Marx's Explanation of Money's Functions: Overturning the Quantity Theory

Martha Campbell

At the beginning of the Chapter on Money in the *Grundrisse*, Marx discusses the operation and effects of 'modern credit institutions', touching on several of the questions he will later consider in *Capital*, Vol. III. An argument he will later present in *Capital*, Vol. II is implicit in his rhetorical question: would 'large scale modern industry' be possible 'without the concentration of credit ...created' by "our present banks'? Referring to the great variety of financial instruments generated by the credit system, he states that 'the thousand forms of circulating paper...are as much the preconditions as the product of modern commerce and modern industry'.¹

It is clear from this that Marx knows that capitalist money is not gold and, moreover, that capitalism could not have developed as it did without the credit system. The obvious question, then, is, if he knows it is unrealistic to assume that money is gold, why does he do this throughout *Capital*? There is the obvious 'expositional' advantage that gold money gives Marx a way of presenting money and value so that he can proceed to the concept of capital, which presupposes both; banking, by contrast, presupposes not only capital but the division into different kinds of capital.² Another expositional convenience is that Marx uses gold money throughout *Capital*, Vol. I as the measure, or expression of value, in order to explain, for example, the origin of surplus value and the factors that influence its quantity. By treating gold

¹ All quotations from Marx 1939: 122. The 'forms of circulating paper' include bank notes and bills of exchange, which Marx has already discussed in this passage, but, since Marx refers to thousands, also things like brokers notes, warehouse receipts, bills of lading, which are mentioned in *Capital*, Vol. III. In addition, Lapavitsas (2000: 637) lists important events in the first half of the 19th century, in which banknotes played a crucial role in alleviating or preventing monetary crises because they were already the adequate form of exchange value. As he indicates, Marx was well aware of these events. ² See Matthews 1996: 74 and Campbell 1997: 89.

as the direct equivalent of the labor hours devoted to its production, Marx gives the expression of value a transparency that it lacks in reality. This, however, is unrelated to the theory of money itself.

While these are both reasons for the gold money assumption, I will argue that it serves a more fundamental purpose in Marx's monetary theory than expositional convenience. For Marx as for Keynes, the main obstacle to understanding anything about money is the quantity theory, and this is still true today. Even though Ricardo entertained both, the quantity theory is incompatible with the theory of value. This is evident immediately from its claim that the value of money is determined by the quantity of money in circulation. As we will see, however, this is just the tip of the iceberg. The quantity theory also means that commodities are made commensurable in circulation (they have no value), that money cannot be anything but a medium of circulation (it is not the measure of value), that money is established by the state (rather than inherent in value) and that its quantity is determined arbitrarily and exogenously.

Beginning from commodity money enables Marx to trace the phenomena on which the quantity theory is based back to their source. The source is the metamorphosis of commodities and the phenomena in which it is manifested are inversions or reflections of it. By showing that the quantity theory mistakes the reflection for the reality, Marx establishes that it is false. Although Marx has already identified one of these inversions in Chapter 2, his full reconstruction of the inversions underlying the quantity theory is completed only at the end of the second section of Chapter 3 (on money's function as means of circulation). With the quantity theory behind him, Marx proceeds in the third section of Chapter 3, to develop the theory of credit money.

1. Measure

Money in its function as measure of value expresses the values of commodities as prices; it is therefore inseparable from the standard of price. These are the only two functions Marx mentions when he disputes Fullarton's assertion that there is no need for money to be a commodity.³ The alternative Marx is rejecting is important as well. This is that money could be just a symbol (and one, Fullarton says, that 'derives from law'). His point then is that money is not created by the state and that the expression, and so measurement, of value cannot be performed by a symbol.

Marx has already made this case before he gets to Chapter 3. In the forms of value section of Chapter 1, he argues that value can appear only through one specific relationship, namely, the polar (or as he calls it, antagonistic) relationship of all commodities but one to that excluded one as their equivalent.⁴ Since commodities cannot be values except within and through this relationship, the form of value is part and parcel of what value is. As Arthur explains, Marx 'derives money as the form necessary to constitute value objectively'.⁵ A symbol, by contrast, is indifferent to what is symbolized; the latter, on the other side, is complete by itself, or has no need to be symbolized (an example, as Arthur notes, is the idea of money as a veil). Making the same point in different terms, Murray captures Marx's idea of the necessary relation between value and money by the conception of value as an essence. Because essence must appear, value requires money.⁶ It follows that money cannot re-present value, as would be true in a symbolizing relationship, since value has no way of being presented except in money.

³ See Marx 1867: 225, n35. By the standard of price, Marx means a monetary unit that applies to a money commodity itself (e.g., some weight of gold). Prices are actually expressed in the unit of account, which Marx calls the standard of money (or sometimes just money names, such as Euros).

⁴ See ibid:161n26. The form of value is 'antagonistic' in the sense that the immediate exchangeability of money implies that commodities are not immediately exchangeable.

⁵ Arthur 2004: 3.

⁶ See Murray 1993.

To this Marx adds in Chapter 2, the criticism that the idea of money as a symbol completely misses the objective character of capitalist social relations; this, in turn, is the key to understanding that 'value is a form of association."⁷ If money is regarded as a symbol, it seems that we have given it its character as universal equivalent (that money, and so value, is 'the arbitrary product of human reflection') and that commodities acquire their value character from it.⁸ This is the inversion that Marx attributes to the appearance of money in its 'finished shape' and which he describes as the misconception that 'all other commodities universally express their values in a particular commodity because it is money⁹. Alternatively, he speaks of this as the confusion that money gets its value - meaning its character as value, not the amount of its value – rather than its value-form from the exchange process.¹⁰ Last, Marx says that the 'moneyform is...the reflection' thrown on one commodity by the relations among all others; in these terms, the inversion would involve mistaking the reflection for its source.¹¹ Marx argues, on the contrary, that commodities and money are not symbols but objects through which capitalist production relations exist. Because these relations exist as relations between things, value must be embodied or assume a material shape. This is why Marx describes money as a thing and, speaking absolutely literally, declares, in the first substantive sentence of Chapter 3, that money's 'first main function...is to supply commodities with the material for the expression of their values'.¹² His claim that 'it is not money that renders commodities commensurable' is directed against this same inversion. Although these statements summarize Marx's earlier

⁷ Williams 2000:

⁸ Marx 1867: 186.

⁹ Marx 1867: 184, 187.

¹⁰ See ibid: 184-5

¹¹ ibid: 184.

¹² ibid: 188. As I have argued, Marx's claim in Chapter 2 that a 'physical object, gold or silver...becomes...the direct incarnation of all human labour' (1867: 187) means that money is the material shape of value (Campbell, 2004). Williams holds that money is not a thing, and that thinking of money as

argument against money as a symbol, he is far from done with it and the inversion it entails. As we will see, the quantity theory not only rests on it but adds other inversions to it; undoing them occupies a significant portion of Chapter 3.

Turning to Chapter 3 itself, as already noted, by the measure function Marx means that the value of every commodity is expressed as a quantity of the money commodity, that is, as price. The section on measure, therefore, spells out the characteristics of this expression or describes the price form. Since explanations of price do not usually consider this issue, it should be emphasized that the expression itself is the topic. Nothing Marx says is about how the amounts of price or of value are determined. These amounts are 'given', not in the sense that we know them, but in the sense that, in this context, it doesn't matter what they are.

To begin with, the expression of value by price establishes a result that Marx stated as an assertion early in Chapter 1: in their relations to each other in the price form, commodities really are 'reduced to a common element, of which they represent a greater or a lesser quantity'.¹³ This point does not figure very prominently in Chapter 3. In an echo of his earlier statement, Marx notes in passing that since the values of commodities are changed into quantities of gold, 'their values become magnitudes of the same denomination'.¹⁴ Despite its modest billing, this result is the foundation for the means of circulation function, which Marx will consider in the next section. Two opposite exchanges (C-M and M-C) make up one circuit, because commodities and money are different external shapes assumed by the same substance.¹⁵ Considered in this way,

gold is a mercantilist prejudice (2000:). It is precisely Marx's point, however, that in capitalism things and social relations are not mutually exclusive (see 1859: 276).

