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Review of Capital as Power

From Commodities to Assets

Capital as Power and the Ontology of Finance

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Abstract

Assets are a crucial concept of the practice and mindset of the capitalist class. Critical analyses of capitalism, however, tend to admit that the exchange of commodities is the foundation of the analysis of capitalism. This article takes a different approach. I claim that assets offer a solid starting point for a scientific research of capitalism. The analysis of assets allows us to elaborate a general description of economic transactions and, to that extent, it lays the groundwork for reconceptualizing the field of finance. These two issues are closely related. The answer to the question, 'what are assets?', will give us the coordinates to address the question: 'what is finance?'

Keywords: assets, commodities, finance, financialization, ownership, power, property, value

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Introduction

The wealth of societies in which the capitalist mode of production prevails appears as an immense collection of ~~commodities~~ assets.

— paraphrasing Karl Marx

The mirages revolt

THE financial meltdown of 2008 presented an opportunity to examine certain fundamental premises of how we understand capitalism. The fact that the epicenter of the crisis was a relatively small group of institutions was enigmatic: it was difficult to understand how the decline in the value of a few financial contracts threatened the stability of capitalism worldwide. These events projected the puzzling image of a society led to the destruction of material wealth by the games and bets of its financial system, which in philosophical terms could be seen as an insurrection of immaterial entities against the material basis of production. How was it possible, indeed, that a collection of symbols stored on hard drives and ledgers wreaked havoc on a productive system made of labour power, raw materials, machines, knowledge and human needs? It was as if production had turned into a *mere superstructure* built upon a financial infrastructure, the new 'real foundation' of society. Postmodern spirits seemed delighted by the idea of a society driven by the virtual sphere of financial signs. Materialist souls ran towards the third volume of Marx's Capital, looking for a way back from the deceptive world of finance and prices to the safe land of production and value.

Certainly, finance is an enigmatic domain. Finance is not production, but it seems to be involved in every aspect of it. The so called 'financial economy' is usually defined in opposition to a 'productive', 'material' or 'real' economy. This seems to imply, however, that the financial realm is unproductive, immaterial and even non-real. Financial signs seem too ethereal to be considered the basis of capitalism. But they seem too powerful to be considered a 'mere reflection' of production.

The development and sophistication of the financial field has led to the popularization of terms like 'financialization' or 'financial capitalism': a new 'phase' of capitalism — different from the older 'industrial capitalism' — dominated by finance capital and financial institutions. In the opposite direction, it is objected that the capitalist order is still sustained by the exploitation of workers in the real economy, which implies that financial dynamics, ultimately, can

and should be understood as consequences of the productive/material dynamics.[2] Regardless of the side one takes within this debate, it seems that one of the most important tasks for social theory today is to understand how the 'real economy' of production and the 'paper economy' of finance interact with each other. In order to understand contemporary capitalism, we need to establish whether the real economy determines the financial economy, whether the financial economy determines the real economy, or whether the truth lies somewhere in between these two possibilities. Or is there an alternative?

Capital as finance, finance as power

The Capital as Power theory (from now on: CASP) offers a framework to address these questions from a radically different perspective. Instead of looking for the ultimate answer to the problem of how the real and the financial domains interact with each other, it asks if such a distinction is valid in the first place. Does it make sense to define finance as opposed to a real/material/productive economy? Which assumptions make this distinction possible? Is there a concept of 'finance' that allows us to solve the enigmas that the 'mirages revolt' poses to contemporary social theory?

This article attempts to provide an answer to these questions through the analysis of an object often overlooked by radical theory: assets. My inquiry pursues two main objectives. First, I argue that the analysis of assets provides the basis for elaborating a general theory of economic transactions. Second, this analysis lays the groundwork for reconceptualizing the ontology of finance. The results of the inquiry will lead us to revisit critically some of the distinctions that structure the way we usually understand capitalism.

In particular, my inquiry elaborates on two main ideas put forward by Jonathan Nitzan and Shimshon Bichler. Firstly, Bichler and Nitzan define the capitalist class as the social group in control of assets that "give their owners direct and indirect control over other people" (2009: 314). Since assets are symbolic entities whose natural habitat is the balance sheets of firms and investors, it seems strange to imagine that such apparently irrelevant entities grant so much power. How, then, can we explain that great leap from gloomy accounting offices to world dominance? What are assets made of? How can they turn a group of individuals into a ruling class?

