Chapter III. Wealth procurement by exchange

In this chapter, we will turn our attention to how wealth procurement operates if profits are made by exchange, i.e., within the economic system. This type is not utterly violence free, but the role of violence in the economy is reduced, as we saw, to enforcing contracts, which persons have freely concluded (pacta sunt servanda).

Section 1. Consumptive and investive spending: C–M–C′ and M–C–M′

Two types of circuits

"Out-legs" and "in-legs" of circuits

As we saw, systems theoretical sociology, when applied to economics, developed the concept of elementary economic events in time. The most important elementary economic events in time are exchanges (do-ut-des, quid-pro-quo). In money economies, they organize themselves in *sequences of two exchanges*, which only together, and only after completion of the second exchange, bring about the intended meaningful result, i.e., closure of a circuit. Exchanges thus integrate systemic wholes of two steps, drives or circuits, with an "out-leg" or an "in-leg" or a "first leg" and a "second leg".

Two types of circuits: C–M–C′ and M–C–M′-circuits

The existence of the two-leg-circuits and the resulting the two phase-rhythm was known about since long ago, as we already said: M–C–M′ was present as the implicit algorithm on which merchants acted for millennia and as an outspoken and explicit regret of mythical and religious men, reformers, philosophers,[1] artists, social critics,

1 See *Aristotle*, Politics, I IX. In essence, he puts forward the distinction between C–M–C‘ and M–C–M‘ as follows: "One kind of acquisition … is a part of the household art… that art must procure to be forthcoming a supply of those goods…, which are necessary for life and useful for the community of city or household. … the amount of such property sufficient in itself for a good life is not unlimited… But there is another kind of acquisition that is specially called wealth-getting, and … and to this kind … there is thought to be no limit to riches and

and statesmen who lamented that production was being "abused" for profit-making. Finally, it also already existed in economists' analytical observations on the precondition of capitalist production and circuit closure prior to Marx's time.[2] How-

property. [1257a] [1] … One of them is natural, the other is not natural …. with every article of property there is a double way of using it; both uses are related to the article itself, but not related to it in the same manner—one is peculiar to the thing and the other is not peculiar to it. Take for example a shoe—there is its wear as a shoe and there is its use as an article of exchange …. And the same also holds good about the other articles of property; for all of them have an art of exchange related to them, which began in the first instance from the natural order of things, because men had more than enough of some things and less than enough of others. This consideration also shows that the art of trade is not by nature a part of the art of wealth-getting; for the practice of barter was necessary only so far as to satisfy men's own needs. … Exchange on these lines therefore is not contrary to nature, nor is it any branch of the art of wealth-getting, for it existed for the replenishment of natural self-sufficiency; yet out of it the art of business in due course arose… So, when currency had been now invented as an outcome of the necessary interchange of goods, there came into existence the other form of wealth-getting, trade. … natural wealth-getting belongs to household management, whereas the other kind belongs to trade, producing goods not in every way but only by the method of exchanging goods. It is this art of wealth-getting that is thought to be concerned with money, for money is the first principle and limit of commerce. And these riches, that are derived from this art of wealth-getting, are truly unlimited; … so also this wealth-getting has no limit in respect of its end, and its end is riches and the acquisition of goods in the commercial sense. But the household branch of wealth-getting has a limit…. Hence from this point of view it appears necessary that there should be a limit to all riches, yet in actual fact we observe that the opposite takes place; for all men engaged in wealth-getting try to increase their money to an unlimited amount." (English translation http://www.perseus.tufts.edu). In fact, history is rich with almost identical insights of other most famous thinkers, which will occasionally surface in this book. Disdain for primacy of money accumulation is also expressed in the statement of Nietzsche quoted in the opening pages of this book. See generally on the issue: *Polanyi* (1944) page 56.

2 "…Revendre avec profit est produire" (*Quesnay*, Sur les travaux des artisans. Second dialogue, page 373). *Quesnay* spoke of produce needing a "valeur vénale", a "sales value" in excess of the production costs. "It is… not … the productions of the territory of a kingdom, which form the revenues of the nation; it is … necessary that these productions have a sales value, which exceeds the prices of the costs of the exploitation of the cultivation" (*Quesnay*, page 158). *Smith* is also explicit about the expectation of profit being the sole motive for investment and production in capitalism. "The consideration of his own private profit is the sole motive which determines the owner of any capital to employ it either in agriculture, in manufactures, or in some particular branch of the wholesale or retail trade." (Wealth of Nations, Book II, Chapter III, page 335.). *Malthus* held the same view: "No fresh hands can be employed in any sort of industry merely in consequence of the demand for its produce occasioned by the persons employed. No farmer will take the trouble of superintending the labour of ten additional men merely because his whole produce will then sell in the market at an advanced price just equal to what he had paid his additional labourers." (*Malthus* (1820) chapter 7 section 2, page 348.). Malthus also wrote: "But where wealth and value are perhaps the most nearly connected, is in the necessity of the latter to the production of the former. … no consider-

ever, Marx made, at least at first, more out of it (just as Heidegger made more out of "Sorge") and elevated it to a central piece of economic thinking. He could not have emphasized its importance more than by calling it "*the general formula of capital*" and he came up with a specific notation, which we have already used and which is used throughout this book. While

Commodity – money – (other) commodity (or **C–M–C'**)

represents an "out-leg" into money and an "in-leg" into a good,

money – commodity – (more) money (or **M–C–M'**),[3]

which is the more famous one, represents an investment or profit driven circuit. Its emergence marks the birth of profit economies and capitalism. Profit economies or capitalism means: M–C–M'-players working their way, in M–C–M'-drives, through a complementary environment of C–M–C'-players. Profit economies and capitalism are, insofar, guest systems in the economic system at large, which is the host-system.

In other words, circuits with "in-legs" and "out-legs" split up into two types of combinations of elementary economic events: C–M–C' and M–C–M'-circuits. [4] The motive behind a C–M–C'-circuit is the *consumption* of C', of a needed or desired good; the motive for initiating such circuits arises from nature, society, politics or culture etc. Whether the completion of such a circuit achieves the intended purpose, is normally rather reliably foreseeable; if I can exchange my honey against money, I can buy chicken for my Sunday dish. Or: If I am employed in a factory, I can buy my Sunday dish with my salary. The motive behind an M–C–M'-circuit is investment or *profit*. Whether profit can be achieved is more conditional. The motive depends on the investor's *expectation* of a future spending M' by somebody else. This M', which I need to close my circuit, will either arise from other players' C–M–C'-circuits – it will then be their consumptive M–C'-leg – or from other players' M–C–M'-circuits

able quantity of wealth can be obtained … unless the value which an individual or the society places on the object, when obtained, fully compensates the sacrifice which has been made to obtain it, such wealth will not be produced in future." (*Malthus* (1836) volume II, page 263 and editorial comments page 447.) *Minsky* rephrased the same idea 144 years later as follows "For a capitalist system to function well, *prices must carry profits*". *Minsky* (1986) page 158, emphasis in the original. Therefore: "A capitalist economy only works well as an investing economy, for investment creates profits." (*Minsky* (1966) page 104).

3 *Marx*, Capital, volume I chapter 4.

4 The legs C–M and M–C' (in M–C–M') or M–C and C–M' (in M–C–M'), which are each elementary economic events, exist, as we shall see, in both the wealth economy and in the productive economy.

– it will then be their investive M–C-leg. Whether the completion of such a circuit achieves the intended purpose, is normally less reliably foreseeable. I depends not on my prospective counter-parties having a want for money, which they always have, but on their having sufficiently budgeted money for what I offer.

Marx' "under-use" of the distinction between C–M–C' and M–C–M'-circuits

Unfortunately, as Marx's ambition was not mainly to analyze an economy based on profit-making, but to debunk exploitation as the essence of profit-making, he used M–C–M' only as his theoretical "door-opener". Even if he touched upon M–C–M' in his reflection on the "realization of profit",[5] he did not attempt to evolve it into a proper theory of macroeconomic circuit closure. Insofar, he did not exhaust its potential but moved "forward" to the fallacious attempt to "improve" upon Ricardo's theory of labor value in Marx's theory of exploitation. Labor power, according to Marx, could exchange its value (which was its objective labor value), but it could nevertheless be exploited (in a novel and specifically Marxian sense): The labor-power purchased by the capitalist would generate more labor value than it was worth itself in the form of the output-commodities, which would belong to the capitalist. Marx's theory of labor value and exploitation, thus, aimed to explain why and how the gain of value between M' and M (M'-M) was possible. And it was most important for him that this – the origination of surplus value – occurred already in production and through labor. This labor-value and exploitation-theory, even if Marx and most of his followers considered it to be his greatest achievement and a holy cow of Marxism, was a trap, however. It followed Newtonian and Hegelian preferences and was, ultimately, not only false but also reifying. It was, however, very successful as an ideological and a propaganda tool for communist and socialist parties – even Christian philanthropists loved it. Therefore, probably, it was upheld in left wing circuits and parties ever since. This book, though, believes that M–C–M', possesses enormous analytical power, but on condition that it is examined *without* Marx's theory of labor value and exploitation.