¹³ Marx 1867: 127.

¹⁴ Possibly Marx does not emphasize the point because he considers that he has already established it. He draws more attention to it in the *Contribution*; "the value of the commodity is thus fully expressed, for to the extent that commodities are equated with gold, they are equated with one another" (1859: 305).

¹⁵ Substance means that which remains the same throughout changes in its outer form. This is the meaning it has in Marx's presentation of the general formula for capital: value 'is constantly changing from one form into the other without becoming lost in this movement' (1867: 255). Marx will speak of money and

the circuit consists of the movement of that substance through these different shapes. Marx's account of the circuit, therefore, rests on his demonstration that money is the materialization of value. It also requires that money be a commodity, at least until it can be shown how money could represent value without being a commodity.

A key point Marx does want to emphasize about the price form is that the material of the money commodity matters but the presence of this commodity does not. The first is true because any one commodity has one definite value; this is why translating values of all other commodities into quantities of that one expresses the values of the others adequately (it is also why two commodities cannot act as measure at the same time). The second is true because it does not take any real money just to state the prices of commodities (they are not being bought and sold but just having their prices announced). It follows that everything to do with the actual existence of money – how it is created, how much there is of it – is irrelevant to the measure of value function. Since Marx is assuming that money is gold, the process that brings money into being is gold production. In keeping with its irrelevance to measure, he does not mention gold production in the section on measure, but introduces it only when he comes to the means of circulation function.¹⁶ Marx's argument, then, is that money must be a commodity to measure value, but the actual presence of this commodity is unnecessary.

Another question that is relevant to measure is: what happens when there are changes in value, both of money and of other commodities? Regarding the first, Marx is concerned to show

commodities as shapes of value when he comes to the means of circulation function (where the term is sometimes translated as 'embodiments'). For a fuller exposition of the constitution of value as a substance by the price form and the connection between this and the circuit, see Arthur (2004).

¹⁶ Money's presence is required in the medium of circulation function but, as we will see, the description Marx presents of its production is necessarily false (and intentionally so). Moreover, gold production is ultimately irrelevant to the means of circulation function, since this is necessarily performed by symbolic money.

that value changes do not interfere with the measure function.¹⁷ He offers, what seems at first, to be a very peculiar explanation. 'A change in the value of gold' he says 'affects all commodities simultaneously, and therefore,...leaves the mutual relations between their values unaltered.¹⁸ This sounds like the claim that changes in money's value don't matter, relative price is all that counts and a new equilibrium is achieved instantaneously. But this is not at all what Marx means; his statement applies only to the measure function. In this context, prices change simultaneously because all that is at issue is the translation of given commodity values into the appropriate quantity of the money commodity. This is instantaneous because it is a 'purely ideal act.¹⁹ In other words, Marx is not talking about any real process of change: about commodities being sold, money being lent or the presence of inflation.²⁰ Considering changes in commodity prices in the same way yields a principle that Marx has already stated in connection with the simple value form. Since price is a relation, a change in price does not reveal its value source (since this could come from either side of the relation) while changes in value need not be disclosed in price (in the unlikely event that the value of a commodity and of money change in tandem).²¹ This is just the simplest way that price is not transparent, or in other words, does not reveal value unambiguously.

Taking this one step further, the last point Marx makes about the price form is that incongruities between price and value are inherent in it. Price may express a value that is not the right amount and may also express a value that isn't even there. With this, Marx's whole argument seems to unravel. The obvious questions are: If non-products have prices, what

¹⁷ Marx is evidently answering Ricardo but his argument has broader relevance. He overstates the point in the Contribution, claiming that 'gold is the measure of value because its value is variable' (1859: 309). ¹⁸ Marx 1867: 193.

¹⁹ Marx 1867: 190.

 $^{^{20}}$ Marx argues that changes in the value of money do matter for hoards and for debt, just not for the measure function (see 1859: 380, see also 1939: 129). ²¹ See Marx 1867: 193 and 144-6.

justifies the transition from commodities to abstract labor in Chapter 1? If price doesn't express the right quantity of value, then why bother with value at all, since it is of no help in formulating a theory of price? One way of responding is to say that the prices that misrepresent values are just disequilibrium prices and will get back to equilibrium shortly, while the price of land will be explained eventually by the theory of rent. While these arguments are not false, they are beside the point. Marx's topic is the price form. He is drawing attention to one of its characteristics, namely, that price stands in an external relation to value. (Price is also value's expression, but this is not the issue now; it was already demonstrated before Chapter 3 and reiterated at its beginning.) A commodity's value is its proper place relative to all others in the social product, but is transformed, Marx says, into 'the exchange ratio between a single commodity and the money commodity which exists outside it.'22 This external relationship between price and value originates in the mediated or indirectly social character of capitalist production and so is the logical implication of the two-fold character of the commodity. As a result of it, disparities between price and value, not only may, but are bound to arise. Disequilibrium prices and the price of land are two examples of how price and value can diverge, but price is still externally related to value even under conditions of proportional production (i.e., equilibrium). Marx is concerned with what a price is, not with the economist's question: does price converge to equilibrium? It is the exclusive concern with the latter that makes the concept of value seem superfluous. The answer to that charge, therefore, is that if price is considered on its own, the distinction between price and value is abolished. This is one of the ways of falsely conceptualizing capitalist production as an immediate unity or, in other words, of abolishing money.

²² Marx 1867: 196.

The section on measure concludes with the external character of price to value because this could not be disclosed until the price form is fully developed. Introducing it sooner would only have muddied the explanation of how value is ambiguously manifested in price (and if Marx had brought it up in his first discussion of value, he would never have gotten to the price form, or for that matter, anywhere). As this illustrates, to develop capitalist forms, Marx must treat them 'in their unity'. This is because they are unities, even though, as mediated unities, they always have the potential to come apart. When they do disintegrate, they fall short of achieving their proper form (or 'pure shape') and so reveal nothing.²³ Since each capitalist form is internally contradictory, treating them as unities never effaces their potential to disintegrate.²⁴

The contradiction in its initial cell form, between the use value and value of the commodity, carries over into each newly developed form. In the price form, it is that price is both the expression and the misrepresentation of value. This, in turn, carries over into the difference between ideal and realized price. The price form, in which money figures as measure, does point to actual exchange, in which money is the medium of exchange: 'the price form...implies the necessity of exchanges', as Marx says.²⁵ Commodities have prices only because they link the activities that produce them. For this interconnection to be accomplished, their ideal prices must be realized.²⁶

²⁵ Marx 1867:

²³ Ibid: 203.

²⁴ Classical and Neo-Classical theory do obliterate potential disintegration because they present capitalist forms as immediate unities (and as just noted, so does heterodox theory that lacks value). As Murray explains, for Marx, mediation, as manifested by the presence of 'third parties, such as heaven, the state, or money, signal submerged conflict, not achieved harmony' (1993: 41). Hence contradiction extends throughout all capitalist forms and indicates that potential collapse is ever present. The answer to Shortall's criticism that Marx stresses 'the unity of the dialectic of capital over and above its oppositions and contradictions' (1994: 455) is that the forms themselves, even in their pure shapes, are characterized by contradictions.

²⁶ This transition is clearer in the *Contribution*. There, Marx chides Smith for treating the difference between ideal and realized price as purely nominal, which suggests that realization is a mere formality. He says: 'the existence of price as an expression of exchange value, or of gold as a measure of value, entails the necessity for alienation of commodities in exchange for glittering gold and thus the possibility of their

2. Means of Circulation

As in the section on measure, Marx's explanation of the means of circulation refers exclusively to this one function or cannot be generalized to money without qualification. This focus establishes what is taken as 'given', restricts what is relevant and entails a particular perspective towards exchange. If my interpretation is correct, Marx has made his argument difficult to understand by leaving these conditions tacit. They can be spelled out, however, if we bear in mind that commodity circulation is the change of form of the commodity and nothing else.

