Money as a capitalist form

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Neoclassical economists have never had an easy time dealing with money. Traditionally, they have conceptualised money not in terms of what it *is*, but rather in terms of what it *does*: as a widely used textbook in monetary economics defines it, money is the object that functions 'as a medium of exchange, as a unit of account, and as a store of value' (Mishkin, 2012: 53). These functions, however, are not equally important: 'of the three functions, its function as a medium of exchange is what distinguishes money from other assets such as stocks, bonds, and houses' (ibidem). And this is so because, according to the orthodox view, money was created first and foremost to mediate exchange, and the other monetary functions are mere by-products of the use of money as means of exchange. This simple story, which neoclassical economics has embraced since its beginnings (Menger, 1892), and which one still finds in the most influential contemporary textbooks (e.g. Mishkin, 2012), is inconsistent with the available evidence. The claim that money's existence as a means of exchange precedes its use as standard and store of value is historically inaccurate: as historical research has consistently shown (Graeber, 2013; Ingham, 2004; Polanyi, 1968), the chronological order was actually the reverse.

In view of this shortcoming, heterodox economists have long tried to develop alternative theories of money. The most well-known of these is the chartalist or state theory of money. According to state theorists of money, the neoclassical approach is flawed in two senses: first, it overlooks the crucial role of the state in the historical emergence of money; second, it overstates the economic importance of money's function as medium of exchange, failing to account for the crucial role of money as a standard of value in the development of market economies. By addressing such issues, chartalists have shown that money did not originate as a means of exchange. Moreover, they have uncovered the essential connections between the market and the state, and demonstrated that a market economy cannot exist in the absence of money.

Yet, the chartalist approach too has its shortcomings. First, while it does not break away with the functional definition of money, it falls short of explaining why and under what

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circumstances the instrument posited by the state as the means of tax payment becomes a universal standard of account and a generalised medium of exchange. Consequently, and second, although it reveals the historical nature of both money and the market, chartalism does not manage to establish a conceptual distinction between the pre-capitalist forms of money and money as it exists in capitalist societies.

As we shall see in this paper, such shortcomings are an inevitable outcome of the fact that chartalism does not recognise the specificity of value as a capitalist form of wealth. The paper contends that, by conceiving of value as a specifically capitalist form, and by showing that value cannot exist in the absence of a general equivalent, Marx establishes the foundations for a richer understanding of the capitalist institution of money. In positing the transformation of money into general equivalent as problem, and showing that this transformation is a necessary outcome of the capitalist mode of production, Marx reveals that the effort to derive a conceptual hierarchy between the functions of money from the order in which they appear in history is mistaken. Whatever the historical sequence of these functions might be, the fact remains that it is only in the capitalist mode of production that money becomes a general equivalent, and that whatever is posited as a general equivalent must necessarily perform the roles of general unit of account, means of exchange/payment and store of value.

1. The chartalist approach to money

The neoclassical view that money emerged to solve the problems of barter has been harshly criticised by the proponents of the chartalist approach to money. According to the latter, far from being an outcome of market exchange, money is in truth 'logically [and historically – BH] anterior to the market' (Ingham, 2005: 35). As any neoclassical economist would easily concede, a market cannot operate adequately in the absence of transitive exchange-values. Yet, as pointed out by the critics (Ingham, 2004; Peacock, 2013), transitive exchange-values cannot emerge in the absence of a money of account. This means that money was not an unintended product of the interaction of agents in the market; rather, it was that 'which ma[de] an orderly market possible' (Ingham, 2004: 35) in the first place. If it is true that money is a pre-condition of markets, then money cannot have emerged from pre-monetary market exchange (Ingham, 2000: 18); rather, it must have had

an extra-economic origin. In the words the founder of the chartalist school: ‘money is a creature of law. A theory of money must therefore deal with legal history’ (Knapp, 1924: 1).

The state theory of money builds on the notion that proper money can only emerge through the constitution of a money of account.[2] Most contemporary chartalists embrace the view that ‘money – as money of account – was the means by which genuinely “market value”, as opposed to individual subjective preference, could be created’ (Ingham, 2000: 26). According to them, ‘monetary constructs such as price lists, debt, book-keeping and so on are ... the pre-condition for the emergence of market exchange and production for sale in the market, rather than vice versa’ (Smithin, 2003: 19). From this idea, they derive two important corollaries. First, money as unit of account must have emerged before, and indeed can ‘*exist independently of the production and exchange of commodities*’ (Ingham, 2004: 12, emphasis in the original) – from which it follows that the historical origins of money must be sought not in money’s role as a medium of indirect commodity exchange (as argued by the neoclassicals), but rather ‘in the concept of money of account’ (Ingham, 2000: 26). Second, contrary to the neoclassical view, a ‘money of account cannot be readily established by exchange’ (Ingham, 2006: 271); rather, it can only have ‘originated outside the market’ (Ingham, 2000: 26), and must therefore have had an *extra-economic origin.*

This brings us to the defining chartalist proposition: that money is not an invention of private agents, but rather a creation of the state (Ingham, 2000: 26–7; Wray 2000: 42). To explain how the state performed such a great historical task, chartalists point out that ‘debt (and its settlement) does not necessarily result from acts of *exchange* in which one payment is deferred’.[3] The ‘payment of taxes … for instance, involves no exchange’ (Peacock, 2003: 208, emphasis in the original; see also Innes, 1913: 398). Hence, ‘administrative authorities … have the power to impose debt (tax burdens) on their subject population’ (Peacock, 2003: 208). More than that: ‘[t]he state [can] not only [stipulate] the *level* of taxation but also the *form* in which it is to be paid’ (ibidem, emphasis in the original). In other words, the state not only imposes tax burdens over its subjects, but also defines ‘that which it accepts … in payment of taxes’ (Wray, 2000: 48). By levying taxes and establishing the means through which the subjects must discharge these

[2] See Keynes (2011 [1930]: 3-4).

[3] Polanyi (1968: 198–9, emphasis in the original) provides many examples of how societies without developed markets can ‘produce *indebtedness of a non-economic nature*’.

obligations, the state determines both ‘the unit in which the amount of the payment is expressed’ (Knapp 1924: 8) and the ‘movable thing which has the legal property of being the bearer of units of value’ (ibidem: 7).