C–M–C'

As we have observed, the economy emerged as a separate social sub-system alongside the emergence of proto-states or states during roughly the Neolithic or late Neolithic eras. This new system inserted itself between nature and men's biological and

5 By "realization of profit" Marx meant the formal transformation of the profit C'-C already "sticking" in the produce C' into M', hence into money form (in M–C…C'–M'). The term "realization" implies that the profit is already there before the commodity has been sold. At his most "deep-structural" level, Marx, accordingly, at first ignores the problem of finding a buyer for the output.

social reproduction.[6] Its modus operandi and main means of propagation was exchange; money followed almost instantly thereafter. Exchange and money were infectious, given that they were advantageous for everybody – but only after overcoming the resistance of traditional life-styles of course.

Exchange and money opened access to goods and services – grains, animals, or labor, and positional goods –, which humans could not have obtained previously, and the interest to possess these more and better values-in-use made almost everybody into a partisan of the innovations. Money eased transactions greatly. Marx looked at this economy, at first, from the view of consumer-interest, which led to C–C' or C–M–C'.[7] People start with one commodity, which is their property. That may be their naked capacity to work, their labor power, or if they also own means of production, e.g., land, something they produced with them, e.g., grains, honey, or wine. They can exchange it against a second commodity, which they need or desire (barter) or they can start with the same commodity again, exchange it against money as a first, intermediate step, and then exchange it, in the second, ultimate step, with the needed or desired commodity. This motion consists of two exchanges and involves *three states*: an *initial state, a transitory interim state, and a final state*, which closes the circuit; it is both consumption-driven and value-in-use-driven.

If the majority of the population still owned land and were "self-employed" small producers, the classical example for such exchanges were Neolithic societies' peasants bartering or selling parts of their harvest to obtain clothing, tools, or services at nearby town markets. Later, the classical example became simpler; workers would trade their labor against goods or sold it for money to obtain a means of subsistence. The old social imperative had been: "Procure from nature what you need to survive" (or rob it or subjugate people to make it for you), the new social imperative became: "Get yourself something that you can exchange against what you need to survive". For landless people, this soon became identical with: "Find a buyer for your labor". More generally speaking, the imperative was: "Get yourself value-in-exchange!". Thus, many anonymous Alter – with their often-unknown interests, opinions, tastes, acts of valuation, and with what they were willing and able to produce – became crucial for Ego's survival. If you could procure what Alter needed, and if Alter could procure what you needed, then you would survive; if you could procure a lot thereof, and Alter could procure a lot thereof, then you would have a prodigious

6 Once again, we use the notion "economy" not to mean the physical provision or procurement of the means of subsistence or conveniences of life, which must take place as soon as humans exist, but only for a *special way* to organize this, though a system of exchange and payments, and not by collective gathering, hunting, farming, pasturing, handywork-production, and also not by robbing or violent wealth procurement.

7 *Marx*, Capital, volume I, chapter 4.

live and you might even get rich in the process. If you could not, or if Alter could not (and you could not regress to autarch production), then you would fall into ruin.

A general mutual cross-wise economic interdependency emerged already at the level of C–M–C' and prior to M–C–M'. An Ego depends on an Alter and an Alter depends upon an Ego. Ego cannot not obtain from Alter that which Alter does not produce, and Alter cannot obtain from Ego that which Ego does not produce. Moreover, this interdependency does not only operate if Ego and Alter meet on markets, – sitting, e.g., behind a mountain of grains or the cackle of a few dozen of chickens –, but already Ego's and Alter's decisions to produce what they produce and their means to produce are affected by interdependency. Ego's expectation to be able to trade its grains against chickens (with or without money-intermediation) may induce it to produce more grains in order to satisfy the growing chicken-hunger of its family, etc. In fact, it may also enable it to produce more grains – the family is better nourished thanks to the chicken-component on the menu. We already have here, *in nuce* and un-developed, what will lead Malthus to speak of a macroeconomic "union between production and distribution", what *Quesnay* will try to evolve into a *tableau économique*, what Ricardo will fallaciously conceive of as Ricardo's Law of Say, and what Marx's will try to analyze in his reproduction schemes. The issue becomes bigger and takes on a different shape as soon as M–C–M' arrives on the scene.

M-C-M' (M-C...C'-M')

M-C-M' (M-C...C'-M') in general

C–M–C' has a built-in evolutionary option. This option is soon discovered and is brought to operation by the brightest, fittest, and most endeavouring, whom we sometimes call "merchant heroes". The advantages conveyed by this option are an even stronger pro-money-economy-stimulus than the value-in-use related stimuli, which we already saw at work in C–M–C'. Exchanges and money are good for everybody, *but they are particularly good for those who want to become wealthy as M–C–M'-players*; money *plus* M–C–M' is the turbo-mechanism to become rich. The condition of the possibility to play C–M–C' or M–C–M' is, as we have already seen, private property. Both classes of players must be free to decide what to do with the commodities or money that they own.[8] This also applies to labor power.[9]

8 *Heinsohn/Steiger* (2009) page 462 et seq. also place great emphasis on property and the legal power of owners.

9 Noteworthily, while labor power must be owned by *somebody*, the owner does not have to be the person who is its natural bearer. If private ownership of humans exists, the owner is different from the natural bearer of the labor power. M–C–M' also works if laborers are purchased like seed or cattle.

To realize the M–C–M'-option, one has to only approach C–M–C' with a different punctuation and look at M not as an intermediary transitory stage in the middle of a drive, but as its starting point. One also has to extend the drive by adding a new final stage, which is not the satisfaction of consumption needs or desires, but the collection a money amount M', which is higher than the initial M-pay-out. The motive for the player to move through these mutations, too; it is no longer value-in-use-driven but value-in-exchange-driven. Exchange is an open, generous, and neutral form that allows counterparties' full discretion concerning their motives and integrates profit and consumption interests harmoniously in one transaction. Moves of innocent and naïve value-in-use-driven C–M–C'-players who are pursuing their consumption motives – they may be hungry, in need of clothing or shelter, or just seeking pleasures or positional goods – are welcome to cohabit with complementary, albeit fundamentally different moves, value-in-exchange-driven moves made by M–C–M'-players.[10] Within an individual transaction C–M–C' is also like a symbiotic host to M–C–M'. What is the first consumption-driven leg in a consumptive **C–M**–C'-circuit for one party (peasants sell grains to a town merchant with to purpose to later buy medical services) may be the first profit-driven leg of a firm's **M–C**–M'-circuit (town merchant buys grains to resell them). The merchant is obviously not interested in the grains as values-in-use for his family, but he will resell them, possibly after they have been carried to high-value-regions (in space), say Athens, Rome, or Luoyang, or stored (in time) until the next famine. The economy consists of a great number of such exchanges of goods against money and of money against goods and whether they are the C–M-leg or M–C'-leg of C–M–C' or the M–C-leg or C–M'-leg of M–C–M' is often undistinguishable when viewed from the outside. M–C–M'-players only enter the circuits at a different point and with a different motive.

The motive behind why M–C–M'-players would make the effort to exchange money into money through, the intervention of a commodity, is quite obviously, not a qualitative difference between their starting and end-position; rather it is merely quantitative. The input-money must become more output money – what Marx notated as M', with M'-M, ΔM, *s* or *p* representing the profit. This new motive revolutionizes the prior society and the prior world; it may well have been the most revolutionary "thing" in human history. In particular, it frees motives for production from motives for consumption as money frees the accumulation of wealth from

10 M–C–M'-players are a self-discovered, self-made, and self-selected group of players who offer counterparty services to C–M–C'-players in a "sandwich"-like manner. "You need to sell your labor or your produce? I am here to help!" …" Now you want to spend your salary or other income? I am here again…– I am your complementary market-maker, whether you are seller or buyer in your C–M–C'-drive".

the need to store and maintain values-in-use. As the importance of both M–C–M'-players and their relative wealth grows, M–C–M' rises to the generally accepted and assumed motive of human behavior, even if the vast majority of the people remain outside of the game (much like how many back-yard football-players never reach the big leagues). One might question why wealth owners should, notwithstanding their already captured immense wealth, still pursue wealth accumulation. One motive may come from hitherto-non-wealth-owners, who aspire to rise into the wealth owners' ranks by increasing existing wealth owners' wealth. *Levitt/Dubner* have observed that it is the foot soldiers amongst drug dealers, who often still live with their moms, that start gang wars; while their bosses prefer peace, it is their only chance to advance in their career.[11] Similarly, continued aggressive wealth accumulation by the already wealthy which may not be a result of their endless greed, but from the greed of their foot soldiers, e.g., former Harvard, Stanford, Oxford, and Cambridge graduates who try to battle their way up to wealth too. Further increasing one's existing wealth, is, of course, also a matter of preventive defense, of consistency, and beauty. Even wealth owners who commit significant parts of their wealth to philanthropy continue to have other parts managed profitably.