The prohibition against considering anything else means, on the commodity side, first, that use value is the aim of exchange (since what is at issue is the *commodity*'s change of form). Second, commodities are assumed to be present; we know from Chapter 2 that they are private property, but not how their owners came to have them. Last, the commodity's value is given as an ideal price (we are prohibited from considering how it is determined).²⁷ On the side of money, it dictates that money is nothing but an intermediary. In its extreme form or limiting case, this means that money cannot leave circulation (although, as I will argue, Marx never really subscribes to this). Further, since money mediates the satisfaction of needs, it has ideal (potential) use value consisting of all the commodities whose price it could realize.²⁸ Last, as

non-alienation. In short, there is here contained in latent form the whole contradiction which arises because the product is a commodity' (1859: 308).

²⁷ The realization of this price is assumed too, but the conditions for this are spelled out rather than simply presupposed (see Marx 1867: 200-3). Rather than a presupposition, this is the strategy of treating capitalist forms in their unity, which is necessary to progress from one form to the next. The evidence that Marx is considering one single commodity's change of form is that he speaks of the second commodity in a C-M-C circuit as the final form of the first (e.g., gin is the bible's final shape). That this seems peculiar is part of his point; as will emerge more fully below, we do not see the order and continuity in commodity circulation.

²⁸ Williams (2000:) maintains that money has no use value, but this comes from overlooking the restricted terms of Marx's argument. If exchange is viewed solely as a means of satisfying needs, the use value Marx

with commodities, money's presence and its value are both given; for any given sum of money, 'commodity prices define the limit of its convertibility, namely its own quantity'.²⁹

In complete contrast to the measure function, the chief characteristic of means of circulation is that the physical presence of money matters but its physical material does not. The reason for the first aspect is that exchange is 'the scene of the action'.³⁰ This is the next step in the 'further development of the commodity': the external opposition between commodities and money, which was implied by the opposition between use value and value within the commodity, in its turn, implies the opposed 'real forms of motion', sale and purchase.³¹ Just as the expression of the values of commodities in one of their number makes that one into ideal money, the 'transformation of their real shapes as objects of utility' by their sale, makes the shape of value they assume into real money.³²

Turning to the second aspect, the reason why the physical material of the means of circulation does not matter, is that this function is necessarily performed by a symbol of value, or

attributes to money seems appropriate. The condition that money cannot leave circulation helps explain Marx's account of forced paper currency in section (c) on coin. If the condition is not recognized, this account is baffling because it appears to contradict his critique of the quantity theory in the previous section. Alternatively, if the condition is recognized, it could seem that Marx is making a claim about paper money without qualification. I am arguing that the condition is provisional and is overturned in Section 3, on Money. Marx seems to claim that there have been token monies that are exclusively means of circulation (possibly the bits of leather in Russia, Marx 1859: 351). As I will argue, whether or not such money ever existed, it fulfills the (false) premise of the quantity theory that money is exclusively a medium of circulation; this certainly was never true in capitalism.

²⁹ Marx 1867: 205. This quantity is not directly money's value but its purchasing power. Value, however, can only be expressed relatively and, as money cannot have a price, this relative expression is its purchasing power.

³⁰ Marx 1867: 199.

³¹ Ibid: 198, 199.

³² Marx 1867: 204. Williams (2000) is, therefore, right to argue that what 'validates and revalidates different money objects' is their 'successful deployment' in the functions money must perform in capitalism (ms 10). Since ultimately this is the reproduction of capital, Williams presents it in these terms. As he points out, the reason for this is that money is 'socioeconomic, not natural' (ms 11). This means that money cannot be identified with any of the objects that have performed these functions, including credit.

as Marx calls it, by coin.³³ With coin, money assumes a shape of its own, different from commodities. Marx derives coin, or the symbolic character of money, as the last result in Section 2. It follows from the currency of money, which, in its turn, is the reflection of commodity circulation as a whole. As Marx proceeds from circulation to coin, the physical substance of money becomes less significant (or more 'ideal'). In the same transition, real relations become inverted, giving rise ultimately to phenomena on which the quantity theory is based. To retrace Marx's derivation, we turn next to circulation.

2.i. Circulation

By circulation Marx means the network of all commodity circuits taken together.³⁴ Because the interconnection among commodity circuits takes the place of coordination in the production of different kinds of commodities, this is the social connection among commodity owners. It encompasses everyone since the dominance of the commodity form makes circulation the ordinary or established way of satisfying needs, or as Marx calls it, the 'process of social metabolism'.³⁵ By their dependence on circulation, all commodity owners are bound to each other, or to society as a whole. Because the relation among members of society is mediated by money, circulation – or their social connection – is an objective entity 'entirely beyond the control of human agents.'³⁶ This is evident in the impersonal character of exchange relations, in the 'haphazard and spontaneous' nature of the division of labor, in the consequence of this, that the commodity's successful passage through its circuit is 'a matter of chance' and ultimately, in

³³ Marx uses the term coin to refer to all such symbols. For example, he states that the 'Bank of England... was empowered by Parliament to coin money...by lending it...to the public in the form of bank notes." He then states that 'this credit money...became the coin in which' the bank made loans to the state (1867: 920). ³⁴ Marx makes this point in a rather understated way in *Capital*; he speaks of circulation as the 'whole'

process' of commodity metamorphoses (1867: 207).

³⁵ Ibid:

³⁶ Marx 1867: 207.

crises, or the disintegration of circulation.³⁷ For all the foregoing reasons, circulation must exist continuously and be a permanent fixture – it is, as we say 'the market'; unlike occasional exchanges it 'does not disappear from view once the use values have changed places and changed hands.³⁸ If commodity circulation has this character, there must be, as its counterpart, a stock of real money, or means of circulation, to carry out exchanges. This raises the question: where does this fund of money come from? Although it involves somewhat of a digression, this question will be considered next.

2.i. a. Gold Production or the Given Money Stock

One answer Marx gives to this question is that the fund of money is just there. This is the answer implied by his assumption that the money in one commodity circuit comes from a prior sale in the circuit of a different commodity.³⁹ Marx's second answer is that gold, and so by assumption money, is produced in the same way as any other commodity (although, as we will see, neither gold nor any other commodity is produced in way he describes). He appeals to gold production three times in Chapter 3: first, in connection with the commodity circuit and gold's entrance into circulation; second, in connection with gold's value as this relates to the quantity of money in circulation; and last, in connection with the formation of the hoards that are required for circulation.⁴⁰

It should be recalled, to begin with, that these discussions of gold production violate the limits appropriate to the consideration of circulation (which Marx otherwise observes and, in fact, reinstates). Since circulation involves only the change of form of commodities, accounting

³⁷ See 1867: 207, 202, 203 and 209. Marx states this point well in the *Grundrisse*: 'Circulation, because a totality of the social process, is also the first form in which the social relation appears as something independent...as a power over the individual which has become autonomous' (1939: 197). ³⁸ See 1867: 208.

 ³⁹ 'We will assume that the two golden coins in return for which our weaver has parted with his linen are the metamorphosed shape of a quarter of wheat' (Marx 1867: 204)
 ⁴⁰ Ibid: 203-4; 214; 228-9.

for their presence is out of bounds; commodities must be taken as given. Second, Marx describes production as it would appear straight out of circulation, if the antithesis between commodities and money were pursued no further. The result is simple commodity production, familiar to Marx as one of the ways the classicals think of capitalist production. Marx does not limit his description to gold and so to money, but extends it to all commodities. As he says:⁴¹

Up to this point we have considered only one economic relation between men, a relation between owners of commodities in which they appropriate the produce of the labour of others by alienating the produce of their own labour.