[2] It is impossible to present a detailed synthesis of such a vast debate. Some relevant contributions to the topic of finance and financialization include: Bryan and Rafferty 2006; Chesnais 2016; Duménil and Lévy 2011; Durand 2014; Epstein 2005; Foster and Magdoff 2009; Hudson 2015, 2017; Krippner 2005, 2011; Langley 2008; Lapavitsas, 2011, 2016; Leyshon and Thrift 2007; MacKenzie 2006; Martin 2002; McNally 2011; Muniesa, et al. 2017.

Secondly. Bichler and Nitzan claim that "all capital is finance, and only finance" (2009: 262). This thesis, once again, is bewildering. Capitalism involves the production of goods and services, the exploitation of labor, the allocation of resources and the control and exploitation of nature. Capitalism — we might argue — takes place mainly 'outside of finance'. This dissonance calls for a conceptual clarification. If 'all capital is finance', what concept of finance does this statement imply? What is finance made of?

A remarkable fact about assets is the little interest they receive from radical thinkers, who instead have devoted thousands of pages to the analysis of commodities. This is even more surprising if we consider that capitalists act in the exact opposite way: commodities do not seem to concern them, while assets receive all their attention. In fact, there are newspapers, websites and even television channels dedicated exclusively to discussing the present and future state of assets. Moreover, there is an entire academic discipline — finance — dedicated to the study of assets or, more precisely, to interpreting the world as an immense repository of actual or potential assets. They are also the exclusive object of the ruling class: all members of society interact with commodities, but only the capitalists structure their relation with the world through assets. None of this seems to be consequential for the current division of intellectual labor: the scholars who study the accumulation of capital are determined to become experts in commodities, while actual accumulators of capital put assets at the center of their theory and practice.

Rather than being an accidental omission, the lack of interest in assets seems to originate from a theoretical bias. For radical thinkers, finance represents an untrustworthy field of study. Since Marx (and because of Marx), it has been conceded that scientific knowledge of capitalism must be founded upon the solid ground of production, not the illusory world of nominal manifestations. Commodities originate from the hands of the workers, while assets spring from the minds of capitalists. According to this epistemological map, the endeavor of this essay can only be appropriate for idealist minds and vulgar economists.

Challenging this convention, I aim to demonstrate that assets provide us with a better understanding of economic transactions than one that arises from the analysis of commodities. I will argue that the analysis of assets, far from leading to an 'idealist' understanding of capitalism, allows us to understand that the financial domain is a direct expression of relations of domination and resistance. Marx believed that by getting rid of the *financial fictions* it was possible to access the truth of production. This essay suggests that by getting rid of *commodities* it is possible to access the reality of power.

In contemporary societies, the wealth of the capitalists takes the form of an immense collection of assets. It seems reasonable to expect that these entities have something relevant to tell us about the social order they contribute to organizing.[3]

Assets

The Fetishism of "The Fetishism of the Commodity and its Secret" and its Secret

Marx's investigation begins with the analysis of the commodity (an external object endowed with a use-value and an exchange value). The analysis of the 'commodity-form' allows Marx to describe the main elements of production: labour power, money, commodities and means of production. A problem arises, however, when we must deal with the fact that, in the market, there is a wide range of economic transactions in which the physical objects are absent. Marx himself acknowledges this question:

> Things which in and for themselves are not commodities, things such as conscience, honour, etc., can be offered for sale by their holders, and thus acquire the form of commodities through their price. Hence a thing can, formally speaking, have a price without having a value. The expression of price is in this case imaginary...
>
> (Marx 1981a: 97)

A little further on, Marx adds '*uncultivated land*' to these examples. On the one hand, then, there are authentic commodities (bearers of human labour), and on the other hand there are entities that merely *adopt* the commodity-form without having a real value. Later on, we find an identical reasoning when Marx distinguishes between *real capital,* composed of industrial and commercial capital, and *fictitious capital*, composed of the stock exchange, public debt

[3] The study of assets is a promising field of analysis that, albeit slowly, is beginning to receive more attention. Recently, Birch and Muniesa (2020) edited a collective book that comprehensively studies how different spheres of society (information, knowledge, public infrastructure, education, etc.) are turned into marketable assets. Along the same lines, Lisa Adkins, Melinda Cooper and Martin Konings (2020) propose to move from the "logic of commodities" to the "logic of assets" to explain the increase in inequality and the decline in the standard of living of the working class. "The commodity is an anachronistic lens through which to understand the character of present-day economic restructuring" (p. 18). According to this analysis, "asset inflation has reconfigured the logic of class and inequality" (pp. 28-29), so that the conflict between capital and labor must be understood within a broader framework in which asset inflation is the counterpart of wage stagnation.

bonds and bank-money (see Marx 1981b: Ch. 25-32). The law of value governs the dynamics of real capital. In the world of fictitious capital, on the contrary, 'irrational expressions' and 'irrational forms' reign.