If M'>M, the resulting M'-M or ΔM is the profit (we assume that M includes such other costs as storage, transportation, fees, taxes already, and hence is a *sum* of payouts). It does not matter whether the merchant resells at the spot or shifts the goods in space or in time or processes them before resale. Such physical alteration before resale can, however, be expressed by evolving the notation to M–C…*C'*–M'[12] with C…C' depicting the physical processing with value-in-use and value-in-exchange-effects.[13] It is not necessary for the second exchange to already reach the end-consumer; another capitalist as purchaser is good enough to allow for the first capitalists to realize his profit, even if he is, by the same token, starting a drive for profit. We could write M–C–M'–C'–M"–C"'–M"'–… to notate a *chain of* several consecutive circuits (if the full profits are re-invested), given that the process can be reiterated if M' is reinvested by the same capitalist. To my knowledge, Marx never used this notation and we do not need it either.

M-C-M' (M-C…C'-M'), c, v and s, profit and loss, cashflow, and present values

M–C–M' expresses how M–C–M'-players intuitively think and act. Marx, though, kept his "general" "formula of capital" only transitorily in the center of his argument

11 *Levitt/Dubner* (2005) page 97, 83.

12 *Marx*, Capital, volume II, chapter 1.

13 The processing firm is then promoted from "merchant capital" to "industrial capital" or "productive capital" (*Marx*, Das Kapital, vol. II, MEW 24, page 56. As already stated, it is important for Marx that the profit is already there in C' and has only to be "realized" later. Surplus value *s*, as attached by workers in production, already "sticks" in C' before the C'–M'-"realization".

and moved quickly from "simple commodity production" and "merchant capital" to "industrial capital", where he could best set out his theory of surplus value and exploitation, which, after all, he saw this as the jewel in the crown of his analysis of capitalism. To get there, he splits up capitalists' outlays M into two parts, representing the used-up equipment and inventories, which he jointly calls *constant capital*, abbreviated *c*, and the wages or salaries for labor, which he calls *variable capital*, abbreviated *v*. In order for M' to be larger than M, M' must contain not only recoveries of *c* + *v* but an additional amount on top. Marx calls this amount *surplus value*, abbreviated to *s*. Hence, while M = *c* + *v*, M' = *c* + *v* + s. Accordingly M'-M = *s*. *s* is also called surplus value by Marx, and, it is the same as profit, including in Marx.

Marx did not connect his terminology to accounting terms such as sales, revenues, profit, cash flow, etc. It is, however, clear that his constant capital *c* encompasses both costs for equipment and inventories and that *c* is fully recovered as part of M'. Accordingly, the costs for depreciation are included in *c* and Marx's profit M'-M or *s* must already be *after deduction of depreciation*, i.e., "pure" profit or profit in the meaning of a profit and loss-calculation. It is also clear that M' represents the sales prices or sales proceeds, sales, revenues or turnover in the sense of accounting. Accordingly, he either assumes (contra-factually) that the costs of depreciation have fully become cash-pay-outs as part of *c* when M' is collected or his M–C–M' operates at the level of profit and loss-analysis. Alternatively, we might say that Marx assumes circuits, whose "beats" are such that they condense all financial effects in the two transaction legs M–C and C–M' – and the difference between cash flow-analysis and accounting-analysis becomes meaningless.

This allows us to view M–C–M' like a retrospective profit and loss calculation or a prospective business plan. M is then conceived of as *the present value of a series of discrete and sequential outlays* (beyond the purchase of a single commodity) that do not have to be exclusively purchase prices, technically (but may also be salaries, interest, rent, maintenance, repair, substitution, and even administrative fees, taxes etc.) for many individual goods and services, which arrive at different times (including e.g., energy and transport services)[14] and M' is the *present value of a series of discrete and sequential consequential inflows of revenues*. This brings M–C–M' in full accord with modern business planning, today's value calculation, and corporate finance. The M–C–M'-analysis converging with business planning, business valuation, and corporate finance, speaks for both of them.

The origins of profits in M-C-M'

We have already claimed that, contra Marx, profit does not come from labor value. Profit, instead, comes from the seller *appropriating that part of the value-in-exchange that the buyer attributes,* in his subject-related way, to the good or service sold *beyond*

14 See *Marx*, Das Kapital, vol. II., MEW 24, page 346.

the seller's costs in the generalized form of money. This is even so if the buyer's attribution of value-in-use and value-in-exchange is rather bizarre or eccentric. Keeping in mind that all value is attributed by a subject in a way specific to that subject, one may say that *the buyer "objectively" pays for what he "subjectively" attributes* or that the seller gets the buyer to "objectively" pay for what he "subjectively" attributes. *This* is the clue to profit economies' economics. Profit, then, is possible, first, because a buyer-subject, attributes buyer's value-in-exchange to the commodity in his subject-related way, which is higher than the seller's costs (not the seller's value!); second, this is because the buyer politely, and in an understanding way, expresses his valuation in the inter-subjectively valid and generalized form of money. It must also be presupposed, third, that the buyer has the money and is willing to sacrifice it for the purchased good.

This opens a corridor where seller and buyer may agree on a deal. A price will be acceptable to the seller, if it is reasonably higher than his costs and allows for a proper profit, and to the buyer if the price is reasonably lower than his subjectively attributed value-in-exchange. No exploitation is involved. If the sold commodity is a consumption good, then the buyer feels happy to consume what he gets (which can only be expressed on an ordinal scale), if the commodity sold is an investment good, a wealth asset, equipment, or inventories, then, both, buyer and seller expect a quantitative increase of wealth. This can even be expressed in cardinal numbers: For instance, if inventories, equipment, a building, or a business are worth $100m in the hands of a low concept and low synergies seller, but are worth $200m in the hands of a high concept and high synergies buyer, and the sale is made at $150m, then the deal enriches both parties by $50m. The buyer's higher concept and higher synergies allow the seller to appropriate some of the value-in-exchange that the object has for the buyer.

The result for the seller is, thus, the same in all C–M' or C'–M'-legs, whether with private consumers or firms as buyers. The value-in-use sold, and with it the value-in-exchange sold, are gone, but the seller receives the amount M' as a claim or immediately in cash. With it comes a profit M'-M, i.e., an increase of the seller's wealth. If a private consumer, a consumer, who does not invest the good, is the buyer – a worker buys a meal – he is interested in utility, and if he consumes the good, then both its utility and value-in-use are destroyed – and with it its value-in-exchange. By far the greatest number of purchased objects or services are the means of subsistence, e.g., whoever buys food, shelter, clothing, drugs, positional goods, sex, or a health service may (and likely will) be better nourished, protected from the weather, clothed, stoned, or drunk, might enjoy the positional goods, may be satisfied, and even be healthier. However, the value given away to the seller is gone for good…[15].

15 Of course, by being fed, sheltered, clothed, healthier, satisfied, etc. the worker-consumer will re-strengthen his capacity to work and to offer his work in his further C–M-exchanges.

This is different if the buyer is not a private consumer (not a worker or a consuming wealth owner), but a productive or sterile wealth owner who uses the object as C in an intended new M–C–M'-drive. In this case, the buyer's initial money-loss is not final. The buying wealth owner will, rather, if everything goes as planned, recuperate what it paid out as M and will pocket M'-M, a profit on top, and their wealth will increase thereby. One side consumes or invests; the other side gets richer.

It is noteworthy that C–M–C' and M–C–M'-transactions are insensitive to the past and future of the money and commodities. Firms sell as easily to buyers who earned their income honestly through work and exchanges as they sell to buyers who robbed the money or received transfer payments. Even freshly created money will be willingly accepted and digested. Similarly, goods and services sell indiscriminately well whether they were bought, robbed or expropriated by the state or criminals. Goods procured by violence in a *praeter-economic way* are not rejected if they are introduced in the economic system. Getting to a M'-M difference neither requires the goods to be procured within the economic system through free and "unimpaired", fair exchanges, on the left supply side, nor that the money paid on the right sales side arises from proper market-compliant trades.

A metaphor for M-C-M'

It is interesting to try to look out a metaphor for M–C–M'. The economic system is not comparable to the blood system of mammals, given that blood is pumped into the body and it is not sucked in by the body. The metaphor of a jet engine (sucking in air on one side and blowing it out on the other side) or of a gun (arming on one side and firing at the other) do not fit either. They move pressurized air out of the jet engine or the bullet out of the gun following a push by the engine or the gun, while the customers must actively pull or suck in an M–C–M'-circuit. Marketing, advertising, and selling can lure the customer to do so, but ultimately everything depends on him attributing value, having the money required, and being willing to take the pain to sacrifice it. If customers do not actively pull, suck in, or absorb commodities by actively sacrificing money, then the circuit cannot be completed.