In Marx's terminology, this is 'the appearance of the law of appropriation in simple circulation'. It is the assumption that 'one's own labor' is 'the original title to property' and appears in the hunter and fisherman stories of Smith and Ricardo.⁴² According to Marx it is made by 'all modern economists' for two reasons.⁴³ First, since one must already own something to acquire property through circulation, there must be some other way of acquiring property, that is based on different principles than circulation.⁴⁴ Economics takes labor to be this other principle. Second, it derives the mutual isolation of different production activities from the mutual independence of individuals in exchange. In these ways, the assumption 'is not arbitrary, but... springs from the examination of circulation itself.⁴⁵ Instead of reaching the other relations presupposed by circulation, however, the leap from circulation to production arrives at a notion of production without social form.⁴⁶

⁴¹ Ibid: 203. I am not arguing that Part I of *Capital* refers to simple commodity production. Except for this one passage, which I argue is intentionally false, Part I refers to capitalism.

⁴² Marx 1858: 461 (translation modified) and 463. Marx originally intended to make this "law" more explicit (see 1939: 238). He also apparently intended to include a section on its inversion in the *Results* (see Mandel 1976: 943)

⁴³ ibid.

⁴⁴ The neo-classicals manage to banish this insight and portray circulation as self-sufficient by their assumption of initial endowments.

⁴⁵ Marx 1858: 464-5.

⁴⁶ See Marx 1858: 470 and 1933: 1022. As Marx explains, the other 'relationships are obliterated' from the standpoint of simple circulation (1858: 466).

Since they entail the same idea of production, Marx's descriptions of gold production are his versions of the hunter and fisherman stories. As it is one of his principal aims to demonstrate that these are false, he cannot be supposed to be unaware of this himself.⁴⁷ Reconsidered in this light, each of the accounts of gold production contains a clue that it refers, not to capitalism itself, but to the period that precedes capitalism. In the first, Marx no sooner introduces gold production than he leaves it aside to assume instead that money comes from a previous sale in another circuit, or in other words, that money is already in circulation.⁴⁸ This just treats gold and so money in the same way as commodities; all are assumed to be present, as the investigation of circulation requires. In the second account, Marx concocts an elaborate explanation of how changes in the value of money are automatically accompanied by appropriate changes in its quantity. Then, as in the previous story, he takes the value of money as just given. This not only corresponds to the given prices of commodities but is presupposed in these prices themselves.⁴⁹ In the last case, Marx has just argued that circulation requires hoards. Since (without capitalist production) these can be formed only by selling without buying, their formation seems to undermine circulation rather than support it. Marx appeals to the initial exchange by which gold enters circulation to circumvent this 'self-contradiction'.⁵⁰ In the now familiar pattern, he

⁴⁷ This is a problem for the criticism that commodity money involves Marx in logical inconsistency: that he must present the process of producing money as non-capitalist (since money comes into being only as its result) in order to explain capitalist production, which must begin with the monetary purchase of labor power.

⁸ See Marx 1867: 204.

⁴⁹ 'When money begins to function as a measure of value, when it is used to determine prices, its value is presupposed' (Marx 1867: 214). Marx makes the same point in an account of gold production in Capital, Chapter 2 (see 1867: 186). Marx's explanation of the adjustment of the quantity of money for changes in its value is that if the value of money falls, the gold producer has to hand over more gold to acquire the same commodities. So the quantity of money increases when and because its value falls. As we will see, Marx claims that this is what Hume saw, but misinterpreted because he inverted causality, taking the increased quantity of money to cause a decrease in its value (see Marx 1859: 392). Marx also claims that it took more than fifty years for a change in money's value to have a noticeable effect on prices and even longer to be generalized to all prices (see ibid). In the meantime prices are expressed in the given (already established) value of gold. ⁵⁰ Marx 1867: 228.

abandons this story almost immediately, maintaining instead that hoards are already formed before capitalism begins.⁵¹ When, shortly thereafter, he explains how the quantity of money adjusts to the needs of circulation, he says that money flows in and out of circulation, not from gold production, but from reserve hoards.⁵²

The implication of all three accounts is that capitalism proceeds historically as Marx does logically: that capitalism starts from a stock of gold of given value, which production of an earlier era has made available.⁵³ This is consistent with Marx's account, in Chapter 2, of how the money commodity is selected. There he maintains that gold, being physically suited to the role, is set apart from all other commodities when the exchange process evolves sufficiently to require some thing to be money. Capitalism is handed an already selected money commodity; the generalization of the commodity form resulting from production on a capitalist basis, transforms that money commodity into a true universal equivalent.⁵⁴ It follows that gold is the first form of money in capitalism, just as the methods of craft production are the first form of technology, not because these are capitalist forms but precisely because they are not shaped by capital. The turn away from gold production in Marx's argument indicates that it is irrelevant to capitalist money, and, therefore, that money is not gold in capitalism. As I have argued, Marx explains in *Capital*, Volume II that the credit system evolves from the drive to maximize surplus value together with

⁵² See ibid: 232. He also says that hoarding serves this purpose 'where metallic circulation prevails', which is not the same as saying that it does prevail (ibid: 231). As Ganssman has pointed out, it did not prevail in Marx's time. As already noted, Lapavitsas shows the crucial role that credit money played in English monetary history in the first half of the 19th century (2000: 637). Further, Marx will say in Capital, Vol. II that once the credit system develops, the hoards are no longer there: 'in real life, there is no storage of money' (1885: 423). In the sense that banks serve the same function, they take the place of hoards. ⁵³ I am not arguing that Marx employs a 'logical-historical method' (for the problems with this interpretation see Arthur, 1997). Since capitalism exists in historical time, it begins with the conditions established by previous societies. One of these conditions is the formation of a hoard of gold. ⁵⁴ See Campbell 2004: 15(ms).

⁵¹ 'Modern society...already in its infancy had pulled Pluto by the hair of his head from the bowels of the earth' (ibid: 230).

the efforts of individual capitals to capture as much of it as they can.⁵⁵ It follows that credit money is the form of money shaped by capital or the money of capitalism. Well before Volume II, however, even though he continues to assume that gold functions as money, Marx shows that money is not a commodity. As I will argue, this is established by the end of Chapter 3, first, by the capacity coin acquires to act as 'money' (or, in other words, to transcend the role of mere intermediary) and second, by Marx's presentation of the foundations of the theory of credit money in connection with money's function as means of payment.⁵⁶ As Marx proceeds from the currency of money to coin, the substance of money becomes progressively more 'ideal' until it is the mere 'shadow' of gold.⁵⁷

2.i.b. The Currency of Money, Coin and the Quantity Theory

In the section on the currency of money, money, for the first time, steps away from commodities to have characteristics of its own. It has its own path of circulation different from the commodity's circuit, it own law governing its quantity and its own velocity.⁵⁸ Having always spoken of money as the 'mirror of value', Marx here presents money's currency as the reflection of commodity circulation.⁵⁹ This means, first, that the currency of money is derivative; commodity circulation is the source of its monetary counterpart. As already noted, commodity

⁵⁵ See Campbell 1998.

 ⁵⁶ Citations- Williams (2000) Lapavitsas (2000) both argue that coin makes the transition to money
 ⁵⁷ See Marx 1859: 344.

⁵⁸ Although both are translated as 'circulation', Marx distinguishes between the course (*Umlauf*) of money and the circuit (*Kreislauf*) of the commodity. For the former he gives the synonyms, currency and *cours de la monnaie* (1867: 210). Fowkes explains that 'currency' was old-fashioned even in Marx's day, but I will use it anyway.