Marx's epistemological strategy, then, has two steps. First, the distinction between commodities and 'imaginary' expressions of price, as well as the distinction between real capital and its fictitious replicas, split reality into two ontological orders. Second, we must assume that only one of those orders contains the rational foundation of the system —the *law of value*: the exchange of commodities according to the quantities of abstract labor needed to produce them. The other order is labelled as the realm of appearances — an ontologically discredited world populated by fictions, irrational forms, duplicates, 'merely nominal' variations, 'purely fictitious' capitals and all sort of fetishes.

The problem, however, is that if we understand economic transactions based on the exchange of commodities, the resulting framework is restrictive. To begin with, the idea of turning a subset of economic transactions (the exchange of commodities) into the principle that governs the whole economic system, is arbitrary. And once the commodity-form has become the basis of our understanding of exchanges, the other forms of economic transactions can only be considered as distortions or mystifications. Although the exchange of commodities may be a reasonable starting point, to transform it into the conceptual model through which we are meant to comprehend the vast universe of economic transactions, is essentially a metaphysical decision, rather than a working framework derived from empirical evidence. The 'commodity' thus becomes a theoretical fetish — a concept endowed with supernatural explanatory powers.

There is more. As we have stated, the proliferation of entities that have a price without having value represents a major challenge for the alleged sovereignty of the law of value. Under contemporary capitalism, as financial operations extend their territory, and as the production of commodities seems to be more and more subordinated to the financial dynamics, the law of value loses control over the economic system, and the world assumes the form of an immense, unintelligible distortion. The law of value is nowhere and the 'irrational expressions' become reality itself.

It is known that Marx aimed to decipher the reasons behind the fetishism attached to commodities. However, Marx may not have taken his critique far enough. Perhaps the true fetishism of the commodity relies in the presumption that commodities contain a mystery, and their only 'secret' is that they have

nothing to reveal to us. Perhaps the only way to make commodity fetishism disappear is to question the authority of its supposed explanatory superpowers.

Entitlements: I can do *X*. You should do *Y*.

In what follows, I propose to base the analysis of economic exchanges in the concept of assets. This does not mean that I will attempt to invest assets with the exorbitant privileges held by commodities within Marxist theory. Rather, the aim of this analysis is to elaborate a framework that can account for all economic transactions — those involving the exchange of commodities as well as the 'purely financial' ones.

What is an asset? The conventional definitions from handbooks and dictionaries tend to be somewhat loose. Let us refer to some examples. Assets are:

> "Any object, tangible or intangible, that is of value to its possessor."
>
> (Smullen and Hand 2005)

> "Something which belongs to a company or person, and which has a value."
>
> (A&C Black 2005)

> "A resource with economic value that an individual, corporation, or country owns or controls with the expectation that it will provide a future benefit."
>
> (Investopedia)

> "A financial contract or physical object with value that is owned by an individual, company, or sovereign entity, which can be used to generate additional value/earnings or provide liquidity."
>
> (Banks 2010)

'Something', 'anything', 'any object', 'a resource', 'a contract or a physical object'. Assets must be very heterogeneous if, in order to define them, we require this range of terminology. Assets can include ownership of plants, equipment, cash, deposit accounts, derivatives, bonds, stocks, vehicles, computers, land, buildings, machinery, furniture, tools, inventories, art collections, patents, copyrights, licenses, among others. Apparently, any entity that has an economic value can be considered an asset.[4]

[4]The definitions offered by the financial discourse are useful only as a starting point. The way I define them, however, is different to the way they are understood by accounting con-

Some of the listed assets are associated with physical objects (cars, buildings, machines, etc.). We have already seen, however, that transactions involving physical objects are only a subset of the universe of economic exchange. The presence of these objects, then, cannot be a defining characteristic of assets. Is it possible to understand assets in such a way that we escape the dualism between 'physical objects' and 'financial contracts'? If assets are 'anything' and 'something' valuable, what is that 'thing' they all imply? What is the common feature that allows us to recognize all these entities as assets?