M–C–M', thus, is like a *two-chamber-system*, where both movements, the initial M–C-investment and the final C–M'-collection, come from the *sucking-activity* of those on the right edge of the chamber. Firms sitting on right edge of the left chamber bring about the M–C-transmutation by sucking in commodities, including labor, and by paying M-outlays to them, and customers sitting on the right edge of the right chamber bring about the C–M'-transformation by also actively sucking the commodities produced (by paying M'-validations to them). *M–C–M' is about double-sucking* and the unfortunate units on the left can only try to lure the others to suck. This means that sucking must always be paid for by money payment-sacrifices.

Figure 4: M–C-chamber and C–M'-chamber

M–C-chamber	**C–M'-chamber**
>>>>> flow of supplies >>>>>	>>>>>> flow of produced goods >>>>>
firms absorb goods and services from suppliers by their money sacrifices M (named from perspective of firms in the center)	firms and final consumers absorb goods and services from firms by their money sacrifices M' (named from perspective of firms in the center)
<<<<< flow of money sacrifices <<<<<	<<<<< flow of money sacrifices <<<<<

It is noteworthy that the two forces that suck, pull, or absorb, are normally not causally related. The proceeds for the firms from the sucking of the customers are normally not yet available when the firms must do their sucking and payments to their suppliers for equipment and inventories and workers for labor. The relationship is only final. Firms must make their sucking before they could suck from their customers and they must pre-finance their sucking. At that point they mostly have no guarantee that their hopeful customers will also suck in their to-be-made products.

Causation vs teleology; the objectivation of subject-related and subjective value attributions

It is astonishing to watch the 1987 video by *Fischli* and *Weiss* "Der Lauf der Dinge" or "*The way things go*". To give a rough idea, it is like an almost 30 minutes observation of a chain reaction through a very long line of falling domino pieces that knock each other down. However, it is much more complex, and no single domino piece is involved. Rather tires, trash bags, ropes, pieces of wood, ladders, soap, candles, shoes, fuses, water, foam, gasoline, chemicals, and pyrotechnics are used to show an uninterrupted play of cause and effect. It begins with a trash bag hanging on a rope that untwists. The rope becomes longer, the bag reaches a truck tire and gives a turning impulse to it. The tire rolls down a small slope, hits something else and sets it into motion… Almost a half an hour later, and still following the initial impulse, some moving object knocks a bottle over, the water pours out of it and fills a container hanging on a balance beam; when the other side of the balance beam moves upwards it brings a burning candle close enough to ignite a fuse that leads to a small explosion, which again pushes a small carriage forward, etc. While the movie is full of creativity and surprising ideas, in the end they are all correlated in a *simple order of physical or chemical causes and effects* following one another in time.

"The way things go", hence, does not include conscience, observation, mutual observation, intentionality (teleology, purposeful behavior) or strategic behavior any-

where as a means of transmission of the impulse, not even in the sense that a water bottle would try to get out of the way of a truck tire rolling towards it (as a dog might).

Unlike *Fischli/Weiss*' installation, the economic system only partly operates via causes and effects. Catching a fish, yes, is a condition of the possibility to later sell it in the market and a factory owner paying a week's pay to a worker is a condition of the possibility for the worker to go to an alehouse and spend their salary; hence, the catching of the fish and the payment may be called "causes" of the later sale or purchase, which can then be called "effects". However, the economy largely operates *via expectations of what others will do in the future and reactions to these expectations by the observers,* i.e., via purposeful behavior, by motives, or teleologically. Ultimately, as systems theoretical economic sociology teaches, the economic system is created by expectations of future payments or non-payments, which lead (backwards) to earlier payments or non-payments.[16] Purposes, goals, needs, desires, and factual expectations, by dominating the realm of the future, feed back into the present and shape it, thereby, also changing the expectations of the future and even the future itself, following the next round of feedback. *Expectations of the future make the present and the future.* Expectations as to the future's sucking-in of goods particularly affect the present sucking-in, which will in turn affect the expectation of future sucking-in and of future sucks-in. The main causation in the economy are not physical forces from the past, but present mental images of the future influencing the future. The expectation of the future wags the present.

The time-structure is: An expectation for the future, t2, is created in t1. An appropriate payment/non-payment-behavior is implemented and, in t3, its appropriateness is either verified or a new expectation is created for the future. There is, thus, also a sequenced overlap of flows of actual payments, which provide money resources for further payments, and of expectation-building and resulting decisions of how to use or not to use the money resources now available. The mutual anticipation of everybody's future behavior will – in both "chambers" – address two issues: Will Alter have money and will it spend it on me? Both moments are unreliable. Subjective value attribution is always subject-related on the one side (as concepts and synergies are different depending on the subject, see page 42 et seq.) and, by the same token, subjective (in the sense of open to bias and error, see footnote 9 on page 42). However, as they are anticipated and even implemented and materialized by selling or buying, they get "objectivized" for the parties involved and their observers through the generally accepted medium of exchange, money. Thus, the economy's extremely shaky subjectivity also endlessly creates hard objectivity. Reflexive mutual observations, including in the 2nd and 3rd degrees, may bring about a, temporarily, rather solid bottom. *George Soros* speaks of two functions, a cognitive and a participating or manipulative of human thinking: "When both

16 See *Luhmann* (1988) page 53; *Baecker* (1988) page 105 ff.

functions operate at the same time, they can interfere with each other. How? By depriving each function of the independent variable that would be needed to determine the value of the dependent variable: when the independent variable of one function is the dependent variable of the other, neither has a genuinely independent variable"[17] There, is, thus "slippage" and "uncertainty".[18]

Things can become even crazier. One can either maintain that the reflexive witchcraft, which superimposes itself over what would determine values and prices without it, remains false, a deception, illusionary, ideological, etc. and ascribe truth only to the covered-up underlying reality; in this case, one ought to admit that one can get rich by making "false" investments and "poor" by making correct investments. Alternatively, one can acknowledge that where reflexivity applies, it may cancel out the possibility to conventionally distinguish between truth and falsehood. "Knowledge", *Soros* says in the latter sense, comes from a traditional correspondence idea of truth and true statements. "A statement is true if it corresponds to facts." However, reflexivity tricks us concerning the correspondence idea of truth. "The facts no longer serve as an independent criterion, by which the truth of a statement can be judged because the correspondence may have been brought about by the statement changing facts."[19] Reflexive witchcraft in the form of positive self-reinforcing feedback loops may operate as "fertile fallacies", "interpretations of reality that are distorted, but produce results that reinforce the distortion."[20] Reflection of reflection bends the space in which we can decide on truth. Should we draw a parallel to relativity theory? Or to the even more frantic behavior of parts in quantum theory? Gödel, Escher, and Bach, of course, are certainly also not far away.[21]

A Balance sheet view of M–C–M'

Although the M–C–M'-notation (or the C–M–C'-notation) require and presuppose transactions and exchanges and presuppose further exchanges and flows to take place, they do not depict transactions, exchanges, actions, or flows themselves. Rather, they *fixate intermediate moments of tranquility between transactions*. Like balance sheets, they look at what the same person or player owns at certain moments, here at three different sequential moments in time, and show changes in the *form* of their property and, possibly, its *value* at these junctures. The transmutations lie between these moments.

17 *Soros* (2010) page 12.

18 *Soros* (2010) page 13.

19 *Soros* (2010) page 13. Soros gives the example that the statement "it is raining" is not reflexive, but the statement "this is a revolutionary situation" is reflexive.

20 *Soros* (2010) page 16, 29. See also *Soros* (1995) page 65 et seq.

21 See *Hofstadter* (1985).

In the case of C–M–C', this occurs from the perspective of a person in want of a special value-in-use for consumption: C–M–C' spells out "now I have the wrong commodity for consumption, now I have money, for god's sake, finally I now also have the right commodity for consumption!" In the case of M–C–M', the perspective is from a person for whom the exchange of money into a commodity is a means to make more money; it spells out "now I have money, now I have commodities, now I have more money". We have, thus, *two* legs or steps (each with a flow of goods and an inverse flow of money[22]) and *three* moments of relative tranquility, in each C–M–C' and M–C–M', when C, M, C' or YM' can be envisaged as an entry (on the assets side [23]) in a balance sheet.

M–C–M' and supply and sales peripheries

The two transformations in M–C–M', M–C, and C–M', imply two different peripheries[24], a *supply periphery* and a *sales periphery* (Absatz, débit, off-sale) around each firm, which can be envisaged as being at the center of the transaction. Capitalist firms want to have many, good, and cheap suppliers on their (figuratively) left side and appreciate a continuously increasing efficiency and increased productivity of these suppliers, which reduces their costs. On their (figuratively) right side, capitalist firms wish to sell as much of their produce at prices as high as possible; hence, they wish their prospective customers to be hungry, in need, or desirous of their produce and to have many valuable uses or utilities for the produce. These customers should also be as rich as possible. While the counterparties on both sides must be smart to economically produce or to have made a lot of money, they should still act somewhat stupidly towards the firm by undercharging or overpaying. The more these prerequisites are fulfilled, the better the firms in the middle can absorb cheap commodities from the left and successfully lure those on the right to absorb them at a maximum margin.[25]

---

22 We also, accordingly, have *four flows*: First money M flows to suppliers of goods, second, C, the purchased goods flow to the firm; third, C (or C', if processed), goods, flow to purchasers; fourth, the money M' flows to the firm again as the sales price.