⁵⁹ Marx 1867: 150, see also 144, for currency as the reflection of commodity circulation see ibid: 217. Marx's idea of reflection is also expressed by such statements as: 'the magnitude of money's value is expressed in' the price list read backwards (ibid: 189). He repeats this more plainly a few pages later: money 'reads all prices backwards, and thus...mirrors itself in the bodies of all other commodities' (ibid: 205). The language of reflection is sometimes lost in translation. For example, 'This fact must therefore make itself plainly visible in the circulation of money' (ibid: 212) should be 'this fact must be reflected'. Also, Marx (1859: 336) states 'the movement of the circulation process of commodities is therefore mirrored in [translated as 'represented by'] the movement of money'. These translations are misleading because they lose the point that reflections are mirror images or backwards from their source.

circulation creates the need for a stock of money, or as Marx says 'circulation sweats money from every pore'.⁶⁰ Further, Marx reminds us that money mediates the change of form of commodities only because it is the 'independent shape' of *their* values.⁶¹ Finally, the metamorphosis of commodities imparts motion to money rather than the reverse, because circulation is 'the exchange of the material elements of their [i.e., social] labour' or the process of satisfying needs.⁶² Thus, while money does have its own characteristics, the impression that these originate in money itself, is false.

That money's currency is a reflection means, second, that it presents a mirror image or inversion. The original inversion associated with money as the 'mirror of value' was that value seemed to arise from money: it seemed that 'all other commodities universally express their values in a particular commodity because it is money' whereas causality runs the other way around, 'a particular commodity becomes money because all other commodities express their values in it'.⁶³ As in this first inversion, in the second, associated with circulation, the reflection masquerades as the source: whereas 'the movement of money is merely the expression of the circulation of commodities, the situation appears to be the reverse...the circulation of commodities seems to be the result of the movement of money'.⁶⁴

Marx's reference to currency as reflection is, finally, a warning that it is the reflection, rather than its source, that is noticed. Marx revealed the circuit of a single commodity, and from

⁶⁴ Marx 1867: 212. There is a disguised truth to this, namely, that capital, which begins its circuit as money, does circulate commodities. But this is not, as Marx says 'the so-called circuit of money, as people imagine

⁶⁰ Marx 1867: 208.

⁶¹ Marx 1867: 212.

⁶² Marx 1859: 336.

⁶³ Marx 1867: 187. Instead of thinking that money gets its value-form from the exchange process (as Marx maintains) people thought that money's value came from the exchange process (see ibid: 184). 'Value' here means the character not the magnitude of value. It is not value in Marx's sense. As Marx illustrates by citing Locke, the idea that the value of money arises from the exchange process, means that value is conferred on money by convention or 'the universal consent of mankind' (ibid: 184n10). Money's value is 'imaginary' and value in general is use value.

this developed commodity circulation as a whole by pointing out the ways each circuit must intersect with others. He emphasizes, however, that this imposes an order and continuity on circulation that is not immediately observable. Because money separates the two halves of every circuit:⁶⁵

the actual process of circulation appears...not as a complete metamorphosis of the commodity...but as a mere accumulation of numerous purchases and sales which chance to occur simultaneously. The form determination of the process is obliterated.

Whereas commodity circulation appears chaotic, all order and continuity seems to arise from its monetary counterpart, the currency of money. This is because commodities are motley, while money is one thing; commodities enter and leave circulation, while money stays; the connection between the two phases of the commodity's circuit is not apparent, while money's motion – the repetition of the same step – is 'everywhere visible'.⁶⁶ In these ways, commodity circulation itself hides the true direction of causality and 'produces a semblance of the opposite'.⁶⁷ According to Marx, this semblance accounts for the 'popular opinion' – as he dismissively calls the quantity theory – that causality runs from money to commodities. This notion of causality, for example, underlies the claims that the quantity of money determines the level of prices and that stagnation is caused by 'a quantitative deficiency in the circulating medium'.⁶⁸

Marx's alternative to the quantity theory undergoes a series of transformations in which the substance of money becomes progressively more ideal. His first law relates to full bodied coin, meaning that the circulating medium actually has the value of the monetary unit in which

it', by which he means causation as conceived by the quantity theory, which refers to simple circulation not capital's circuit (Marx 1859: 337).

⁶⁵ Marx 1859: 330, translation modified. Marx hints at the apparent disorder of commodity circulation even as he reveals the order in it: we don't know where the money that purchases any given commodity came from (1867:205), the division of labor together with the diversity of needs means that sellers scatter their purchases among many commodities (ibid: 207), we cannot see how circuits intersect and a sale need not become a purchase at all (ibid: 208).

⁶⁶ Marx 1859: 337.

⁶⁷ Marx 1867: 211.

commodity prices are expressed.⁶⁹ Since commodities enter circulation with ideal prices, the value of money is also implicitly given.⁷⁰ Under these conditions, the quantity of money in circulation is determined by the amount of commodity values to be realized. With this, Marx can account for the phenomena the quantity theorists observe: a decrease in the value of money will cause both an increase in prices and in the quantity of money in circulation. 'Money itself' here acts as the cause of the change in its quantity, but because of a change in its value and so 'in virtue of its function as measure of value.'⁷¹ Marx maintains that this is the phenomenon Hume observed. ⁷² Hume, however, attributes it to money as means of circulation, since the quantity theory depends on this being money's only function.

The first law is modified by taking the velocity of money into account. Since velocity can 'make up for' the quantity of money, or with a velocity of ten, 'one ounce [of gold] does indeed amount to ten', this is the first way that money's substance becomes ideal.⁷³ This exposes a shortcoming in the quantity theory, namely, that it must add constant velocity to its list of arbitrary assumptions. Except that velocity figures as an additional factor determining the quantity of money, the first law remains the same.

The substance of money becomes fully ideal in the transformation of the circulating medium into a token of gold and so of value. The effects of this transformation reinforce the

⁶⁸ Ibid: 217.

⁶⁹ 'Money is only the representation in real life of the quantity of gold previously expressed in the imagination by the sum of the prices of commodities' (Marx 1867: 213). The monetary unit is the quantity of gold that is used as the unit of measurement to express commodity prices. In translation this is called the standard of price, although a literal translation would make it the measure of price (I owe this observation to Geert Reuten).

⁷⁰ 'The change in form,...C-M-C, requires that a given value shall form the starting point of the process' (ibid: 210). Criticizing Hume, Marx states: 'any scholarly investigation of the relation between the volume of means of circulation and movements in commodity prices must assume that the value of the money material is given.' (1859: 391-2).

⁷¹ Marx 1867: 213.

⁷² See Marx 1859: 392.

previous two inversions and introduce a third. First, since the state issues coins, it seems to create money, suggesting that money and its value are purely symbolic.⁷⁴ Second, the 'law peculiar to the circulation of paper money' reverses Marx's first law, pertaining to full bodied coin: with paper money, the value of the monetary unit depends on the quantity of money in circulation instead of the quantity of money depending on the value of the monetary unit.⁷⁵ Third, with token money we arrive at the specific characteristic of money as means of circulation, presented earlier. The exact opposite of money as measure, it is actually present but without substance and so without value.⁷⁶

In this way, coin seems to overturn all the principles of money that Marx has derived, up to this point, from value. As will emerge shortly, Marx can connect the quantity-theory-like law of paper money's circulation back to value, establishing that it does not undermine the concept of value. A broader issue, however, is that Marx explains why money becomes a token of gold in two different ways. How we interpret his whole discussion of coin and the inversions associated with it depends on what we make of these two explanations. The first is that gold becomes a token of itself by its physical circulation. For this reason 'the transformation of gold sovereigns into nominal gold cannot be entirely prevented'.⁷⁷ This is perfectly straightforward and establishes that the circulating medium cannot be full-bodied gold coin, or, in other words, cannot have the value it represents. It does not, by itself, however, imply the inversion of Marx's

⁷³ See Marx 1859: 340, 343. Marx does not speak of velocity as an idealization of money in *Capital*. This conception seems worth retaining because it is an intermediate stage between full bodied coin and token money.

⁷⁴ 'The exchange value of commodities assumes, in the price, merely a nominal existence and, in money, merely an imaginary or symbolic existence' (Marx 1859: 350). Saying that price is merely 'nominal' means that money is purely conventional and that exchange is a mediated form of barter (see Marx 1858; 486). This is the misconception Marx warns against in Capital, Chapter 2 (1867: 185).

⁷⁵ Marx 1867: 224; see also 1859: 353, 356 and 391.