By unilaterally imposing debt and obliging its subjects to discharge them with a ‘pay token’, the state also produces the need to acquire such token for the purpose of tax payment. The persons forced into the position of debtors to the government must acquire the means with which they can discharge their obligations. To acquire the means of tax payment, ‘subjects have to sell the produce that they previously consumed themselves or bartered with others’, and thus are forced to engage in economic exchange either with the state or with other subjects who have a surplus of such item (Innes, 1913: 398).

In this manner, that which the state imposes as the medium of tax payment tends to be transformed into the means through which the quantitative relations between goods and services are expressed. It also tends to infiltrate the relations of exchange among private agents and to progressively become accepted by them as a medium of exchange (ibidem). In other words, the token which the state fixes as a means of tax payment tends to become a generally accepted means of indirect exchange: ‘the means of payment role’, which ‘was (usually) prior in time’ to money’s existence as means of exchange, ‘helped to facilitate and develop the subsequent more general medium of exchange role’ (Goodhart, 1998: 413; see also Wray, 2006: 46).

Five important conclusions follow from this explanation of the origins of money. The first is that the object that embodies moneyness need not be something intrinsically valuable (Ingham, 2000; Peacock, 2003; Wray, 2006). For money is not inherently a commodity, but:

> a social relation; that is to say, money is a ‘claim’ or ‘credit’ that is constituted by social relations that *exist independently of the production and exchange of commodities*. Money is a social relation of credit and debt denominated in a money of account (Ingham, 2004: 12, emphasis in the original).

As the expression of a relation of credit and debt, money is both an asset and a liability. And this means that, contrary to a commodity, ‘money has to be issued’ (Ingham, 2004: 12). According to chartalism, money was originally issued by the state as the instrument by means of which the latter made payments to its subjects, and through which its subjects paid taxes. To be sure, the state can determine that such means of payment be a commodity. In principle, however,

there is no reason why this should be the case. Because money is originally that which 'frees us from our debts towards the State' (Knapp, 1924: 52), the state can issue 'a medium or "pay token" … in which tax payments are to be made by the populace' (Peacock, 2003: 208–9; see also Wray, 2000: 46). And this entails that 'there is no need for [the pay token] to possess any intrinsic value independent of its function as the state's means of payment; what gives [it] its value is that it is the only medium that the state accepts in payment' (Peacock, 2003: 209).

Second, contrary to the neoclassical story, money's role as means of exchange did not give rise to the other monetary functions; rather, money as a medium of exchange was *derived* from its operation as unit of account and means of payment (Keynes, 2011: 3; Wray, 1990: 6, 54). In fact, according to state theorists of money, the emergence of a generally accepted medium of exchange is by no means a necessary condition for the development of monetary practices. Given that the multilateral clearing of private liabilities allows goods and services to circulate without the physical interference of the thing that corresponds to the standard of value, market exchange can take place without the introduction of any general medium of exchange (Ingham, 2004: 7). And this, in the chartalist perspective, means that the use of money as a medium of exchange is nothing more than an *accidental* consequence of its existence as unit of account (Wray, 1990: 54, 2000: 46-7).

Third, although money originates as a liability of the state which has the capacity to both account for 'abstract value' (Ingham, 2004: 61) and discharge individuals from their tax obligations, there is no reason why only liabilities of the state should perform the roles of means of payment and exchange. As noted by Peacock (2003: 208, also 2013: 32–3), '[a] debt may be denominated in ounces of silver (unit of account) while being payable in grain (means of payment)'. Accordingly, the crucial thing for the adequate operation of a monetary system is not that the unit of account and the actual means of settlement coincide, but that '[t]he state establishes the nominal unit of account and … fixes the conversion rates' (Ingham, 2004: 47) between the latter and the thing which functions as means of payment. This happened in the ancient kingdoms of southern Mesopotamia, which, despite accepting payments in kind, fixed the conversion rates of ordinary goods into barley and silver – the goods which the state itself privileged as a means of payment, and which the state personnel adopted as the units of account in their economic calculations (Peacock, 2013: 51). And this is also the case in contemporary capitalist economies,

where individuals and firms make payments using bank liabilities – which, due to deposit insurances and to the operation of the central bank as lender of last resort, can be converted into state money (or, more precisely, into liabilities of the central bank) at par.

The same, however, does not apply to the transactions between the commercial banks whose liabilities households and firms use as money. Whereas the latter usually settle their transactions by transferring bank deposits, the banks themselves must use the liabilities of the central bank (i.e., reserves) as the means of settlement of their mutual obligations and of their obligations to the state (Keynes, 2011: 6–7; Wray, 2006: 26–8). And this brings us to the fourth important idea associated with the state theory of money: that the adequate functioning of the monetary system depends not on the imposition of a single means of settlement, but rather on the hierarchical integration of the multiple existing means of settlement. Indeed, in contemporary capitalist economies, we find 'a multiplicity of actual exchange media' (Smithin, 2003: 18): with the development of market relations, a myriad of liabilities tends to become accepted as a means of settlement at different levels of a functional and dynamic monetary hierarchy (Mehrling, 2012). According to Ingham (2004: 14), this is precisely what distinguishes capitalism from other economic systems: '[c]apitalism', he says, 'is founded on the social mechanism whereby private debts are "monetized" in the banking system'. In other words, capitalism is an economic system in which private agents (particularly banks) become increasingly capable of issuing liabilities that perform monetary functions. Hence, although that which the state fixes as the medium of payment of taxes remains as the unit of account of contracts and as the means of ultimate settlement at the top of the money hierarchy (Smithin, 2000: 6, 2003: 18), private agents can issue '*transferable debt* based on [the] abstract money of account' (Ingham, 2004: 12, emphasis in the original) and use such private titles to settle obligations in the lowest levels of the hierarchy.