I argue first that assets can only be defined as *sets of faculties* that are socially sanctioned. In other words, assets are *entitlements*. Second, I argue that *entitlements* are the actual object exchanged in an economic transaction. I will develop this thesis through four propositions:

1. According to its content, an asset is nothing but a group of sentences specifying a set of rights. The degree of complexity of the rights contained in each asset may differ. However, this variation does not change the nature of assets. All assets have these two components: an owner and a set of terms that specify what the owner is entitled to do.[5]

2. Since assets *entitle* their owners, they must be something more than a mere set of sentences. For a group of sentences to be considered an asset, some members of society must materialize the set of rights that the asset grants. We can call these members the 'recipients' of the asset. This recognition endows the sentences contained in the assets with *performative power*. Assets, therefore, can be seen from two points of view: for the owner, an asset specifies a set of *rights*. For the subjects that validate it, an asset is a set of *orders*.

3. An asset will have *value* only if someone expects that the set of rights/ orders it grants will materialize. In other words: to have value is to have performative power. Without performative power, an *asset* is merely a set of sentences. For example, the following sentence — "the reader of

ventions. For example, accountants recognize the existence of assets as goodwill. Goodwill includes 'brand recognition' which is not a vendible entity, but an accounting invention that emerges as a difference between the value of a company before and after it is acquired. Moreover, the classifications proposed by the accounting practice (tangible, immaterial, intangible, etc.) are misleading and therefore will not be considered as a valid reference for the construction of a scientifically useful concept.

[5] The existence of the owner presupposes the existence of a system that solves the following problem: how to be sure that 'that human being' is the actual owner? Identification systems use tools like signatures, photographs, fingerprints, stamps, certificates, passwords, etc. The identification process associates a certain body (a physical entity) with a symbolically recognized figure.

this article is the one and only owner of the Taj Mahal" — has no value because nobody expects that it will be obeyed. The *performative power* of an asset, therefore, does not arise from the will of its owner, but from the will of the subjects committed to enforcing it. (This simple fact highlights a crucial property of power: in the natural world, I can do anything my body allows me to do. In the social world, I can only do what others allow me to do).

4. Assets are vendible *claims*. This means that assets have a price and are exchanged in the market. The market is the system in which sets of rights/orders receive a price and are exchanged according to a unit of account called money.[6] The market is not the only system through which members of society acquire and transfer *entitlements* (there are many *titles* that are not for sale; there are many *rights* that cannot be acquired by paying money). Not all transfers of entitlements are economic transactions, but all economic transactions are exchanges of rights/orders.

Before proceeding further, we must specify the place of assets within the universe of economic transactions. Economic transactions can be classified along two axes:

1. ***Formal vs. informal transactions***. In some cases, transactions are not regulated by a formal code. In a street market, for example, the transfer of rights may rely solely on verbal agreements and on the trust of participants. In other cases, transfers are regulated by a formal code — in a supermarket, for example, the simplest transactions involve vouchers, receipts, tickets, and other devices to certify that certain rights/orders have been exchanged. In everyday economic transactions (the acquisition of ordinary goods) it may be assumed that the rights are sufficiently known by everyone and do not need to be articulated. On the contrary, the terms and conditions of financial contracts may require numerous pages and may be so complex that only experts can fully understand them. Economic transactions, in conclusion, can take place under arrangements with different degrees of codification.

2. ***Legal vs. illegal transactions***. Economic transactions may belong to the legal or illegal sphere of the economy (which goes from organized crime

[6] It could be objected that in an economic transaction an asset is exchanged for money. It is not easy to resolve this question, since money plays an ambivalent role within the system of economic transactions: money can be considered an asset, but it is also the precondition of economic exchange. As a unit of account, money makes possible the existence of assets as 'vendible' units. However, money itself can be sold —it happens every day in the Forex market. It is beyond the scope of this article to offer a detailed examination of this question.

> to the diffuse sphere of 'corruption'). Although they do not have the authority of the law, illegal economic transactions have their own regulation and validation mechanisms. More importantly: illegal economic transactions are also transfers of entitlements.

Regarding the first axis, assets belong to the subset of well-codified transactions. Regarding the second axis, they belong to the subset of legal transactions.