23 Only C–M' touches upon the liabilities' side, as equity goes up.

24 On this occasion we might ask: How can trade be productive? Merchants render commodities produced elsewhere available at places *where* they are needed, store them *till when* they are needed, adjust their sizes, volumes and certain properties to specific needs of markets, etc., and prospective users attribute additional value-in-use and value-in-exchange to these changes.

25 To complete the picture: Firms wish *competing* firms, which attempt to also install themselves between the potentially same suppliers and customers, to be as few, as inefficient, unprodutive, poor, and as dumb as possible.

M–C–M' as driver of economic and technical evolution

If consumption-oriented C–M–C'-players made exchanges with other consumption-oriented C–M–C'-players, then this would lead to what Keynes called a *"co-operative"* or "*real-exchange economy*".[26] Such an economy, as it is bereaved of the main capitalist motive of profit, while it will likely bring about more equality, social security, and social cohesion than capitalism, would unavoidably slow down technological and economic progress and restrict the quality and quantity of procured values-in-use. This is because the motive for the C–M–C'-player is only a change of values-in-use, a relinquishment of certain utilities connected to one object or capacity (his labor) in favor of other utilities. The dash in C–M–C', behind the second C, accordingly, only means "another" or "a preferred" value-in-use; the preference for another value-in-use is, though – see Plato above –always finite and exhaustible. Only the emergence, by self-selection, and the success of specialized M–C–M'-units, who provide "counterpart services" to the consumption-oriented mass of C–M–C'-players, propels the strongest and most effective economic motive, the profit motive, into being. If capitalism finds it proper to operate in the productive economy, it will generate a powerful motive to develop new products sellable at a high M' and reduce the costs of production (of M) and in both cases stimulate technological and economic progress.

Societies that have allowed and incentivized M–C–M' at a large scale were the historic winners in periods of peaceful technical and economic competition and, in fact, also during most wars. Those who slowed down and hampered M–C–M', on the contrary, were the losers. In this sense Sparta (although it won the Peloponnesian war) languished behind Athens, the European Middle Ages remained behind 15th century Renaissance Italy, the China of the 19th century fell behind the West of the industrial revolution or the countries of soviet style socialism in the 20th century never reached the economic level of the US, Japan, and Western Europe (although the USSR won the war against Germany).

Segregating effects of M–C–M'

M–C–M' has two heavy segregating effects. In M–C–M'-circuits, consumptive side C–M–C'-players are always net wealth-transferors who attribute value-in-exchange to the good offered in excess of the production costs and transfer this value-in-exchange to the selling wealth-accumulating M–C–M'-players. The M–C–M'-players "cash in" profits M'-M, while their customers only consume. Their wealth is not only reduced if the goods are for immediate consumption, but also if endurable goods are purchased, the value of which will dwindle as time goes by. Only in exceptional and negligible cases, if for example a used car becomes an antique car, does it increase

26 *Keynes*, Collected Writings, volume XIII, page 408 f. On M–C–M' and Keynes, see also *Keen* (2011) page 217 et seq.

again. The effect of M–C–M' is, accordingly, always a transfer, absorption, or sucking off of wealth from the C–M–C'-player as wealth-transferor to the M–C–M'-player as wealth-transferee.

The most voluminous version of C–M–C' in modern capitalism consists of workers selling their working power to purchase consumables. As human beings, if healthy, they are equipped with labor through their biological existence and may have qualified it through education and training; then they sell their labor C for M. Hereafter, they use M to purchase everyday nutrition, shelter, clothing, cheap thrills (alcohol, drugs), or a few positional goods. Following this, they are, at best and if they have not fallen ill, suffered an accident, or become too old etc., prepared for an "eternal recurrence of the same" and are capable of offering their labor again. However, M, what they have received as their wage income, disappears without any wealth left. Workers may go through several hundreds of such C–M–C'-circuits – selling their labor, working, obtaining wage, buying consumables, consuming them – only reproducing their labor power, but without any wealth build-up. Workers, who are not able to work or to generate income otherwise, are worse off. This is the *first segregating effect* of M–C–M', which operates *between the parties of the exchange*.

Of course, it is possible that C–M–C'-players in some circuits may also become M–C–M'-players, entrepreneurs, capitalists, or firm in other circuits, where they may also collect a profit. This can compensate or even overcompensate for the loss of wealth suffered in consumptive C–M–C'-circuits. Wealth owners do this all the time and quite obviously. They spend a part of their wealth on consumption. There are also ex-workers who may join the ranks of wealth owners, as inventors, entrepreneurs, artists, sports and movies stars, talented and hardworking professionals, managers, etc. However, millennia of history of profit economies show that this possibility never substantially changed the overall course of events towards a progressive segregation between wealth owners and non-wealth-owners. In summary, it suffices for M–C–M'-players to be at least predominantly M–C–M'-players (in terms of numbers and volume of transactions) to likely materially increase their wealth, while it suffices for C–M–C'-players to remain predominantly C–M–C'-players (in the same sense) to see their original wealth, if there was any, fade away without being able to make up for it. If M–C–M' operates for some time in an area, it will, thus, pump away purchasing power from the C–M–C'-players and, normally, bring about an increasingly unequal wealth distribution.

The *second segregating effect of M–C–M'* works b*etween M–C–M'-players themselves*. It results from the different profitability of M–C–M-circuits. As some M–C–M'-players realize higher and others lower profits, or even end up with losses (if M>M'), this has the potential to annihilate their firms.

To explain why few grow rich and richer, while many others remain poor, we, only need M–C–M', which by itself creates an increasingly superior center of financially strong and rich wealth owners, which look left, right, and down to a periphery

of much poorer C–M–C'-players. This is the result of the normal operation of profit economies and capitalism, as old as they are, and is not a consequence of Marxian "exploitation", of accidental circumstances, or even of deplorable austerity-policies of states.

"Circuit-relatedness" versus "time-periodicity"; C–M–C'- and M–C–M' as circuits, not period-flows

Firms think in circuits when they invest. They call their benchmarks "profit", "return on investment" (ROI), or "internal rate of return (IRR)" which are all expressions for the ratio (M'–M)/M. They may also call it "net present value" (NPV), which is M'-M with M and M' when viewed as present values of a series of payments. These terms, even if firms are unaware of them, are circuit-related or "Umschlag"-related terms.

They presuppose an idea of an "aggregate investment", a sum of outlays in the first movement, and of an "aggregate return", a sum of revenues in a second movement. What belongs to the outflowing and incoming series of flows depends upon the type of investment. A money market dealer's time horizon may only be seconds, minutes or days; the time horizon of a car dealer may be weeks or months, whereas the time horizon for a real estate developer or for an energy plant operator may be years or decades. However, firms condense them into "investment" and "return on investment" (as Marx condensed them into M and M').

As we have seen, investment outlays may even occur *after* the last return has been pocketed, e.g., if mine or plant operators underlie re-cultivation obligations. *Firms can never, thus, attribute much significance to the results in a discretionary time interval*, e.g., the usual annual reporting period. Accordingly, the *thinking in circuits, "circuit relatedness", expresses the heartbeat of business and of investment.* "Time-periodicity", on the other hand, even if it governs reporting, national accounts and statistical data will, by necessity, discretionarily chop off economic events, which are important to assess an investment as a whole. Flows must be chopped off where M–C–M'-circuits end, but M–C–M' circuits may not be chopped off because time periods end accidentally.[27]

Quesnay's tableau économique took the "circuit-relatedness" of business into account by simply surreptitiously presuming that the circuits in his *royaume agricole* would all close in one year; the predominantly annual rhythm of his predominantly agricultural economy allowed for this assumption. Quesnay, thereby, implicitly acknowledged the need to maintain the purity of "circuit-relatedness" in economic analysis. Our effort has to be stricter, methodologically speaking. It maintains the

27 Accounting is, of course, aware of this problem. Therefore, time-periodical reporting uses liabilities and provisions to show future M-outlays. The risk-adverse purpose of accounting, though, normally forbids showing future M'-rewards. Macroeconomics is not subjected to that restriction.

purity of circuits, which alone allows for meaningful results, by dealing with circuits solely on the abstract, theoretical level of circuit analysis – and by completely disregarding time periodicity. A circuit, in this book, as already seen, encompasses M-outlays as its first leg, which can be split up into *c*-outlays (encompassing sterile outlays, such as *i*-outlays and *r*-outlays[28], and producive outlays into equipment and inventories) and *v*-outlays. The second leg of circuits consist in M' rewards that recuperate M with M'-M (or *s*,) coming on top as profit. Circuit-analysis considers these abstract processes. "Time periodical flows", which belong to the empirical surface level, have no direct relevance and allow for no direct statistical tests.