2. Strengths and limitations of the chartalist approach

The chartalist theory of money represents an important step forward in relation to the neoclassical understanding of the nature and origins of money. By abandoning the conjectural approach to history adopted by neoclassical economists (e.g. Menger, 1892) and stressing that market prices cannot be formed in the absence of a money of account, chartalism manages to show that money cannot have arisen spontaneously out of the interaction of private agents in the market,

thus uncovering the role of extra-economic relations and institutions in the historical constitution of money. Moreover, insofar as it displaces the monetary function of means of exchange from the privileged position it occupies in the orthodox narrative, chartalism manages to explain the existence of multiple means of exchange and payment in actually existing market economies, and to throw light on the hierarchical character of contemporary monetary systems.

This does not mean that the chartalist literature is free from shortcomings. Take, for instance, its explanation of the historical origins of money. According to most chartalists, the origins of money are to be found in the public institutions of the ancient Near East – and, in particular, in the accounting and taxation practices of the palaces of Ur III (2112-2004 BCE) and Old Babylonian (2004-1595 BCE) periods. In the words of a prominent state theorist of money:

> With the development of large palace communities, heavy taxes in the form of barley were imposed on producers (initially on villages rather than on individuals). At this time, Mesopotamia had a dual standard, barley and silver, although the silver was not coined; the 'ruler' announced the conversion rate of silver to barley and accepted either in payment of taxes. However, normally producers did not have access to silver, so typically only merchants paid taxes in the form of silver (Wray, 2006: 51; see also Ingham, 2000: 26–7).

Hence, it was through the introduction of taxes and the fixing of barley and silver as the privileged means of tax payment that the state first monetised economic practices. But was this really the case? To answer this question, some terminological clarification is needed. As pointed out by Peacock (2013: 52; see also Hudson, 2004), the designations 'private' and 'public' cannot be easily applied to the conditions of the ancient Near East. For:

> they imply a separation of spheres that, in the Near East, were not as easily separable as we imagine the 'public' and 'private' of a modern liberal society; quite where the 'public' sector is supposed to end is a question that admits no easy answer.

The limits of the public/private dichotomy manifests itself clearly in the relationship between the palace and the merchants which were responsible for acquiring luxury goods abroad. Although these merchants frequently managed to derive a 'profit' from the difference between the costs they incurred to acquire such products and the 'price' paid by the palace:

> there is disagreement as to whether a merchant was a dependent of the palace or an independent businessmen. Even if he was formally independent to conduct his own

> business dealings, much of a merchant's activity was conducted on behalf of the palace (Peacock, 2013: 52).

It is hard to describe such merchants as private agents, given that the silver with which they acquired the goods demanded by the palace was usually advanced by the palace itself (Peacock, 2013: 51). Similar considerations apply to the land on which the barley handed over to the palace was produced. As noticed by Peacock (2013: 51), 'there is no documented evidence from Ur III on land ownership by any person or institution outside the palace sphere, nor evidence of land sales or acquisition in the modern sense'. Whether or not *all* land was public (and thus inalienable) is open to dispute. In any case, the evidence (or lack thereof) suggests that, in the granary empires of the ancient Near East, 'the boundaries between public and private were rarely clear cut' (Dale, 2013: 168).

If this was the case, then the goods handed over to the Mesopotamian palaces might not have been privately appropriated by the subjects in the first place. Hence, it is not at all clear that the payments received by the palaces should be conceptualised as *tax* payments. Actually, the historical evidence suggests otherwise: 'in the ancient world, free citizens didn't usually pay taxes. Generally speaking, tribute was levied only on conquered populations' (Graeber, 2013: 63).

A parallel with early modern Europe might help us understand why. At the dawn of modernity, taxation was still not a regular source of state revenue: the financing of state activities via taxes 'had the character of temporary confiscations born of emergency' (Vogl, 2017: 55). In fact, early-modern state theorists (e.g. Hobbes, 2017 [1651]) considered that '[t]he collection of permanent duties ... [as] a dangerous limitation of monarchical power, as a relativization of its supremacy' (Vogl, 2017: 44). For fiscal dependence on taxes implies the sovereign's recognition of the subjects' right to the private property of goods and means of production; and this imposes considerable limitations over the state's authority. Hence, instead of financing their activities through the taxation of their subjects' income and wealth, pre-modern and early modern states usually relied on other sources of revenue, such as the products of the land directly owned by the crown. Indeed, 'the transformation of occasional, extraordinary and arbitrary charges into permanent fiscal revenues' is 'closely linked to the institutionalization of ... taxation' – and the institutionalisation of taxation, in turn, was constitutively connected to 'the genesis of the modern state itself' (Vogl, 2017: 55). It was thus only with the rise to the modern state and the development

of the institution of private property that ‘ordinary revenues such as income from the crown lands gained an extraordinary status, and what had until then been extraordinary, such as taxation, became normal’ (ibidem: 56): the tax-state, as it turns out, is a relatively recent historical creation.

Evidently, there is no reason to believe that the case of early modern European states exactly mirrors the economic and political conditions of the ancient granary empires of the Near East. The observations above do suggest, however, that taxes are not a constant element in the process of state funding. They also suggest that the constitution of a fiscal regime based on the taxation of the state’s subjects is historically associated with the development of a very peculiar institution: that of the private property of land and the means of production. It might be said therefore that, by conceptualising the payments made by the subjects of the Mesopotamian palaces as taxes, chartalists anachronistically project onto the ancient world property relations which have emerged only much later (Lapavitsas and Saad-Filho, 2000: 317).