Now, if our definition is complete and correct, all entities traded in the market can be identified and described as a set of rights/orders. This is valid for assets, but also for the transactions that take place via more ambiguously codified mechanisms, as well as in the illegal economy. For example: a government bond gives the owner the right to demand from a specific government a sum of money (under conditions specifying how much, when, how, etc.). Likewise, the bond instructs certain officials of that government to pay the bond holder. The stocks of a company give the owner the right to receive a specified portion of the earnings of that company. The ownership of a certain number of stocks may also give the right to participate in the making of decisions that, indirectly, have some influence on the productive process. Further, the shares are orders that the company's executives are committed to obey.

Futures, forwards, commodities, patents, machines, mortgages... Every entity vendible in the marketplace can be described as a set of rights/orders. And rights/orders provide the only theoretically consistent definition of economic transactions.

Now, if we define assets as sets of statements, aren't we forgetting the production of goods and services that make possible the reproduction of life itself? We should note, also, that commodities cannot be described as sets of entitlements, but by sets of physical properties. Doesn't this invalidate our definition?

To clarify our definition of assets, and to understand how they relate to the 'physical' world, we must now turn to the concept of *ownership*.[7]

Ownership/Possession

According to a famous phrase by Rousseau, ownership originated when somebody, "having enclosed a plot of land, took it into his head to say 'this is mine' and found people simple enough to believe him..." (Rousseau, 2009: 63). Al-

[7] I consider the term 'ownership' as synonymous with 'property'. In order to avoid the duplication of terms, I will only use 'ownership'.

though this explanation is historically dubious, it is accurate on a crucial point: it asserts that ownership is a symbolic relation. Ownership, indeed, is a type of relation that goes from a subject that ‘tells’, to a community that ‘believes’. *Saying* and *believing* are the two parts that, as we saw, constitute assets: a subject that *claims* and a community that *abides*.

To understand the ontological features of ownership, it must be clearly distinguished from a closely related phenomenon: *possession*. Possession designates a physical relation between a subject and a thing. Ownership designates a symbolic relation between human beings.

In the exchange of commodities, ownership and possession tend to overlap. Generally, the *owner* of a commodity also becomes its *possessor* — the beneficiary of the use-value of the commodity. It is easy to demonstrate, however, that they are two separated relations. To begin with, there can be a change in the possession of an object without a change in its ownership. All forms of illegitimate appropriation highlight this difference. If the reader of this article is distracted, I can take her/his computer and run away. This theft will make me the possessor of the computer, but not its owner. As the possessor, I can make use of the computer I have under my control. But it is the owner who is entitled to activate the social procedures that protect private property — for example, requesting the assistance of the police. The possessor may have control of the object. But the owner has control over the action of other people.

A general theory of economic transactions must focus on ownership — this is evident from the fact that in most transactions there is no object to be possessed. Both Marxist and neoclassical explanations of economic exchange are based on fictional scenes involving ‘possessors of commodities’: a tailor and a weaver who take their commodities to the marketplace (according to Marx’s tale); a student who wants a pizza and gives up four sodas (according to the typical textbook examples). A framework aiming to describe all economic transactions must replace the fictional stories of *commodity holders* with the study of *entitled owners*.

If we understand that economic transactions occur in the symbolic terrain of ownership, then we can describe all economic transactions with the same set of concepts. Within such a framework, there is no ontological difference between the different kinds of economic transactions. Buying a kilo of apples, a car, a building, a bond, a stock, a credit default swap, a future or a mortgage, is always an exchange of entitlements. Ownership — a symbolic distribution of rights — can explain why certain individuals possess certain objects. But

possession — a physical distribution of material entities — cannot explain why certain individuals are entitled to do certain things.

Assets and Matter

I have asserted that ownership is a symbolic phenomenon. Does that imply that assets exist in a virtual space, detached from production and consumption? What is the relation between ownership and the material realm? This point should be analyzed more carefully.

Firstly, we must recognize that entitlements presuppose a material substrate that makes it possible to register, manipulate and preserve the information they contain. Nowadays, it is common to find the idea that the expansion of finance implies the 'dematerialization' of the economy. However, the entities through which financial signs exist and circulate (ink, paper, hard drives, screens, wires, alphabets, etc.) are as real and as material as any commodity. The information contained within assets must be 'presentable' to other subjects — and 'presence', as far as human existence is concerned, is only possible in and through matter.