M–C–M' in product markets and asset markets

Whether there is a market for something, depends on what parties chose to sell. Now, in their M–C–M'-drives, parties cannot only sell things that stand side by side at the same level, such as vine, Coca Cola, automobiles and computers, but also things at a higher level, such as the *capacity to produce* vine, Coca Cola, automobiles or computers. Or, while it is possible to build houses to rent them out, with the aggregate collected rent being M', it is also possible to sell houses. Therefore, it makes sense to distinguish between product markets and asset markets. Businesses produce tangible or intangible goods for sale in product markets, yet firms, i.e., the "M–C–M'-machines", can be sold in asset markets, either in the stock market or M&A etc., as well. Product markets differ according to what kind of commodities are transferred and on the applied legal technique, e.g., whether only a right to a temporary use is sold, e.g., for rent or interest, whether a service is sold, for a service fee, or whether ownership is transferred by a sales contract, for a sales price. Of course, players also consider asset sales and purchases to make a profit. In other words, the process of M–C–M' is capable of applying to itself and *to becoming reflexive*. The "M–C–M'-machine", an organized capacity to generate future financial surpluses, which we call an "asset", is valued by the present value of its future surpluses, and traded in the "meta-markets", which asset markets are.[29] Like profits from the operation of the asset in its "home"-product-markets, these present values can only be estimated (guessed, in a way); in fact, as they depend on a much longer time period and on more circumstances, the uncertainty involved is higher.[30] How

28 Interest-outlays, rent-outlays, variable-capital-outlays (salary payments), and constant capital-outlays (outlays on equipment and inventories). Sterile and producive spending components will be explained later. See pages 123 and 351 et seq.

29 This view has provided new means of securing loans, e.g., by pledging and mortgaging assets, which allowed to extend credit to owners of such assets. New means to secure credit were combined with new sources of money when money creation came into being.

30 Assets may be taken back to product markets and used as equipment of another asset again. E.g., buildings, which had been rented out, can be purchased by a firm for use as an office or by a worker for use as a dwelling.

an asset performs, e.g., a business is being run, depends upon the concepts and synergies, of its owners; there are high concept and high synergy and low concept and low synergy users. In asset markets the potentials to generate future financial surpluses – debt, real estate, businesses or other assets – are normally forwarded to their most efficient users. Being regarded as an asset does not disenable the asset from possibly generating uses that may remain sellable in product markets. While the land is a sellable asset, its temporal use may still be purchased in product markets. Therefore, the borderline between product markets and asset markets is sometimes fuzzy.

M–C–M' and social anthropology

We have mentioned that a feeling existed that it was "bad" – against custom, tradition, good spirits, religion, morals etc. – to subject the procurement of goods for humans to profiteering and that many mystical men and great thinkers spoke out against it. It is beyond the possibilities of this book to pursue this as much as the issue would deserve, but just as we know that profiteering played no role in goods procurement in primitive society, so too can we be certain that the rise of profiteering and M–C–M' in the early profit economies of ancient Greece, Rome, and China contributed greatly to the horrors of classical Greece (6th to 4th century BC), the empire of Alexander the Great, the Roman Republic and the Roman Empire, Principate, and Dominate, and Chinese history from the "Spring and Autumn"-period, via the "Warring States-Period" through the Ch'in and Han-dynasties to just short of the T'ang dynasty, hence roughly the period between 800 BC to 600 AD.

It may surprise many readers that we must assess the Middle Ages as generally more "human" and particularly more bearable for the lower classes. The improvement affected all major civilizations and was due to the astonishing parallel success of religions and philosophies in putting the bad ghost of M–C–M' – at least partially – back into the box, with the prohibition of interest-bearing loans being their signature case. If it got worse again, with the "enclosures" and the "original accumulation", then this was in fact caused by the resurrection of M–C-M' during the European Renaissance. Accordingly, M–C–M' was not only criticized as a cause of evil at the historic times before the Middle Ages, but was also retrospectively used by theoreticians as an explanation for the resurrection of the evils of antique profit economies. We shall briefly mention four authors, who make use of M–C–M' in this sense; these authors are Karl Polanyi, Karl Jaspers, Stanley Diamond, and David Graeber. *Polanyi* presents his reasoning more like a critique of markets rather than as a critique of profit economies. He writes, "…never before our own time were markets more than accessories of economic life. As a rule, the economic system was absorbed in the social system, and whatever principle of behavior predominated in the economy, the presence of the market pattern was found to be compatible with it …

[and] … revealed no tendency to expand at the expense of the rest".[31] He views pre-market-economies as mostly dominated by reciprocity and redistribution.[32] There is, thus, "the absence of the motive of gain, the absence of the principle of laboring for remuneration [and] … the absence of any separate and distinct institution based on economic motives".[33] A "divorce of the economic motive from all concrete social relationships which would by their very nature set a limit to that motive" did not exist at that time, therefore.[34] Markets are limited and controlled, whether in primitive society[35] or in feudalism or mercantilism. There was even little difference between primitive society, feudalism, and mercantilism in this regard. "They disagreed only on the method of regulating; guilds, towns and provinces appealed to the force of custom and tradition while the new state authority favored statute and ordinance. But they were equally averse to the odea of commercializing labor and land – the precondition of market economy."[36] Yet, arrives the "utopia"[37] of self-regulating markets and with it an "extreme artificiality of market economy",[38] which, if it succeeded against resistance, only did so as "the outcome of a conscious and often violent intervention on the part of government".[39] "No market economy was conceivable that did not include a market for labor; but to establish such a market, especially in England's rural civilization, implied no less than the wholesale destruction of the traditional fabric of society."[40] A competitive labor market did not really exist in industrial capitalism in England before 1834, according *Polanyi*, when the *Speenhamland Law* was substituted by new poor laws.[41],[42] While he declaredly puts forward a criticism of the ideology of self-regulating markets, decades before the neoliberal ecstasy came over us, he actually "hits the sack and means the donkey". That becomes quite clear when he writes: "The transformation implies a change in the motive of actions on the part of members of society; for the motive of subsistence that

31 *Polanyi* (1944) page 71.

32 *Polanyi* (1944) page 53.

33 *Polanyi* (1944) page 49.

34 *Polanyi* (1944) page 57.

35 Where "the individual… is not threatened by starvation unless the community as a whole is in a like predicament" (*Polanyi* (1944) page 171). See Polanyi (1944) page 167 on starvation in market economies.

36 *Polanyi* (1944) page 73. Mercantilism, according to Polanyi, liberated trade from particularism, but simultaneously expanded the scope of regulation (page 70).

37 *Polanyi* (1944) page 144, 258.

38 *Polanyi* (1944) page 77.

39 *Polanyi* (1944) page 258. See also page 146 "The road to the free market was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism."

40 *Polanyi* (1944) page 81.

41 *Polanyi* (1944) page 82.

42 *Polanyi* (1944) page 81–84.

of gain must be substituted."[43] While this clearly refers to M–C–M' and expresses a substantive understanding, it remains a weaker point in Polanyi's great work that he officially uses "too much self-regulated market", rather than "profit economy" or M–C–M' as his main *explanans*. *Stanley Diamond*,[44] in his important article on "the order of custom and the rule of law"[45] and throughout his other work, offers a distinction that could become the most fundamental for the theory of social evolution. The overall-distinction between primitive society and civilization is clearly preferable to the Marxian sequence primitive society – slavery – feudalism – capitalism – socialism, etc., which is, in the last instance, derived from a retro-projection of the false Marxian theory of exploitation in combination with an "economistic" reading of a Hegelian concept of evolution. While it is true that in times where there were no (or not too many) "twofold free laborers"[46] (but slaves or feudal dependent peasants), wealth owners would obtain access to their labor not via modern employment contracts, but otherwise, this difference is overstressed if it is elevated to the key to understand evolution. Moreover, the dichotomy primitive society vs civilization transgresses the economic dimension. It entails custom vs law, primitive organization vs statehood, mythical thinking vs rational thinking *and* C–M–C vs M–C–M', etc. *David Graeber in his* work "Debt", employs *a* term coined by *Karl Jaspers* for the aforementioned period, which was "*Achsenzeit*" ("Axial Age")[47] and leaves no doubt that the "Axial Age", hence ancient capitalism, was a very ugly period,[48] but does not, unfortunately, address economic issues and M–C–M' extensively. Still, the importance assigned to M–C–M' as a central tenet of economic theory is clearly also indirectly supported by his work.

As a second social-anthropological aspect, it is noteworthy that there were material frictions in getting modern capitalism off the ground, not only in terms of

43 *Polanyi* (1944) page 43 et seq.