The fact remains, nonetheless, that the Mesopotamian palaces were able to extract compulsory payments from the members of the community. This might suggest that, with a few amendments, the state theory of money can offer a correct description of the emergence and development of monetary practices. Unfortunately, however, there are other elements in the evidence that do not fit easily with the standard chartalist story. According to the latter, the emergence of a money of account presupposed not only the imposition of taxes, but also the fixation of the means of tax payment. Now, as seen above, the Mesopotamian palace privileged not one, but two goods as means of payments: silver and barley. To the extent that the palace fixed the rate of conversion of barley to silver, chartalists believe that this duality was not contradictory with the existence of a general standard of value: the fact that the silver *shekel* was equalised to the *gur* of barley (Ingham, 2000: 26; Peacock, 2013: 51) by the palace ensured that the monetary function of unit of account could be performed by both goods simultaneously. It should be noted, however, that although the palace *privileged* silver and barley as means of payment, ‘[p]ayments to and from the palace were not necessarily made in silver or barley but were often made in the items of which the dependent who was to pay tribute was the direct producer’ (Peacock, 2013: 51). Indeed, a ‘substantial part of rural rents, taxes and agricultural exchanges were paid with “special-purpose” currencies (such as barley or dates) or in labour services’ (Dale, 2013, 170). Thus,

contrary to the chartalist view, in ancient Mesopotamia, barley and silver were not fixed as exclusive means of tax payment.[4]

State theorists of money (e.g. Ingham, 2004; Peacock, 2013) often downplay these facts, stressing that 'the pivotal element of monetary practice' is not money as a means of payment or exchange, but rather 'money of account' (Ingham, 2000: 18); that the fixation of an exclusive means of tax payment is not necessary for the constitution of a money of account; and that, in the societies of the ancient Near East, a money of account arose not from the fixing of the means of tax payment, but from the setting of the rates of conversion of barley and silver into other goods. As argued by Ingham (2000: 26–7), although 'payment was made in commodities, labour services, or silver by weight (shekel, mina, talent) … the authorities not only fixed the standard, but also many of the prices of taxes, rents, and so on, and these remained stable over time'. Insofar as the palace determined these quantitative relations, fixing the 'prices' of goods in terms of barley and silver, it also induced subjects to value all goods in terms of a common standard of value, thus giving rise to a money of account.[5] And this, in turn, induced the subjects to assess the worth of the various goods and services in the economy in terms an unique standard – which, from the chartalist perspective (e.g. Ingham, 2004: 17; Peacock, 2013: 43), promoted the constitution of the transitive prices which are inherent to market economies.

Now, it may well be that, through the pre-fixation of the "values" of goods and services in terms of barley and silver, the palace posited the latter as the standards in terms of which individuals assessed economic worth. This does not mean, however, that barley and silver performed the active role in the constitution of transitive prices which chartalists attribute to money. If the "prices" of the various goods and services in the economy were fixed by the central authority, then barley and silver could simply not have played any active role in their constitution:

[4] Neither, it should be noticed, did they become generally accepted means of exchange. Even in the Neo-Babylonian period, when silver was employed in '[t]he four different uses of money', it was still not generally accepted as a means of exchange. This was no accident: given that many goods were not usually commodified, there was no reason for their producers to exchange them for money (Bongenaar, 1999: 174)..

[5] '[T]he identification of a 'money thing' that changes hands in payment and exchange transactions is not what marks the difference between a pre-monetary economy and a monetary economy; indeed, the search for a money thing as the decisive test of whether an economy be monetized is a reification of money. … In the Near East, the goods used by producers to make payments to the palace had ... a quantitative [relationship] to the silver shekel and the *gur* of barley in which goods were valued; even if silver and barley had never been used as money things that changed hands in payment, the relationship between silver or barley, *qua* units of account, and other goods that were used to make payments, would have sufficed to make the economy a monetary one' (Peacock, 2013: 57–8).

like the Walrasian auctioneer, the Mesopotamian palace must have set the transitive equivalencies *before* any actual conversion of one good into another could take place. This means that, from a purely logical point of view, the unit of account assigned by the authority was chosen just as arbitrarily as the Walrasian *numéraire*. In other words, in the redistributive palaces of the ancient Near East – where the system of equivalencies was autocratically designed by the central authority – the reduction of qualitatively different goods and services to quantitatively comparable "values" must have taken place *before* any standard of value could be selected.

Not by chance, although it became a widely adopted unit of account, silver in ancient Mesopotamia did not monopolise this function: as noted by Seaford (2004: 323), 'items [were] priced in gold as well as in silver'. More importantly, neither silver nor any other item acquired the status of a *general* unit of account in terms of which any good could have its worth assessed. If the equivalencies were set by the central authority, and if silver as a money of account did not play any active role in the constitution of the equivalencies, then the "price" system created by the palace was necessarily *closed*: goods and services that were not included by the palace in the system could not, through the economic interaction of the agents in the economy, acquire monetary values. Yet, if this was so, then the money of account developed by the ancient Mesopotamians cannot have become a *general* equivalent: goods, services or assets that were not included in the system of equivalencies by the central authority could not confront barley or silver as equivalents.

The fact that money, in the ancient Near East, did not become a general equivalent explains why, contrary to the form of money we find in contemporary capitalist societies, Mesopotamian money never acquired the role of a general unit of account.[6] Take, for instance, the case of 'the fundamental means of production' in ancient Mesopotamia: agricultural land. According to Dale (2013: 174):

> much of the southern alluvium in the third and early second millennia was dominated by *oikos* economies, colossal bureaucratic temple and palace complexes that controlled not only distribution, but production too – with their own land, herds, and workshops. While some sort of private landownership (if not necessarily of arable land), seems to have existed it was of marginal importance when

[6] Silver (as well as other goods performing monetary functions) was subject to a 'sectorial' use: it only performed monetary functions (including the function of unit of account) in strictly delimited economic spheres (Renger, 1995: 318).

> compared with the two principal sectors of the economy, the institutional (temple and palace), and the (village-based) domestic and communal.

In such conditions, even if land sales did occur, 'they were occasional, and were often made under duress (for example, military attack or drought) or to relatives' (Dale, 2013: 175). Rather than expressing a value derived from the capitalisation of future income streams, land prices where context-dependent – and thus also contingent and intransitive, just like the exchange ratios which, as state theorists of money emphasise (Ingham, 2004: 25), tend to emerge in the context of barter. Hence, although land could occasionally be exchanged for money, the monetary "price" of land was by no means considered to express its "value": money, in short, was in no sense considered to be *equivalent* to land – which suggests that, in the context of Ancient Mesopotamia, money did not arise to the status of a *general* equivalent.

This introduces important complications into the chartalist view. After all, chartalists aim at developing 'a general theory of money that can be applied equally convincingly to the entire era of state money' (Bell, 2001: 149). In their view, despite superficial changes, money is still fundamentally the same institution it was in 'Babylon and the Champagne Fairs of the late Middle Ages': 'the difference between these eras and our own', says Ingham (2000: 32), 'is in the technological means for making and keeping account and in the overall level of monetization, not in the essentials of monetary practice'. As must be clear by now, this view does not conform to the history of monetary practices. Contrary to contemporary money, ancient money did not function as a general equivalent. Accordingly, it did not perform the role of general unit of account.