Secondly, all exchanges of assets have effects on the material world. All commercial operations are a redistribution of entitlements, and entitlements determine the interactions between subjects and the 'things' of the world. This is evident in the transactions that involve physical entities: an economic transaction determines who is entitled to wear a hat, drive a car, or live in a house. In the same rationale, the owner of a company is entitled to decide whether the factory will stay in the same city or if the company will move to a different continent. But even financial transactions have immediate effects on the material distribution of the world — a financial transaction is a transfer of digital information, a physical modification on a recording system that, in turn, redefines what an owner is entitled to do. Assets, thus, not only have a material substrate, they act on and through matter.

In this specific sense, we can assert that all assets are material. On the other hand, a term like 'immaterial assets' (i.e., invisible, untouchable, intangible, non-presentable) seems more like phraseology synonymous with 'non-existent assets'. For example, I am actually the real owner of Amazon. However, the fact that my stocks are 'immaterial' makes it difficult for me to convince Jeff Bezos to pay me the dividends I claim to deserve. (From an ontological approach, 'immaterial' or 'intangible' assets are very similar to imaginary girlfriends — some may claim they do not really exist).

Now, it is important to point out that there is no contradiction between the first thesis (ownership is a symbolic phenomenon) and the second one (all assets are material). The later thesis simply asserts that assets must be capable of being stored and presented in some way. The former thesis simply states that the material features of the entities involved in a transaction cannot account for the performative power of assets.

Preliminary Conclusions

We can now draw the following preliminary conclusions:

1. Like commodities, assets have an exchange-value (a price) and a use-value (they entitle owners to do certain things). The use-value of assets involve a material dimension: a set of information (materially stored and presented) specifying the rights of the owner. However, this material dimension is not sufficient to explain the use-value of assets. The use-value of an asset *realizes* only when certain members of society obey the commands it contains. This validation is the performative power of the asset. In order to understand how assets work, then, we must turn to the study of their symbolic dimension.

2. All economic transactions are transformations at the level of ownership. This is not to say that goods and services are irrelevant — it is evident that human beings need to produce and consume material objects to survive. But within human societies, the production and consumption of material objects is always mediated by the circulation of symbolic entitlements. In other words: I can only control objects to the extent that I have some control over the actions of other persons. We have asserted that assets can be described as sets of commands. According to this, to be the owner of an asset is to benefit from a set of social actions. And since the only agents that can carry out these actions are human beings, to be an owner of an asset is, ultimately, to be in control of (and to benefit from) the actions of other individuals.

3. Since all assets are entitlements, having many assets means being able to do many things. And being able to do many things means having power over the actions of many people. I become more powerful as I acquire more assets, or as the assets I already have expand their control over people. Likewise, investment portfolios and balance sheets can be seen as a record of the power of an owner, a catalogue of its entitlements (receiving a fraction of the profits generated by the workers of company X; receiving a fraction of the money created by the government of the

country Y, etc.). From this point of view, the claim that markets *allocate* resources is misleading. If the object of economic transactions are symbolic entitlements, what the market allocates is power — and only because it allocates power, it has consequences on the physical distribution of the world.

4. An asset is never a 'thing', but a 'faculty'. Strictly speaking, we never buy 'things'. We only buy the right to be recognized as their legitimate owners. Think, for example, of a pharmaceutical company that owns the patent of a vaccine. According to our definition, the asset cannot be the vaccine itself. A vaccine is a tangible substance, endowed with tangible properties that enable it to produce a tangible outcome. The asset is the 'ownership associated to the vaccine', this is to say, a set of rights — for example, the right to request the government to prosecute those who produce that vaccine without the owner's authorization. The vaccine is about a microbe and an immune system (a biochemical relation). The asset is about the interaction between social groups (a power relation). One is never the owner of a vaccine, just as one is never the owner of a thing, a car or a machine. The expression '*being the owner of x*' means '*being the subject entitled to x*'. Where *x* cannot be a thing, but a set of social actions — and only in some cases: social actions associated to the control of certain things.

5. If we want to understand economic transactions, our object of study must be ownership, not possession. Ownership determines possession: in most cases, I become the holder of a commodity if/when I become its owner. Moreover, ownership establishes what the holder of the commodity can do with it: the *use-value* of an animal, for example, depends on whether the community allows to convert it into food or not. This means that the *use-value* of a commodity does not arise automatically from its physical properties, but it is always mediated by the symbolic realm of ownership, this is to say, by a community that establishes what it is acceptable to do with a certain object.