 $^{^{76}}$ See Marx 1867: 223, 227. In the *Contribution*, Marx describes this as a contradiction between gold as coin and as standard of price (1859: 345). ⁷⁷ Marx 1859: 346, see also 1867: 222-23.

first law governing the quantity of money in circulation. The inversion depends on money being stuck in circulation; that is, the value of the monetary unit would vary with the quantity of money only if money cannot leave circulation. This leads to Marx's second explanation for the token character of coin, namely, that it depends on the supposition that money's function as 'coin or circulating medium can be singled out or rendered independent'.⁷⁸ As Marx points out in the *Contribution*, if this condition were met, even full weight coin would be transformed into a token of itself:⁷⁹

'If the function of means of circulation in serving as coin is isolated, then...it becomes a value token....If without reference to the total value of commodities, all the gold and silver that happens to be in the country must participate as means of circulation in the exchange of commodities, then gold and silver have no intrinsic value and are not commodities.'

Even though Marx says he is talking about inconvertible paper money, it seems unlikely that the

isolation of the means of circulation function is a true characteristic of any kind of money.

Rather this is the assumption of the quantity theory.⁸⁰ As de Brunhoff recognizes, it is Ricardo's

(or any quantity theorist's) mistake to regard currency 'in isolation' from money's other

functions.⁸¹

The additional function that springs to mind is that money is also a store of value.⁸² This

function certainly plays an important role in Marx's theory. His first law regarding the quantity

⁷⁸ Marx 1867: 226.

⁷⁹ Marx 1859: 391, 395. See also ibid: 403.

⁸⁰ Marx's summary of Tooke's results seems decisive. Marx says that Tooke was compelled 'to recognize that the direct correlation between prices and the quantity of currency presupposed by this theory is purely imaginary, that increases or decreases in the amount of currency when the value of precious metals remains constant are always the consequences, never the cause, of price variations, that altogether the circulation of money is merely a secondary movement and that, in addition to serving as medium of circulation, money performs other functions in the real process of production' (this last refers to means of payment, 1859: 415). In *Capital* Marx 'outlines the most important variations in the history of prices', all of which contradict the quantity theory (1867: 218).

⁸¹ De Brunhoff 1976: 35. I agree with her rejection of the idea that Marx 'returns to quantitativism when he analyzes paper money' and her argument that 'he seeks to get rid of the quantity theory for all kinds of money' (ibid: 34, 35).

⁸² This is Keynes's way out of the quantity theory. Keynes, like Marx, recognizes that the hoards do not actually exist.

of money depends on money being able to enter and leave circulation from hoards. It is because the quantity of money adjusts to the needs of circulation in this way that the monetary unit can continue to represent the value of the same quantity of gold (in other words, the standard of price remains the same). Clearly also Marx thinks that it is possible (although unusual) to hoard paper credit money, since he describes a situation in which this occurs.⁸³ But when Marx disputes the classical assumption that money's sole function is as means of circulation, it is not in order to draw attention to money's store of value function but to its function as measure. This is the crucial function for the theory of value: it is the basis for Marx's first law regarding the quantity of money, and, more fundamentally, for the expression of value in price. As noted earlier, it is the function Marx referred to when he objected to the claim that money is a symbol. Money's function as measure is missing from the quantity theory because it lacks a concept of value and because it is missing, money is exclusively a means of circulation.

If the quantity theory's assumption is not valid for any kind of money, why does Marx make it the basis of his 'law peculiar to the circulation of paper money'?⁸⁴ The conditions supposed by the quantity theory are those most at odds with the theory of value. But they are, Marx maintains, the conclusions one would reach if one started from the observation of paper money.⁸⁵ Thus, Marx grants the quantity theorists their assumption for the sake of argument

⁸³ See 1867: 237n52. The circumstance is peculiar, but this is because credit money usually returns to its source and is canceled by the repayment of debt. The 'old, grasping banker' in the story Marx reports, is behaving as if bank notes, or credit money, were gold coin; his actions 'make money tight' because the Bank Act of 1844, which is governing the behavior of the central bank, is based on Ricardo's theory. As we will see, this is supposed to pertain to gold money but in fact pertains to token money, and, in any case, does not pertain to credit money. There is no suggestion, however, that credit money is incapable of being hoarded (Lapavitsas (2000: 649n16) observes that it is). Marx indicates that when credit money prevails, hoards take the new form of reserve funds accumulated to meet debt payments (see ibid: 240).
⁸⁴ Marx 1867: 224.

⁸⁵ See Marx 1859: 391: Hume holds fast to the observable phenomena (fix). Having listed the inversions associated with paper money, Marx (1859: 356) states: 'It is thus evident that a person who restricts his studies of monetary circulation to an analysis of the circulation of paper money with a legal rate of exchange must misunderstand the inherent laws of monetary circulation...its specific movements are due

because the relationship they propose is suggested by what is immediately visible. He can then show that this relationship, which seems to undermine the theory of value completely, can be made consistent with it. If money could not leave circulation, its value, rather than its quantity, would be forced to vary with the needs of circulation. If, to simplify matters, we assume that the needs of circulation remain the same, the value of money would vary with its quantity, but this is because the quantity of paper would determine how much gold a unit of paper money represents. By representing varying amounts of gold, paper would represent varying amounts of value. As Marx says, 'the effect is the same as if an alteration had taken place in the function of gold as the standard of prices', meaning the quantity of gold represented by a unit of money.⁸⁶ Thus, provided that the quantity theory's exogenous money assumption is granted, there is an inverse relation between the quantity and value of money, but it can be explained in terms of value. Stated differently, under the assumed conditions, the state does determine the quantity of money, throwing it 'into the circulation process from the outside'.⁸⁷ This does not mean, however, that the state has abolished value and that money is its creature. To maintain a constant standard of price, the state would have to keep the amount of paper in circulation equal to the amount of gold that would circulate. Apart from there being no way of knowing directly what that amount is or whether the standard of price had changed, this establishes that the effect of state's actions is governed by the law of value.⁸⁸

to infringements of its correct proportion to gold, and do not arise from the metamorphosis of commodities.'

⁸⁶ Marx 1867: 225.

⁸⁷ Marx 1867: 225, 224.

⁸⁸ 'The intervention of the State which issues paper money with a legal rate of exchange...seems to invalidate the economic law....But this power of the State is mere illusion. It may throw any number of paper notes...into circulation but its control ceases with this mechanical act. As soon as...paper money enters the sphere of circulation it is subject to the inherent laws of this sphere.' (Marx 1859: 354, see also 1867: 225).

Marx's conclusion of the discussion of means of circulation with coin parallels his conclusion of measure with the disparity between value and price. Like this disparity, coin reveals nothing: 'the inherent laws of monetary circulation...appear not only to be turned upside down...but even annulled'.⁸⁹ Money's value (really its purchasing power), as we have seen, seems to depend on its quantity. More fundamental, though, is the further implication of this, that paper seems to be a token of value directly rather than a token of value because it is a token of gold.⁹⁰ If we lose sight of this mediation, money seems to symbolize value and value in Marx's sense disappears: value seems not to be a property of commodities; in other words, relations among commodities do not seem to mediate social relations of production. Rather, money's value seems to be something we attribute to it (it is 'imaginary or conventional').⁹¹ As opposed to money, only commodities are true wealth, but this is "value" in the sense of use value and all notion of social form is gone.

By presenting money as a commodity, Marx can trace the phenomena associated with coin back to their origin in the 'metamorphosis of commodities'. Disclosing the mediations between the phenomena and their origin shows the inversions inherent in coin to be inversions. As against the quantity theory, which takes all these inversions just as they appear, Marx argues that money arises from commodity circulation (not the state), that value is a form of association mediated by commodity circulation (rather than directly unified and subject to social control)

⁸⁹ Marx 1859: 356. As with price by itself without value, the quantity theory results from what is directly visible. It implies direct unity or the absence of mediation.