The reason why money could not, in the ancient Near East, acquire the character of a general equivalent and unit of account is that production relations did not have a capitalist character. For it is only when use values are generally produced as commodities that they become universally commensurable values; and this only happens in societies where labour power has been transformed into a commodity owned by the worker (Höfig, 2019: ch. 2). Now, there is no evidence that production relations, in the granary empires of the Near East, predominantly took a capitalist form (Dale, 2013). Accordingly, goods and services, in such societies, were generally not produced as commodities (Dale, 2013; Milevski, 2016). Consequently, they were not transformed into commensurable values.[7] And this explain why, in such societies, monetary objects did not acquire

[7] 'Money in itself does not make the products of labour commensurable' (Elson, 1979: 138).

the status of general equivalents and universal standards of value that they have in contemporary capitalist societies.

By pointing out that '[c]omplex multilateral indirect exchange – that is, an authentic market – presupposes a money of account' (Ingham, 2004: 25), state theorists of money manages to show that the first monetary practices in human history must have preceded generalised commodity exchange – which suggests that, contrary to the neoclassical view, money cannot have emerged primarily as a means of exchange. In doing so, they revealed that the ancient forms of money must have emerged from social practices imposed by extra-economic authorities, thus enriching our understanding of the origins and historical development of monetary practices. Yet, insofar as they severed the mutually constitutive connection between money as general equivalent and market exchange, chartalists erased the *essential* difference between the pre-capitalist and the capitalist forms of money. And this, in turn, lead them to neglect that the emergence of money as a general unit of account presupposes not only the constitution of the State, but also another, very specific – and, from a historical point of view, very recent – extra-economic event: the separation of direct producers from the means of production.

3. Marx's approach to money

Marx's approach distinguishes itself from the chartalist approach in three crucial ways. First, whereas the latter conflate the logical derivation of money with its historical evolution, Marx establishes a clear distinction between the logical and the historical developments of money. In *Capital*, it is not with the historical, but rather with the logical development of money that Marx is mainly concerned. Accordingly, in his analysis of money, he does not trace the historical evolution of monetary practices; rather, he shows that:

> It is the foundation of the bourgeois production process that *money* confronts *commodities* as an autonomous form of value, or that exchange-value must obtain an autonomous form in money, and this is possible only if one particular *commodity* becomes the material in whose value all other commodities are measured (Marx, 2015: 633).

By revealing that generalised commodity production – which only exists in societies where 'the capitalist mode of production prevails' (Marx, 1990: 125) – entails the transformation of

goods and services into values, and that the development of the value-form entails the emergence of a general equivalent in terms of which all commodities can express their values (Marx, 1990: 159), Marx makes clear that, regardless of the of its historical origins and of the forms it might have taken in other modes of production, money *qua* general equivalent is a necessary institution of a capitalist economy. In so doing, he shows that the logical derivation of money does not coincide with its historical evolution

This leads to another important difference between Marx's and the chartalist approaches. As seen above, chartalists regard the monetary function that first emerged into history is seen as the primordial money-use out of which the other monetary roles were derived, and thus also as the *defining* function of money. This position is not shared by Marx. Instead of starting from one of the monetary functions, Marx introduces money by deriving it from the value-form itself. It is only after developing money *qua* general equivalent from its constitutive connection with the value-form that Marx deals with the functions of money as such. This allows him to show that, whereas different objects have, in different historical periods, separately performed the roles of means of exchange and/or payment, store of wealth and unit of account (Graeber, 2013, the object which is socially posited as general equivalent necessarily performs all of these functions. In other words, the unification of the monetary functions by a monetary object is intrinsic to capitalist economic relations: 'the properties of money', claims Marx (1993: 146, translation modified), 'all simply follow from its [social – BH] determination [Bestimmung] as exchange value objectified and separated from commodities themselves', i.e. from its constitution as general equivalent.

Thus, what we find in Marx's presentation of the functions of money 'is not simply an enumeration of different and mutually independent monetary functions ... but a very specific connection of these functions' (Heinrich, 2014: 248). From a Marxian perspective, 'there is ... an internal cohesion to the functions of money' (Fine and Lapavitsas, 2000: 370): in the context of the capitalist mode of production, only an object under which 'the [monetary] functions ... are united ... becomes money' (Marx, 1989: 358). And this implies that, under capitalism, one cannot establish a hierarchy of the monetary functions: it is only by being what it is (the general equivalent, i.e. the immediate expression of value) that the capitalist form of money can perform its functions; conversely, it is only by performing all the monetary functions (either directly or through representatives – see below) that the capitalist form of money can be what it is.

This brings us to the third differentiating feature of Marx's approach to money. Although they define money in functional terms, the chartalist theorists of money cannot explain what are the conditions under which an object that functions as a means of exchange in particular spheres of exchange and/or as an unit of account within limited spheres of valuation is transformed into a general means of exchange and an universal unit of account. Insofar as he derives the monetary functions from money's existence as general equivalent, Marx lays the ground for an original solution to this puzzle. As seen above, the transformation of money into general equivalent is coterminous with the development of generalised commodity production – which, in turn, is an outcome of the emergence of the capitalist mode of production. If this is so, and if, as Marx contends, the constitution of money as general means of exchange and payment and as measure and store of value is inherent to money's existence as general equivalent, then the full development of the functions of money is contingent upon the development of capitalist production. In other words, it is only in societies where goods and services are generally produced as commodities that the functions of money can be fully developed: 'in the system of developed money', says Marx (1993: 214, translation modified), 'one produces only in order to exchange'.

> To the degree that production is configured in such a way that every producer becomes dependent on the exchange value of his commodity, i.e. as the product increasingly becomes an exchange value in reality, and exchange value becomes the immediate object of production – to the same degree must *money relations* develop ... in the relation of the product to itself as money (Marx, 1993: 146, translation modified).

