because facilitating exchange is what money is for, they weigh such claims against other moral and political considerations about what money ought to do, and then settle on a form for money that might be *worse* at fulfilling that function, but for good moral reason. Perhaps money ultimately ought to take the form of whatever has maximal exchange value, but if that is so, it will have to be because there is a decisive moral reason to do so, not simply because exchange is what money is for.

## 5.2 Modern Limits on What Money Can Be

Much modern philosophical work on money has focused not on what form money should take, but rather on what money is and can be. Using it as an example of a particular sort of social kind, Khalidi (2015) tells us that "[m]oney cannot very well be made out of ice (at least not where temperatures often rise above 0 °C), or a radioactive isotope with a very short half-life, or a rock the size of the moon" (p. 105). Following Guala (2010), Khalidi thinks money is a social kind with stable causal properties that will constrain what money can be, and that money depends on the physical properties of objects in addition to the attitudes of agents.[14] That

**13** Scharding (2019) rightly doubts many of Fichte's specific economic claims.

larger claim may well stand, but it is interesting to note the different sort of teleological reasoning at play here in Khalidi's claim. It is not normative in the way Locke's was or the way Smith's might be, telling us what form money ought to take. Instead, it seems to build a teleological assumption into the very ontological category of money, thinking that money can only be what achieves money's purpose well. The only things that can be money are those things that are good at being money.

There is reason to doubt such an assumption ontologically and there can be circumstances where we have reason to resist it normatively. The history of money provides us with examples where money has taken forms that achieve such purposes less than perfectly and we have already seen that we might have normative reason to prefer such forms. Ice and isotopes are presumably poor money because they have short lifespans, but so too can currency: consider the Zimbabwean Dollar notes already discussed above that were stamped with expiration dates only eight months in the future (Salmon 2009). Moon-sized rocks are presumably poor money because they are too large to carry and exchange hands, but as *rai*, the giant stone coins from the island of Yap that can "exceed six feet in diameter" demonstrate, an object need not be portable or even change its physical location in order to function perfectly well as money (Gilliland 1975, p. 9). Furthermore, *rai* show that money can be exchanged without changing physical location. Ownership of *rai* is kept as part of the oral tradition of Yapese islanders, which has been suggested as the inspiration for the ledger system by which Bitcoins transfer ownership (Fitzpatrick and McKeon 2019).

Thus, the teleological assumption that money can only be what performs its function well may not stand up to scrutiny, despite being a popular claim among many modern philosophers of money. For example, in a recent working paper, Yermack (2013) argues that Bitcoin is not a "real currency" because it performs all the functions of money so poorly. But this teleological assumption is on display perhaps most prominently among the modern chartalists.

Chartalism is the view that, roughly, money is whatever the state or similar authority declares it to be. It descends to us from G. F. Knapp's *The State Theory of Money* (1924), which proposed the theory at the beginning of the 20th century, but it has garnered many more defenders in recent years, including Ingham (2004), Graeber (2012), Douglas (2015), and Hubbs (2019). These modern chartalists are fond of casting their view as a historical improvement over what Hubbs (2019) calls the "market" accounts of those like Smith and Locke, that suppose an origin story in which trade began in barter, and then out of its frustrations, money arose as a

**14** This is an explicit rejection of Searle's (1995) view that the tokens of money can be just whatever are "collectively accepted" to be money.

spontaneous and emergent property of these interactions. According to Douglas (2015), "[a] glance at the anthropological evidence shatters this picture. There is no evidence whatsoever that a barter society, in which goods are *primarily* distributed by instantaneous spot-exchanges has ever existed" (p. 72). Later, Douglas goes on to explain that

> [n]one of the history we have examined so far supports the view that commodity money is or ever has been a medium of exchange. Everything suggests that it first emerged as something else: an accounting unit whose value is set by a legal authority (Douglas 2015, p. 80).

Ingham (2004) goes further to say that not only *does* the historical record not show money arising as what was fundamentally a medium of exchange, but that it *could not* have, since claiming otherwise involves a circularity. Considering a scenario in which the cigarette is purported to emerge as the privileged monetary substance, Ingham argues

> The conventional economic answer that a 'cigarette standard' emerges spontaneously involves a circular argument. That is, a *single* 'cigarette standard' cannot be the equilibrium price of cigarettes established by supply and demand because, in the absence of a money of account, cigarettes would continue to have multiple and variable exchange-values. A genuine market which produces a single price for cigarettes requires a money of account – that is, a stable yardstick for measuring value (Ingham 2004, p. 25).