⁹⁰ 'The gold coin obviously represents the value of commodities only after the value has been assessed in terms of gold or expressed as a price, whereas the token of value seems to represent the value of commodities directly' (Marx 1859: 356).

⁹¹ Marx 1859: 395, see also 1867: 185. Marx associates this view of money with Locke (although others share it). Locke claims that money's value is imaginary in opposition to the mercantilist idea that 'money alone constitutes wealth' (Marx 1859: 389). Marx considers the mercantilists to have recognized the 'adequate form' of wealth and 'the determining purpose and driving motive of production.' (ibid: 389-90).

and that, as capital, value is the goal of this form of association (and is completely different from the goal of satisfying needs).

Once Marx has reconstructed the inversions associated with coin, the assumption that money is a commodity seems to have served its purpose (at least as far as the theory of money is concerned). Unless Marx is specifically talking about gold, money retains the value-less character of coin (although not the law peculiar to the quantity of paper money which follows from money being only a means of circulation). One of the signs of this is that, at the end of the section on coin, Marx begins to speak of money as the independent form of exchange value, rather than as value made independent.⁹² Since exchange value is the form of value, this suggests that money is form without value substance, as it is in coin. In his introduction to the final set of functions, in which money gains independence from the metamorphosis of commodities, Marx again associates only the measure of value function with a commodity. Means of circulation can be performed either by that commodity or by a replacement and so can money's functions as 'money'. Since money is not just a vanishing intermediary in these functions, their performance by a symbol of value makes that symbol into the 'adequate existence of exchange value'. A detailed consideration of these functions is beyond the scope of this paper; Marx's account of them is considered only as it relates to his view of the form of money and to his critique of the quantity theory.

⁹² Marx describes money as 'the independent being of exchange value' (1867: 226), whereas earlier he calls it 'the value of commodities made independent' (*es der verselbständigte Wert der Waren ist*) (ibid: 212). Speaking of the third set of functions, he states that the money commodity or its representative is 'money when its function...causes it to be fixed as the sole value shape (*Wertgestalt*) or only adequate existence of exchange value' (*Dasein der Tauschwerts*) (ibid: 227, translation modified). Again, in the section on the means of payment, he states that it is 'the absolute existence of exchange value' (ibid: 234) or 'the independent existence of exchange value' (ibid: 235).

3. Money on its own: The basis of credit money

Marx speaks of money as gold in connection with two of its functions 'as money', hoards and world money. With regard to the first, Marx indicates that hoards serve an economic purpose when 'metallic circulation prevails': they allow the quantity of money to adjust to the needs of commodity circulation.⁹³ Neither this role nor hoarding as a means of self-enrichment figure in Marx's account of money's function as means of payment and of the situation in which this function becomes dominant. In this situation, which as we will see in a moment, is capitalism, money is accumulated only as a reserve fund to meet payments coming due on debts.⁹⁴ In the case of world money, money must be precious metal because the state's power does not extend beyond one nation's borders. As Matthews and later Williams have both pointed out, however, this is because of the 'lack of a world monetary authority'; since this is a historical contingency there is no reason why 'acceptable international monies' must be 'metallic ones'.⁹⁵ According to Marx, the state's only role in creating money is to give 'the symbol of money... objective social validity'.⁹⁶ Given his awareness both of the institutional transformations that capitalism produces and of how theorists can be deceived by the circumstances of their times, it seems unlikely that he would consider the development of international monetary institutions to be impossible. Thus, of the two functions Marx associates with gold, one is pre-capitalist and the other is historically contingent.

In contrast to these, in connection with money's remaining function as means of payment Marx presents the beginnings of the theory of credit money. Lacking both the concept of capital and the distinction between industrial and banking capital, he describes only the precursor of true

⁹³ Marx 1867: 231.

⁹⁴ See Marx 1867: 240.

⁹⁵ Williams 2000: 9ms; Matthews 1996: 70. Matthews also points out that the price-specie flow mechanism has been an additional reason for advocating the gold standard, but that Marx does not subscribe to it.

credit money, which arises in connection with trade credit. This is the bill of exchange.⁹⁷ Nevertheless, he indicates that, with the development of the credit system, 'money takes on its own peculiar forms of existence', which push coin into a trivial role.⁹⁸ Marx warned earlier that credit money and paper money (or coin) originate from different functions of money.⁹⁹ In his account of money as means of payment, he emphasizes a number of differences between it and the 'simple circulation of money' developed earlier: whereas with the latter, the aim of selling is to satisfy needs, money as means of payment may involve forced sales, with the aim of obtaining the money to meet debt payments; whereas the connection between buyers and sellers previously existed only in exchange, now the movement of money 'expresses a social connection which was already present independently'; the quantity of money also depends on entirely different factors than before, bearing no relation to 'the mass of commodities in circulation' in the same period; and finally, unlike money's 'constant removal from its starting point', credit money, for example, bank notes 'flow back into the various banks from which they issued' (and since this adjusts the quantity of money to the needs of circulation, the hoards associated with metallic circulation no longer perform this function).¹⁰⁰ These differences point to another of Marx's disagreements with the quantity theory, which becomes an issue in evaluating the 1844 Bank Act. As Marx sees it, Ricardo thought he was describing metallic money, but because of his 'wrong assumption that gold is simply specie' (i.e., means of circulation), in fact, ends up

⁹⁶ Marx 1867: 226.

⁹⁷ These are 'titles to money in civil law' or 'certificates of debt that circulate' (Marx 1867: 234, 238).

⁹⁸ Marx 1867: 238.

⁹⁹ See 1867: 224.

¹⁰⁰ Marx 1859: 380; 1867: 234, 235, 237, 210, 239-40 n57. With the revision of the aim of selling, Marx is evidently moving towards capital. In the *Contribution*, he starts the section on 'Money' by trying out the inversion of the circuit into M-C-M, before returning to C-M-C (see 1859: 357). It is also much clearer in the *Contribution* that credit money follows a different path than money as means of circulation; with credit money (bank notes) 'the conditions governing the issue of money determine also its reflux' (1859: 337). Marx credits Steuart with the discovery 'that currency based on credit returns to its point of departure.' (ibid: 397).

describing inconvertible paper.¹⁰¹ On top of that, 'Ricardo confuses the circulation of banknotes or credit money with the circulation of simple tokens of value'.¹⁰² The 1844 Bank Act turns all these confusions 'into a practical experiment', by trying to 'subsume the circulation of credit money' under Ricardo's laws (which apply neither to metallic nor to credit money).¹⁰³ Marx's differentiation of credit money from both metallic money and inconvertible paper sorts out these confusions, preparing the way to consider the explanation of banking.

Although they are subtler in *Capital* than in the *Contribution*, there are a number of indications that Marx associates the means of payment function specifically with capitalism. He is careful to say that this function (or the creditor/debtor relation) is not unique to capitalism. Rather, he maintains that it is the dominant function of money in capitalism and this dominance is unique to capitalism. It follows that credit money, as the kind of money that originates from this function, is the money of capitalism. One of these indications is that Marx conceives the credit system to develop from trade credit among commodity producers; in turn, he regards the evolution of the credit system and of capitalism as one and the same process. This process, he argues,¹⁰⁴

'causes money to function increasingly as a means of payment to the detriment of its function as a means of purchase and even more as an element of hoarding.'

Second, Marx argues that, with the increasing extent of money as means of payment, money payments replace in kind payments of rents and tribute (taxes); that is, money becomes the 'universal material of contracts'.¹⁰⁵ As Marx illustrates by historical examples, this transformation is specifically capitalist because it can be instituted only in a capitalist context

¹⁰¹ Marx 1859: 414.

¹⁰² Marx 1859: 400. I would be truer to say that the quantity theorists conceive their theory to apply to any form of money and Marx holds that it applies only to 'simple tokens of value'. ¹⁰³ Ibid: 414, 412.
 ¹⁰⁴ Marx 1859: 375. Marx describes the development of trade credit in *Capital*, see 1867: 232.

and, when it is instituted, it destroys non-capitalist relations and the production techniques that depend on them.¹⁰⁶ Marx is again more forthright in the *Contribution*, stating:¹⁰⁷

'The extent to which money functions as the exclusive means of payment indicates how deepseated and widespread the domination of production by exchange value is.'