It is only in those societies where use values are generally produced as commodities that money becomes the general equivalent of all goods and services in the economy. Accordingly, it is only in such societies that money becomes a universal measure of value, a generally accepted means of exchange and payment, and a store of value.[8]

Let us now elaborate more on the connection between money's existence as general equivalent and the degree of development of the monetary functions. As argued by Marx, whatever functions as general equivalent also supplies:

> commodities with the material for the [quantitative] expression of their values, or to represent their values as magnitudes of the same denomination, qualitatively

[8] 'All the illusions of the monetary system arise from the failure to perceive that money, though a physical object with distinct properties, represents a social relation of production' (Marx, 1989: 276).

> equal and quantitatively comparable. It thus acts as a universal measure of value, and only through performing this function does ... the specific equivalent commodity ... become money (Marx, 1990: 188).

Because '*[q]uantitative* determinacy is not included in the [general] equivalent' (Marx, 1976: 23, emphasis in the original), that which is posited as money must function as measure of value: 'all commodities', whenever they are ideally equated to money as the measure of their values, 'appear not only as qualitatively equal, as values in general, but also as values of quantitatively comparable magnitude' (Marx, 1990: 159). The function of money as measure of value is therefore coterminous with money's existence as general equivalent – which, as seen above, is an outcome of the development of the capitalist mode of production. To be sure, monetary objects already functioned as standard of prices in many non-capitalist economies (Peacock, 2013; Schaps, 2003). Yet, the use of money as standard of prices does not entail that it functions as a measure of value. For goods and services can be priced without being fully constituted as values. Such is the case when prices are not transitive. In such conditions – which are characteristic of monetised but non-capitalist economies (Höfig, 2019: ch. 2) – prices cannot be said to express value; accordingly, whatever functions as standard of prices cannot be said to measure value.[9]

In non-capitalist societies, therefore, money can and often does function as a standard of prices; yet, it cannot (and, therefore, does not) measure value. This means that money's use as a measure of value is specific to capitalist economies: only in societies where use values are generally reduced to values can monetary objects be used to count and quantitatively compare all elements of wealth as values. Since it is only in such societies that wealth is generally priced, the emergence of money as measure of value is coterminous with another important transformation: that of money from a limited to a general standard of prices.[10] In other words, although monetary

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[9] To be sure, intransitivity does not prevent prices from being compared to one another other. Yet, if prices are not transitive, it cannot be reasonably claimed that the second item is worth twice as much as the first.

[10] The development of money as measure of value does not erase the distinction between this function and that of standard of prices. 'As measure of value, and as standard of price, money performs two quite different functions. It is the measure of value as the social incarnation of human labour; it is the standard of price as a quantity of metal with a fixed weight. As the measure of value it serves to convert the values of all the manifold commodities into prices, into imaginary quantities of gold; as the standard of price it measures those quantities of gold. The measure of values measures commodities considered as values; the standard of price measures, on the contrary, quantities of gold by a unit quantity of gold, not the value of one quantity of gold by the weight of another'. Thus, whereas '[f]or the standard of price ... the stability of the measurement is of decisive importance' (Marx, 1990: 192), this is not the case for money's role as measure of value: changes in the price level do not prevent relative prices from being compared, so long as the unit of measure (the dollar, for instance) remains the same. Hence, insofar as the standard of prices is

objects can function as unit of account of prices in non-capitalist economies, it is only in societies where the capitalist mode of production prevails that the role of money as unit of account becomes fully developed.

Similar considerations apply to money's role as means of exchange. Insofar it 'is the form assumed in common by the values of all commodities', money, in capitalist economies, is 'directly exchangeable with all other commodities', and thus 'functions as a means of circulation' (Marx, 1990: 159, 212). To be sure, it is not exclusively in capitalism that money performs this role: instruments have been used to mediate exchange in many different socio-historic configurations (Graeber, 2013). However, it is only in a mode of production in which tendentially all goods and services are produced as commodities that money becomes a *general* means of exchange.

Now, the transformation of the commodity that is posited as general equivalent into a generally accepted medium does not imply that no other item can mediate exchange. As Marx (1990: 223–5) points out, 'the circulation of money itself' tends to split 'the nominal content of [the monetary objects] away from their real content', dividing 'their metallic existence from their functional existence' and creating 'the possibility of replacing metallic money with tokens made of some other material'. Accordingly, with the development of the capitalist monetary system, '[t]he metallic content of tokens' – if any – tends to become 'arbitrarily determined by law', until the point where '[r]elatively valueless objects ... such as paper notes' start serving 'as coins in place of gold'. In other words, 'inconvertible paper money issued by the state and given forced currency emerges directly out of the circulation of metallic money' (ibidem).

According to Marx (1990: 227), therefore, the commodity which embodies the form of the general equivalent need not mediate exchange 'in its own body'; rather, it can do so 'through a representative'. This is made even clearer by the rise of credit-money, which 'take[s] root spontaneously in the function of money as the means of payment' (ibidem: 224). As Marx points out, with development of capitalist exchange relations, even the inconvertible paper money issued by the state tends to be displaced from circulation, with exchange being increasingly mediated by the circulation of privately issued IOUs. 'The role of creditor or of debtor', says Marx (1990, 233), 'results here from the simple circulation of commodities'.

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stable, one can say – regardless of any change in the price level – that an item whose price is US$2 is worth twice as much as whose price is US$1.

> The money functions now, first as a measure of value in the determination of the price of the commodity sold; the price fixed by contract measures the obligation of the buyer, i.e. the sum of money he owes at a particular time. Secondly it serves as a nominal means of purchase. Although existing only in the promise of the buyer to pay, it causes the commodity to change hands (Marx, 1990: 233–4).

With the development of capitalist relations of exchange, therefore, both the money-commodity and its representative (i.e. tokens issued by the state) tend to loose importance as direct mediators of exchange: it is '[n]ot until payment falls due' that the monetary object 'actually steps into circulation' – not anymore as a means of exchange, but as 'means of payment' (Marx, 1990: 234). In such role, however, the monetary object does not need to step into the sphere circulation very often. For, '[w]ith the concentration of payments in one place, special institutions and methods of liquidation develop spontaneously': the IOUs issued by the myriad transacting parties 'have only to be brought face to face in order to cancel each other out, to a certain extent, as positive and negative amounts' (ibidem: 235), rendering the mass of means of payment that is necessary for the circulation of commodities increasingly smaller.