44 As a law student and political thinker, one grows up considering the "rule of law" as a great achievement. Rightly so! Nothing apart from the state can and should rule and it is best for everybody if the state's rule takes the form of predetermined, known, general, objectively administered and court-controlled laws (rather than discretionary, impulsive orders following the spur of the moment of a weird ruler). As children of today, we even appreciate the "rule of law" if we do not like the contents of the laws at the time. *Diamond's* use of the term "rule of law", however, places the emphasis on the laws, which the state authoritatively pushed into primitive society – based on abstract reasoning, philosophy, religion – displacing the order of custom.

45 *Diamond*, The rule of law versus the order of custom, Social Research, Vol. 38, No. 1 (Spring 1971), pages 42–72.

46 The second feature, apart from laborers being freed of land, consists in their being freed of feudal bonds, hence a legal person that may freely contract (*Marx*, Capital, volume 1, chapter 4, section 3).

47 *Jaspers* (1949) page 251.

48 *Graeber* (2011) page 224, 251.

the lack of capital or money, but also in terms of the lack of willing workers. Even if workers were bereaved of the chance to subsist, as they had before, outside of manufactures and factories, they still at all needed some "education" to become capable and willing to endure employment in capitalist production (rather than emigrating, becoming bandits, or dying off). Social-historical, anthropological and psychological studies found significant resistance of early workers against manufactures and factories. It appears that the *"pull"* coming from firms' job offers (including to lure with goods, which could only be bought with salaries), and the *"push"* from the loss of more primitive income opportunities were very often *not* enough to draw the expropriated peasants, their children, and other rural residents into wage labor. The reason may have been the unaccustomed long working hours, compared to the indolence of the prospective laborers, at which e.g., Malthus points with regard to South American or Irish workers,[49] or a reluctance of early workers to bow to the discipline in manufactures or factories. It often also appears that men were, quite simply, also not psychologically fit for this purpose. Therefore, a second artificial "push" had to be exerted through foreclosing of even second- and third-class ways of alternative subsistence. Marx describes the English enclosures in this sense[50] – the termination of poor laws ought also to be mentioned here[51] – and analyzed the German *Holzdiebstahlsgesetz*, a law against the gathering of wood in forest,[52] in this context, too. The period of the creation of a mass proletariat is also the period at which stories about poachers appear everywhere and the police and criminal law began to levy much heavier sanctions against petty property offenses of the poor. Simple theft and pickpocketing, indeed, became capital crimes in England in the 18th century.[53] Sometimes, raising taxes in money may also have been a purposeful instrument by which to force lower classes to seek work in manufactures, factories, or mines.[54]

Predator-prey interdependence and M–C–M'-governed macro-transmissions

We have presented M–C–M' as a crucial concept for the economic analysis of profit economies and already seen, to some extent, how it *builds and shapes* the economic system, almost like a DNA, by selecting which economic events occur or do not occur. We shall later use M–C–M' to examine deficient employment-generating spending and the problem of the closure of M–C–M'-circuits. In the upcoming section, we

49 *Malthus* (1836) volume II, page 382–398.

50 *Marx*, Capital volume I, chap. 24.

51 *Polanyi* (1944) page 81 et seq.

52 *Marx* (2008) page 109 et seq.

53 I refer to my further treatment of the subject in my doctoral thesis (Wächter (1987)). See also *Thompson* (1975), *Hay* (1975) page 17 et seq.; *Ignatieff* (1978); *Lea* in: *Fine* (1979) page 76: *Linebaugh* (1976); *Spitzer*/Scull in: Greenberg (1977) page 276; *Rusche/Kirchheimer* (1974); *Treiber/Steinert*, (1980).

54 *Graeber* (2011) page 51.

shall try to draw a *line from biology, i.e., from social biology, to M–C–M' and the economic system*. This line will teach us two important lessons: First, while it largely consists of communication, the economic system still has a "materialistic" kernel, *a mechanic of biological life and death*. Second, while the economic system inserts itself between human predators and nature, it not only safeguards within itself the old type of socio-biological predator-prey-interdependencies in a modified form, but also adds new interdependencies in a similar predator-prey-style.

Animals, as we already stated with regard to humans, have a multitude of necessary relationships to their environment. Aside oxygen, water, sun beams, land or water to live on or in etc., they need food as nutrition and materials from the animated and unanimated nature, humans also for clothing, housing and other production. If all these necessities are the "prey" of zoological systems, the latter, in turn, are the "predators" of their prey. The manner, in which prey is produced and reproduced, matters greatly for predators. Some prey – other zoological systems – are predators themselves, while others – botanic systems and minerals – are not.

In predator-prey-relations of primitive stages, predators take *the body of the prey*, which they mostly disassemble to eat it up, use it for clothing or for shelter etc., thereby *destroying* or *killing the prey.* There are different predator and prey species with specific characteristics, which determine the predators' preferences for prey, e.g., what plants or meat they can chew, digest and they like and whether they can gather or hunt them. Insofar primitive predator-prey systems emerge around a *twofold complementarity*: value-in-use of the prey for the predator (e.g., measured in nutritional value) and superior power of the predator over the prey (e.g., measured in kills per effort). Both moments need to unite: For a hyena to become a predator over a lion, it does not suffice for the hyena to like the tasty lion's meat…

Predator-prey relations between species are not static but can change. E.g., if a species migrates into a new habitat, another species in that habitat may discover the newcomer as tasty prey. Normally, of course, a species will only migrate into a new habitat, if it expects to find prey underneath it there. Hence, for prey to be available for a predator, it must first have found other prey underneath it. In practice, there will often be a basic low mineral level, one or several botanic levels, and then a series of upper zoological layers of predators and prey, which each built on the next lower level. Short cuts and jumps across levels are, though, possible. Humanity thrones at the top. While the levels have in common that the upper depends on the lower and influences it, of course, the character of the relationship between plants and the mineral world or between animals and plants and minerals or between animals and animals and the rest differs greatly. The term "predator-prey-relation", thus, has a different meaning on different levels to which it is applied.[55]

55 Often reference is made to a so-called "nutritional chain". Small fish eat plankton, big fish eat small fish, humans eat big fish, like tuna and whales. Small land animals eat gras and

Looking at nutrition, if there are no predators above, the destiny of the top-predator depends exclusively on its prey, hence on the prey's number, how many kills the predator can make, how many other predators for the prey are around and how many kills they make. Furthermore, the top-predator depends on the prey's reproduction rate, and whether the prey population is exhausted by the kills it suffers. If a predator is also prey to a predator of another level, its destiny also depends on the number of kills it suffers itself. The relation to prey underneath is the most important moment of the biological existence of species, the avoidance of being captured as prey on a higher predators should be the second important one.

Predator-prey-relations mostly exist in parallel between a number of predators and a number of preys, and this over several stories, so that two species often have only little impact on each other. However, sometimes stronger interdependencies evolve between two species, and veritable predator-prey-systems emerge. We have already seen one moment, which intensifies predator-prey-interdependencies: If a predator has *no other predator on top*, its fate will largely depend on its prey underneath. Interdependencies become more intense if one species becomes the sole or overwhelming nutrition supplier to a predator, i.e., if the nutritional value of killed units from the prey species covers most of the predator's species aggregate nutritional demand. This implies that no or only few alternative prey is around. Such *exclusivity of supply* will rise the impact of a falling or growing prey population onto the predators; if there is far too little supply, the demanding predators will simply die out. Contrary to what we know from the theory of market forms in capitalism, exclusivity of supply will, though – we are in the realm of values-in-use-procurement by violence and not in the realm of freely negotiated contracts – not convey market power to the prey.

The interdependencies become very intense in the other direction, if a predator species becomes the overwhelming or sole demander for a prey species, i.e., if the number of kills by a predator in relation to the prey population grows particularly high. This implies that no or few alternative predators are around. *Exclusivity of demand* will, thus, even if it does, again, not convey market power to the predator – we continue to be outside of the realm of freely negotiated contracts – rise the impact of a falling or growing predator population onto the prey population. If *exclusive supply combines with exclusive demand*, we find ourselves in a particularly highly integrated predator-prey-system. The Specific properties of the predator and prey populations

---

leaves, big animals eat small animals, humans eat big animals, like pigs, cows, lambs etc. Sometimes there are jumps across levels and humans also eats small fish, mussels, oysters (which are too well protected against less clever inhabitants of the oceans), chicken and other birds. Inversions occur rarely. Small animals seldom manage to procure the power to kill an animal on a higher level; occasionally there is group hunting though, or they can steal the kills from superior animals or are scavengers.

and their prey and predators underneath as well as of the habitat, in which they live, determine the story of such relations.[56]

Initially, humans are just one predator and prey species amongst others. As predators, they take the body or parts of the body of their prey mostly killing or, occasionally, only crippling it. Sometimes they also take kills made by the prey. As prey they suffer the same fate. As the human species elevates itself above all other species, it more seldom becomes prey to them and the effort to defend against predators can be reduced, allowing to transfer time and energy to improve and refine the capabilities of human preying. They first improve their gathering and hunting skills, but then – once more, the Neolithic meant the crucial jump forward – become sedentary and substitute the gathering of plants by planting and harvesting them and the hunting of animals by capturing and breeding them. The increased control over their prey allows mankind to also deal more efficiently and economically with it. E.g., they can now avoid unnecessary killing and collateral damage to their prey if they only need *fruits of the body of their domesticated prey*, e.g., its hair, wool, eggs or milk. Or they only kill and eat *offspring* of prey, thereby preserving valuable breeding capacities. Furthermore, mankind learned to use *services of prey*, such as having domesticated oxen or horses pull chars or plows or as using slaves in neolithic plantations. This early form of industrialization in the relationship of mankind to its human-helots, animal-helots and plant-helots further raises its superiority over all other species.