Both Douglas and Ingham think that the constitutive feature of money –what gives it its "moneyness" as Ingham puts it– is its ability to function as a unit of account. Ingham puts the claim most forcefully by asserting that the "very *idea* of money, which is to say, of abstract accounting for value, is *logically anterior and historically prior to market exchange*" (Ingham 2004, p. 25). But if this is true, how did money as a unit of account come to be? The chartalist answer is that it was "*fixed by an authority*, not determined by the market" (Ingham 2004, p. 25).

The chartalist picture of money takes money's telos to be to serve as a unit of account, and then goes on to conclude both that money could thus only have come about through the intervention of some authority declaring a fixed exchange rate for that unit of account, and that the only things that count as money are the things that are declared to be so by such an authority. Money can therefore take any form that an authority orders it to have, but nothing can count as money unless some authority has stipulated a stable exchange rate for it.

The alternative, according to the chartalists, is either logically or practically impossible. Not only is the idea of money as a set unit of account logically prior to sophisticated monetary practices, "it is hard to see how a unit of account could emerge from within a barter society" (Douglas 2015, p. 73). Citing work from Davies (1996), Ingham (2004) doubts that "a money of account could emerge from myriad bilateral barter exchange rations based upon subjective preferences. One hundred goods could possibly yield 4950 exchange rates" (p. 25).

The role of an authority is indispensable on the chartalist picture to explain not only the origin of money, but also its persistence. Lacking an authority to use its power to stipulate a stable exchange rate, a floating market exchange system attempting to converge and remain on a commodity such as a cigarette could not maintain a stable price. "[U]nless the exchange-value of a cigarette was fixed in terms of another linchpin commodity, its exchange-value would vary from trade to trade for the same commodity. Consequently it could not function as money" (Ingham 2004, p. 24).

The chartalist account of money is controversial in at least two respects. First, as a descriptive or conceptual matter, other recent theorists deny that the telos of money is to be a unit of account. Across a series of papers, Smit, Buekens, and Du Plessis (2011, 2014, 2016) present a theory of money that is similarly permissive as to the form that money can take, including seashells, gold, cigarettes, paper bills, tins of mackerel, and records of transactions, but they differ profoundly from the chartalists on what the telos of money is, claiming explicitly that "it is not conceptually required that money be the unit of account" (Smit, Buekens, and Du Plessis 2016, p. 333).

Second, even if we grant the chartalists their conceptual claim that excludes anything that does not function as a unit of account from even counting as money, this will not ground a normative conclusion that we must therefore make our money perform this function optimally well. For reasons of convenience, inertia, or justice we might prefer to keep our money in a form whose exchange value fluctuates a bit from trade to trade, even if this means chartalists like Ingham would thereby insist it does not even deserve the title "money." Even for the task of measuring value itself, it might be best to use a unit that is familiar and comprehensible like the fiat currencies such as dollars, pounds, and euros even though they all float and fluctuate in value themselves.

This is not, of course, to exclude the possibility that we might ultimately have reason to make our money as stable and rigid a unit of account as it can be, it is just that this will only be the case if the overall balance of our normative reasons recommends it, and not simply because of a teleological claim built into a view about what money must be.

## 6 Conclusion

There is still much work to be done in interpreting the teleological claims about money from past philosophers like Adam Smith and in developing and evaluating the teleological claims about money in contemporary philosophers like Khalidi and the chartalists. While this paper cannot carry out this work here and now, it provides tools to guide such future work by distinguishing between two types of teleological arguments about money that have already been made. Where new work on money is ambiguous about the kind of teleological claims it wishes to make, it will do well to model itself on a particularistic version of a teleological argument like that of Locke's rather than a universal one like that of Aristotle.

But not all modern philosophical work on money is so ambiguous in the way it treats teleology. Frank Hindricks and Francesco Guala provide a functionalist account of money, taking it to be an institution that emerges to solve a particular kind of coordination problem (Guala 2010, 2016, and Hindricks and Guala 2015). Given that their ontology of money gives it, by definition, a specific function to perform, we might worry that their argument veers toward the Aristotelian model of teleological argument about money and errs in doing so. Happily, precisely the opposite is true. In a recent paper, despite using the term "teleological" in a way incompatible with its use in this paper, they provide an argument that is entirely compatible with the recommendations this paper makes. There, they offer an argument on the Lockean model, separating the *function* that individuates and explains an institution like money, from the *value* that institution promotes. They further observe that we can evaluate various institutions in terms of the values they secure, and "a poor evaluation provides reasons for redesigning … [those] institutions" (Hindricks and Guala 2019, p. 11).

This is a good model to emulate as we proceed with philosophical investigations about money, taking its purpose (or purposes) into account when we consider how to use or fashion it, but not letting those purposes, on their own, settle such questions.

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