Over time, the liabilities issued by the institutions that manage the payment mechanism – usually banks – tend to monopolise the mediation of commodity circulation (Marx, 2015, chapter 5). And, with the development of interbank monetary markets, the emergence of central banking – with its role as deposit insurer and lender of last resort – and the consequent stabilisation of the baking system, bank-money tends to completely replace both commodity-money and state liabilities in the sphere of circulation. Thus, in contemporary advanced capitalist economies, the use of the liabilities of the state as means of payment is increasingly restricted to relations between the state (represented by the central bank) and banks, as well relations among the private banks themselves. As for other private agents, they tend to make payments to each other using almost exclusively liabilities issued by commercial banks.

In short, the development of the credit system – a necessary by-product of the development of capitalist relations of production and exchange – reduces the use of the money-commodity as means of exchange and payment. The same, however, cannot be said about money's role as a store of wealth. The development of capitalist relations of production and exchange has a paradoxical influence over this latter monetary function. Insofar as it makes money 'convertible into any other commodity', it also transforms money into 'the universal representative of material wealth' (Marx,

1990: 230), thus turning money from a particular – and thus limited – form of storing wealth into an instrument for the storage of *value*, i.e. of wealth in a general form. Moreover:

> The development of money as a means of payment makes it necessary to accumulate it in preparation for the days when the sums which are owing fall due. While hoarding, considered as an independent form of self-enrichment, vanishes with the advance of bourgeois society, it grows at the same time in the form of the accumulation of a reserve fund of the means of payment (Marx, 1990: 240).

In other words, the development of capitalist relations of exchange makes it necessary for economic units to hold cash so as to be able to make payments. On the other hand, as credit markets become more "complete", assets tend to become more liquid, making the hoarding of money to meet unforeseen expenses increasingly unnecessary (Saad-Filho, 2002: 95).[11] Accordingly, hoarding within capitalist social formations tends to appear as just as 'naïve' as it had been – at least in Marx's view (1990: 228) – 'among those peoples whose traditional mode of production, aimed at fulfilling their own requirements, corresponds to a fixed and limited range of needs.'

And yet, investors do hoard.[12] And they do so out of neither naïveté nor irrationality. Indeed, the holding of assets that are generally accepted as means of payment is a rational course of action in a mode of production which 'cannot exist without constantly revolutionizing the instruments of production, and thereby the relations of production, and with them the whole relations of society' (Marx and Engels, 1976: 487), and which, therefore, cannot reproduce itself without generating tensions and contradictions that often manifest themselves in the form of economic crises (Marx, 2015, chapter 3). As Marx points out (1990: 236), '[w]henever there is a general disturbance of the [payment – BH] mechanism ... money suddenly and immediately changes over from its merely nominal shape, money of account, into hard cash': '[i]n a crisis, the opposition [Gegensatz] between [non-monetary assets – BH] and their value-form, money, is raised to the level of an absolute contradiction'. Hence, whereas in times of prosperity it appears 'that money is a purely imaginary creation' (ibidem), in periods of crisis, money appears as the

[11] The development of repo markets, for instance, makes it easier for investors to acquire the bank's liabilities with which they can settle their contractual obligations in exchange for other assets which, albeit less liquid, have a higher yield than the liabilities of the banking system (Ban and Gabor, 2016). It is worth pointing out that, as Vasudevan (2018) has shown, Marx was aware of the inner trend of capitalist economies to develop markets in which interest-yielding assets can be easily exchanged for assets that are generally accepted as means of payment.
[12] Indeed, non-financial corporations have increased their holdings of cash in the past few decades (Davis, 2018).

only real asset. By enhancing the inherent instability of capitalist economies (Vasudevan, 2018), the development of the credit system also strengthens money's role as a store of value.

4. Strengths and limitations of Marx's approach

By establishing a clear distinction between the historical and the logical development of money, Marx manages to conceptually differentiate the capitalist form of money from the institution of money in non-capitalist societies. This allows him to explain why, in capitalist social formations, money becomes a general means of exchange and payment, a measure of value and a store of value, thus solving some of the puzzles that plague both the neoclassical and the Keynesian approaches to money.

Marx's considerations on money are not, however, free from limitations. Three of them shall occupy us here. First, Marx underestimates the role of the state in the historical emergence of money and its constitution as a widely used unit of account. Like Weber and other influential scholars (see Dale, 2010: 146), Marx believed that money first arose as a means of exchange in commercial relations between societies (Marx, 1993: 165), neglecting the role of public institutions and the fiscal system in the constitution of money as unit of account. In *Capital*, Marx explicitly denies that the imposition of taxes and the fixation of its means of payment could of itself create a money that functions as the 'universal material of contracts' (Marx, 1990: 238). As he points out, in France, 'the conversion of taxes in kind into taxes in money' under Louis XIV did not promote the constitution of money as the general unit of account. Rather, it only managed to generate the 'unspeakable misery of the French agricultural population' (Marx, 1990: 238) – a population that did not usually produce goods as commodities, and thus did not find it easy to acquire the monetary means of tax payment.

In Marx's view, the transformation of money into the universal material of contracts is conditioned 'by the total shape of the process of production' (ibidem), and thus cannot be unilaterally imposed by the state. This is not to say that Marx completely overlooked the role of the state in the historical development of money. Insofar as he distinguishes the capitalist from the non-capitalist forms of money and shows that it is exclusively in the former case that the monetary functions are fully developed and unified, he also makes clear that it is only under capitalist

conditions that money can become a generally accepted means of payment and universally valid unit of account. In this sense, the emergence of money as universal material of contracts can only occur in societies where the direct producers have been separated from the means of production – something which, as Marx shows (1990), could not have taken place without the decisive intervention of the state. Hence, it can be argued that, although he does not fully account for the extra-economic determinations of the historical emergence of money as unit of account, Marx does unveil the specific extra-economic foundations of the transformation of money into general equivalent, and thus also into general unit of account.