With the increasing dominance of humanity intertwined revolutionary changes occur. Proto-states and states are erected and invent and administer property and other laws. Property laws basically consist in foreclosing opportunities as predators for some while monopolizing these opportunities in favor of others. This is particularly evident with hunting rights, by which the appropriation of non-domesticated animals becomes an exclusive right of the title holders. But ownership of land, too, means that non-owners are excluded from using it to farm or pasture botanic or zoological prey. In other words, while the human species rises to become the dominant species, humans invent, amongst themselves, rules and practices, which systematically limit the "direct preying" of human individuals to specific channels, by which an increasing number of humans lose all access to such "direct preying". Humanity risen to the top of the pyramid, erects barriers for its individuals to profit from its

56 We shall not further pursue the specifics in this book. They are, amongst others, the life expectancy and fertility of predators and prey, the nutritional value of one kill for the predators, the killing effectivity of the predator, whether mostly "just-in-time-delivery" of the needed amount of prey is available or whether a significant percentage of the nutritional value out of a kill rot before consumption, the effects of the peripheral species etc. They render the matter over-complicated very quickly and may diffuse the interdependencies within the system. As we are interested in the evolution of predator-prey-structures in the economic system, where more generalized structures prevail, they do not greatly matter for us here.

victory and their fighting spirit is redirected to battling for a share of the aggregate prey, which human society has become capable to strike; human individual predators meet again to battle this out on a novel intra-societal fighting ground.

As hinted at the beginning of this section, we propose to conceive of this mediated intra-societal distribution of killed or to-be-killed prey (which we may now again think of as including minerals) in terms of predator-prey-relations, too. Insofar the prey, which has been or can be socially made available, *remains* prey and predators continue to fight for it. But, as seen, society also enlarges the term of "prey" by discovering the human *capacity to work*, i.e., *labor power*, as a fantastic utility, which is worthwhile to be chased. This rendered preying reflexive: human predators, since, procure for themselves not only the booty of other human predators but also their capacity of future preying. But it does not even stop here. The human society went on to elevate a wholly original and very specific produce of human labor to the most consequential *super-prey* of human history: media of exchange and, ultimately, *money*. Gold, silver and copper, commodity money, first conquered this role, but soon states would soon establish fiat money (without value-in-exchange if demonetized) as instrument to pay taxes and as legal tender, and this wholly artificial "fiat prey" joined commodity money as super-prey.

This evolution was accompanied by several remarkable formal changes: *First*, prey changed its character from to-be-gathered "free" and "wild" plants or to-be-hunted "free" and "wild" animals to *inner-social appropriation rights* regarding the socially domesticated botanic and zoological prey. These appropriation rights were mostly already *owned* by somebody who related to them as his *property*. As physical violence of privates was largely forbidden, one could only appropriate these appropriation rights with their owners' consent; hence, one needed to agree on an *exchange* with owners who *traded* their prey. In fact, the owners were rather often willing to enter into trades or exchanges. To prepare them, which was facilitated as states now protected the property by laws, the owners now even dared to *parade their prey on markets* to invite predators to trades.

Second, as regards money as the new and single most important generalized and standardized super-prey, *the need of a specific complementarity between predators and prey disappeared*. The money-prey had utility in its value-in-exchange, and this utility attracted all predators equally. This was connected to a differentiation in the human predators. Aside their specific stomach for values-in-uses, which reflected their complementary position in biology and social production – e.g., as general humans they need medicine to overcome illness and as farmers they need agricultural tools –, they build a second stomach, which was now *identical in all predators*. Aside needing or liking specific different things, they began to like money, too. Money insofar resembled sunbeams and oxygen. Yet, beyond what sunbeams and oxygen were capable of, money, could mostly be exchanged into specific complementary prey, too. Finally, it was remarkably different insofar as humans could absorb it *without*

limits. The overkilling of botanic and zoological prey, beyond present needs, would only lead to stores with rotten plants and meat and unnecessarily reduce the living prey. Yet, the money-prey does not rot. It can be stored in any quantity, and it can even be multiplied.

Third, while old-fashioned predator-prey structures – e.g., big fish had to always look out for small fish, and small fish had to always look out for plankton etc. – possessed an inflexible "directedness" to specific suppliers, which created a hierarchical "chain"-or "string"-structure, this was different with money. This men-produced standard prey, money, as an exception, rendered the playing field for predators *equal and polycentric.* Predators could now watch out for this prey everywhere, at 360 degrees around them. Everybody, even those with little money, became a possible supplier of the money prey – as everybody had become its demander.[57]

Fourth, we not only have, as far as money is concerned, a polycentric mutual supply of and demand for a standard prey, aside the continued hunting of specific predators for specific complementary prey, but the "kills", which we already have observed to have become consensual, also *integrate into pairs*. One kill of prey, which was offered by providers of a specific complementarity and one kill of prey out of the atomistic pool of the standard prey money now always had to occur simultaneously in an intertwined (do ut des) manner.

Fifth, the substantial and formal changes that "predators", "prey" and "predator-prey"-relation have undergone in their transformation from social-biological to intra-societal predator-prey-relations – new forms of prey, consensual trades or exchanges instead of violence, polycentricity and paring up of kills in trades or exchanges –, do *not annihilate the predator-prey-interdependencies as such but safeguard them. This is the most important point for us.* The point is obvious with regard to old-fashioned biologically based dependencies: Priests in the Palace of Nestor near Pylos, even if their access to plants and cattle is now mediated by "inner-social prey", such as money, which they receive for their priestly services, will still need vegetables and meat to survive. Furthermore, even if money is available to them, if the prospective sellers, the owners of farm land and pasturages, have carelessly exhausted their reservoirs, in case of natural catastrophes or if domesticated prey was captured by other predators, the priests will not be able to buy anything. Yet, in addition to such still essentially social-biological dependencies, novel interdependencies arise, which emerge out of the intermediation of the economic system and are essentially social. E.g., Nestor may no longer be interested in the services of so many priests and send some away who may not be able to find new exchange partners who will buy their labor and allow them to lay grip on money as intermediate prey. Or somebody who even has the money must learn that others have bought the

57 Note that through money not every human became prey for everybody, but that every human could *own* prey for every human.

specific goods away, which he wanted to buy, e.g., to later resell them at a higher profit.

Most moments of our discussion of the transformation of predator-prey-interdependencies during social, economic and political evolution, which we now conclude, are, as such, not new in substance. Yet it allows us to conceive of C–M–C‘ and of M–C–M’ as a bond or type of entanglement in capitalism, which has been inherited from social biology and only been transformed. C–M–C‘ and M–C–M’, in particular the latter, may be something like the Lotka-Volterra-Formula of capitalism.

Section 2. The productive and the sterile economy

As stated, this book assigns a great importance to the distinction between a sterile wealth economy and a productive economy. With this distinction we first refer to intuitions that everybody already has – even if based, at the moment, on too simplifying abstractions. We shall leave it that way for the time being and only later make comments about how the flows of the two economies have to be separated more cleanly. The reader is asked to follow the argument with that in mind.[58]

Today, probably most people feel that the productive economy is the “rule” and the sterile economy is the “exception” in capitalism. From a wealth owners’ perspective, and to better understand what really goes on, it may make sense to turn this around. Renting out land, giving land to feudal vassals for a share of the harvest, making loans to generate interest, or equipping firms with equity for a share of the profit has been the first and preferred way to draw revenues for millennia; these revenues are sterile revenues, though. Productive activity, on the contrary, inventing a new technology, discovering markets, engineering production, building factories, employing workers, mass-producing something, etc. appeared artificial and unnecessarily complicated and burdensome to many wealth owners. You had to understand something about a lot of things, show focus, intelligence, competence, organization, endurance, resilience, recklessness, *and* needed a good deal of luck in the productive economy – and all of this only to turn money you already had into (often many and tiny) claims against customers, whose sum, if you could collect it, would hopefully exceed that which you had possessed previously. The productive economy, may, thus, more properly be seen as a series of exceptional expeditions, a rare and risky activity for the particularly braves and merchant heroes, like war times compared to peace times.

58 The later delineation will show that what at first glance appears to typically belong into the sterile wealth economy has almost always a component of producive spending, and that what appears to typically belong in the productive economy also almost always has a sterile component. See on page 123 et seq. and 351 et seq.