Last, money's function as means of payment appears prominently in monetary crises, where it stands opposite commodities as the 'only true wealth'.¹⁰⁸ Because crises occur only 'in periods with developed credit systems' they are specific to capitalism and it may be assumed that money has developed into credit money.¹⁰⁹ For Marx, they demonstrate the error of the classical view that money is a 'purely imaginary creation' and vindicate the mercantilists. He expresses this by saying that 'only gold and silver constitute money' and that 'only money is a commodity'.¹¹⁰ What is at issue, though, is the opposition between use value and value within the commodity, which is transformed in crises, into the external 'antithesis between commodities and their value form, money'.¹¹¹ It is money as value form that matters, not the form of money.¹¹²

¹⁰⁵ Marx 1867: 238.

¹⁰⁶ The evidence Marx cites includes the failed attempts in the Roman empire to transform in kind into money rents, the preservation of non-capitalist relations in the Ottoman empire through in kind rents, the prediction that Japan's 'exemplary agriculture' will be undermined by money rents (1867: 239) and the 'ruin of the feudal debtors, who lost their political power together with its economic basis' through the transformation of in kind into money rents (ibid: 233).

¹⁰⁷ Marx 1859: 376.

¹⁰⁸ Marx 1867: 236.

¹⁰⁹ Marx 1859: 414.

¹¹⁰ Marx 1859: 378, 1867: 236.

¹¹¹ Ibid.

¹¹² Because Marx's account of the credit system in *Capital*, III is combined with his discussion of the 1844 Bank Act, which ties money to gold reserves, it sometimes seems to suggest that a monetary crisis involves a reversion to gold money. If Marx already presents the basis for credit money in *Capital*, I, this seems unlikely. By the collapse of the credit system into the monetary system, he means instead that payments must be made in money (whatever the form of money happens to be) because credit is not acceptable (see Campbell 2002: 221).

4. Conclusion

It is a safe bet that the faults Marx identifies in the monetary theories of others are corrected in his own. Worst, are the quantity theorists, who, Marx says take a 'one-sided view of money' and 'mechanically place commodities on one side and money on the other' obliterating the 'different form determinations that money obtains in circulation'.¹¹³ Next are those, such as Steuart and Tooke, who restores Steuart's theory to its 'legitimate position', who develop money's various different 'functions from different moments in commodity exchange'.¹¹⁴ Their failing, however, and this applies mainly to the followers of Tooke, is that they overlook the 'organic connection (lebendigen zusammenhang) of these moments with each other or with the whole system of economic categories'.¹¹⁵ The second part of this statement means that they do not separate money from capital, which creates all kinds of confusion in the explanation of banking, of international investment and payments, and of the monetary phase in the circuit of capital. Although it has not been a topic of this paper, Marx has distinguished money from capital by examining 'money in its abstract form' in 'the framework of simple commodity circulation" in Part I of Capital.

The different moments or form determinations, to which Marx refers in the first part of the statement, are the different characteristics money has in its different functions. As Marx has argued against the quantity theory, these originate in the contradiction of exchange value and use value' inherent in the commodity and 'are in fact only crystallizations of the transformation of commodities'.¹¹⁶ The organic connection among them is exhibited by the order in which Marx presents them in Chapter 3. Money's function as measure ties money to value. It is presupposed

 ¹¹³ Marx 1859: 416, 396, and 371 (translation of the last modified).
 ¹¹⁴ Marx 1859: 415, 396.

¹¹⁵ Ibid: 416, translation modified.

¹¹⁶ Marx 1859: 396, 371.

by money's function as means of circulation, since, on the basis of value theory, commodities enter circulation with ideal prices. In turn, money's functions as money evolve automatically – without society's aid or desire, Marx says – from the previous two, by the interruption of the circuit or the separation of its two poles in time.¹¹⁷

In all Marx considers three forms of money, gold, paper and credit money. The first of these connects money directly to commodities and their metamorphosis. The second corresponds to the inverted way that commodity circulation appears, which is the basis of the quantity theory. Moreover, distinguishing the first from the second clears up the confusion over what Ricardo's theory is about (it seems to be about metal money but it is in fact about 'paper', or really a form of money that does not exist). Credit money is the money of capitalism but its connection to commodity circulation is hidden.¹¹⁸ It is only once Marx gets past the inversions of the quantity theory that he can turn to it.

¹¹⁷ Marx 1858: 487, see also 1859: 357.

¹¹⁸ The danger in starting with credit money is illustrated by Macleod's theory. Having no ground in value, because the function of money as measure is absent, Macleod produces a theory of simple commodity production with difference in production time thrown in (see Marx 1859: 376).

References

- Arthur, C. J. (2004), Money and the form of value, in Ricardo Bellofiore & Nicola Taylor (eds.), page numbers refer to manuscript.
- (1993), Hegel's Logic and Marx's Capital, in Fred Moseley (ed) 1993, 63-87.

(1997), Against the logical-historical method: Dialectical derivation versus linear logic, in Moseley and Campbell, 1997.

_____ and Geert Reuten (eds 1998), *Money in the Circulation of Capital: Essays on Volume II of Marx's 'Capital'* (London/New York: Macmillan/St Martin's Press).

- Ricardo Bellofiore & Nicola Taylor (eds) (2004), *The Constitution of Capital* (London: Palgrave), forthcoming
- Brunhoff, Suzanne, de (1976), Marx on Money, Maurice Goldbloom (transl.) (New York: Urizen Books)
- Campbell, Martha (1997), Marx's theory of money: A defense, in Fred Moseley (ed) 1997, 89-120.
- (1998), Money in the circulation of capital, in Chris Arthur and Geert Reuten (eds) 1998.

- Lapavitsas, Costas (2000), Money and the analysis of capitalism: The significance of commodity money, *Review of Radical Political Economics*, Vol. 32, 4: 631-656.
- Mandel, Ernest (1976) Introduction to Results of the Immediate Process of Production, in Marx (1867).

Marx, Karl (1867), Capital, Vol. I, (trans. B. Fowkes) (Harmondsworth: Penguin, 1976).

- (1858), The original text of the second and the beginning of the third chapter of A Contribution to the critique of political economy, in Marx, Karl and Frederick Engels, *Collected Works*, Vol. 29, pp. 430- (London: Lawrence and Wishart, 1987).
- (1859), A Contribution to the Critique of Political Economy, in Karl Marx and Frederick Engels, Collected Works, Vol. 29 (London: Lawrence and Wishart, 1987).
- (1933), Results of the immediate production process, in *Capital*, Vol. 1
- (1939), *Grundrisse* (trans. M. Nicolaus) (Harmondsworth: Penguin, 1973).
- ____ (1885), *Capital*, Vol. 2,

^{(2004),} in Riccardo Bellofiore and Nicola Taylor (eds) 2004.

- Matthews, Peter Hans (1996), The modern foundations of Marx's monetary economics, *The European Journal of the History of Economic Thought*, 3:1, 61-83.
- Moseley, Fred (ed) (1993), *Marx's Method in Capital* (Atlantic Highlands, NJ: Humanities Press).
 - and Martha Campbell (eds) (1997), *New Investigations of Marx's Method* (Atlantic Highlands, NJ: Humanities Press).
- Murray, Patrick (1993), The Necessity of Money: How Hegel Helped Marx Surpass Ricardo's Theory of Value, in Fred Moseley (ed) 1993, 37-61.

Shortall, Felton C. (1994), The Incomplete Marx, (Aldershot, UK/ Brookfield, US: Avebury).

Williams, Michael (2000), Why Marx Neither Has Nor Needs a Commodity Theory of Money, *Review of Political Economy*, Vol. 12, no. 4: 436-451.