Second, and more seriously, although Marx clearly devised the hierarchical nature of the capitalist monetary system, and thus acknowledged that commodity-money tends to be excluded from the sphere of circulation, he never considered that the highest position in this hierarchy – that of the general equivalent – could be occupied by a valueless item. To put it differently, Marx thought that the general equivalent must necessarily be a product of labour. His view was informed not only by the contingent characteristics of the capitalism of his own time, but by the characteristics of his own monetary theory of value. Marx's theory of value ascribes an active role for money in the process of constitution of the products of labour as values: for him, concrete labours cannot be reduced to abstract labour, and use values cannot be reduced to values in the absence a general equivalent. In the role of general equivalent, however, money 'counts as the visible incarnation, the social chrysalis state, of [abstract] human labour' (Marx, 1990: 159, 162).

In Marx's view, this implies that an item can only be posited as general equivalent if it was firstly produced by human labour.[13] Yet, as Heinrich (2014: 233, emphasis added, my translation) points out, Marx never managed to prove that the general equivalent had to be a product of labour:

> What he demonstrates is not that it is necessary for a second commodity to serve as the value-expression of the first, but that the value expression is incomplete and deficient insofar as it attaches itself to a single, accidental commodity. Marx uses the value expression of a commodity in another commodity to demonstrate what requirements a value form must meet in order to adequately express value. *That the bearer of this value form is itself a commodity was not shown, but presupposed from the beginning*. To be sure, value-form analysis, while providing the formal

[13] 'Gold confronts the other commodities as money *only because it previously confronted them as a commodity*', and serves 'as a measure of value *only because it is itself a product of labour*, and therefore potentially variable in value' (Marx, 1990: 192, emphases added).

> determinations of the general equivalent, gives no argument as to whether or not the general equivalent must be commodity.

Marx demonstrates, therefore, that in order to transform use-values into values, 'the commodity owners have to refer their goods to something that acts as a general equivalent, but not whether that something is itself a commodity' (Heinrich, 2014: 233, my translation). Indeed, contrary to Marx's own understanding, there is nothing in the monetary theory of value that establishes that the general equivalent must be a commodity. Although the general equivalent does relate to ordinary commodities as the immediate form of appearance of their values, and although this does mean that money, in a capitalist economy, 'counts [socially] as the materialisation of the abstract genus-property [Gattungseigenschaft], which stands on the same level as the individual commodities' (ibidem) – thus allowing them to express their values – money's performance of such social role by no means depends on its being a product of labour.

In itself, a product of labour can only be the product of a concrete labour. Thus, money's appearing as the incarnation of abstract labour has nothing to do with how it is produced; rather, it appears as such because it is transformed by a social process into the immediate expression of value. In other words, an item does not become the sign of value because it is the product of labour, but 'because all commodities relate to [it] as their immediate form of value' (Heinrich, 2014: 234, 235, my translation).[14] Hence, the constitution of an object as general equivalent does not depend on its character as a product of labour: '[a]lthough commodity money may have been a historical starting point for the emergence of money, its existence does not follow logically and conceptually from the commodity-form of the product labour' (Heinrich, 2014: 236, my translation).

'By linking its monetary theory to the existence of a money commodity', therefore, 'Marx blends the most abstract definition of money with a specific historical monetary system. At the level of the exchange process, however, it can initially only be about money as such, without the

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[14] As Marx (1993: 145) himself puts it: 'in order to realize the commodity as exchange value in one stroke, and in order to give it the general influence of an exchange value, it is not enough to exchange it for one particular commodity. It must be exchanged against a third thing which is not in turn itself a particular commodity, but is the symbol of the commodity as commodity, of the commodity's exchange value itself; which thus represents, say, labour time as such, say a piece of paper or of leather, which represents a fractional part of labour time. (Such a symbol presupposes general recognition; it can only be a social symbol; it expresses, indeed, nothing more than a social relation.) This symbol represents the fractional parts of labour time; it represents exchange value in such fractional parts as are capable of expressing all relations between exchange values by means of simple arithmetical combination; this symbol, this material sign of exchange value, is a product of exchange itself, and not the execution of an idea conceived a priori.'

concretisation of a determined monetary system' (ibidem: 240, my translation). In other words, when he argues that the general equivalent must be a commodity, Marx makes an inference that cannot be derived from his own theory of money. Hence, despite appearances to the contrary, 'Marx's theory does not ultimately depend on money being a commodity' (Williams, 2000: 435).

5. Conclusion

By revealing that the use of money as means of tax payment was a constitutive moment in the monetisation of economic practices, and by showing that – contrary to the neoclassical view – money did not arise from the interaction of agents in putatively pre-monetary markets, the state theory of money not only increased our understanding of the historical origins of money, but also threw light on the inner connections between the market and the state. In so doing, it revealed the historical specificity of economic systems based on market exchange. Yet, while positing that money must be defined in terms of its functions, chartalism falls short of explaining why and under what circumstances the instrument posited by the state as the means of tax payment becomes the general unit of account and the universally accepted medium of exchange. Consequently, although it succeeds in highlighting the historical nature of both money and the market, chartalism does not manage to establish a conceptual distinction between the pre-capitalist forms of money (such as those which existed in the ancient Babylonian empires) and money as it exists in capitalist societies. Insofar as they presuppose the value-form of wealth, chartalists fall short of identifying the conditions under which money acquires the character of general equivalent of all the goods, services and assets in the economy. Accordingly, they fail to unveil the social processes that turn money – which in non-capitalist social formations function as a limited means of exchange and/or unit of account – into a generally accepted means of exchange and a universal unit of account.

By conceiving of value as a specifically capitalist form, and by showing that the constitution of the latter entails the transformation of money into a general equivalent, Marx's approach establishes a clear distinction between capitalist and non-capitalist money. And this, in turn, allows it to overcome the shortcomings of the chartalist approach. As this paper has demonstrated, contrary to the latter, Marx's theory of money successfully explains both why, in capitalist economies, the monetary object necessarily embodies *all* of the functions of money, and

why, in such economies, all goods and services are counted in terms of and can be exchanged for the object that is posited as money.

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