We are accustomed to thinking that capitalist domination is explained by the immanent rules of production and exchange of commodities. From a CASP approach, on the contrary, we can argue that domination is not comprised of means of production, labour power, commodities or any other *material* entity, but of claims, promises, expectations, beliefs, orders, obedience, etc. Rephrasing Marx: it is not the material properties of production that determines the distribution of power, but the relations of power that determines production.

It is the symbolic universe of claims, beliefs, confidence, etc., that determines who uses the machines, who acquires the goods and, in general, how the community uses its time and energy.

From Production to Power

Thus far, we have focused on the content of assets — sentences with performative power. Now we must analyze their second component: their economic value.

According to conventional financial wisdom, the economic value of assets rests on their ability to generate a monetary income for the owner: the greater the expected revenue (and the lower its associated risk) the higher the price of the asset. We have already seen that the performative power of the asset is a precondition of economic value: an asset receives a price if it is desirable for someone; and it is desirable only if it has performative power. Performative power makes assets commensurable — it is the common element present in all assets. But what makes their price vary?

At this point, it is necessary to incorporate the critique of the productivist theories of value elaborated by Bichler and Nitzan. According to the productivist paradigms, prices are the nominal representations of units of utility (neoclassical version) or of socially necessary abstract labor (Marxist version). Bichler and Nitzan (2002, 2009) have demonstrated that *value*, in the way these two schools understand it, is theoretically indefinable, empirically non-measurable, and can exist only in a competitive market — a theoretical fiction that has little to do with actual capitalist competition. The bad news is that value is unknowable; the good news is that capitalism does not need it in order to function.

It is beyond the scope of this article to explore in detail Bichler and Nitzan's critique to conventional theories of value. However, we can use some of the most important findings of this critique to advance our inquiry. According to CASP theory, if we wish to understand the dynamics of capitalism, we must abandon the productivist paradigm and study capitalism as a mode of power. This idea has two important consequences for the analysis of assets. First, it changes the way we understand prices. Second, and more generally, it lays the basis for a social ontology in which financial entities can do much more than simply 'represent' underlying magnitudes.

Productive Power in General vs. Social Power in Particular

Marx's theory of prices is anchored in productivist notions. According to Marx, the *magnitude of value* of a commodity changes with "every variation in the productivity of labour" (Marx, 1981a: 130). Productivity of labor, in turn, is determined, among other circumstances, "by the workers' average degree of skill, the level of development of science and its technological application, the social organization of the process of production, the extent and effectiveness of the means of production, and the conditions found in the natural environment" (Marx, 1981a: 130).

The problem with this framework is that if we admit that changes in prices express changes in levels of productivity, we are thinking in terms of a relation between 'nature' and 'society', which means that the concrete action of social groups is absent from the equation. A 2:1 price relation between two objects means that the time it takes society to produce the former is (approximately) twice as long as it takes to produce the latter. Relative prices, therefore, express a relation between the productive forces of the society in question and the degrees of resistance that nature presents in the process of the production of each commodity. A high price indicates that the production of that commodity involves a larger effort. If its price decreases, it means that the society found a more effective way to overcome the resistance that nature presents. The concept of productivity tells the story of a struggle between society and nature.

Now, if we think from the framework of power relations, the monetary magnitudes do not refer to a relation between nature and the productive capacity *in general,* but to a relation between social groups *in particular*. According to this thesis, prices are driven not by the productive power of society over nature, but by the social power of specific groups. Suppose there is a technological innovation that augments the capacity of producing a certain commodity. What will be the overall result of such innovation? Will it democratize access to that commodity, driving its price down? Will it increase the relative power of the companies that produce it? Will it lead to the formation of a monopoly, driving the price up? Will it increase the leisure time of the members of the community? Will it intensify the exploitation of workers and boost unemployment? From a CASP perspective, the 'material determinations' can tell us nothing about the final redistributive outcome. Only the interaction between social groups will answer these questions.

Previously, we analyzed the relation between assets and the 'material realm'. We can ask a similar question about prices: how are prices related to production? Admittedly, there are good reasons to think that changes in the realm

of production engender changes in prices. For example: aren't there many cases where it is perfectly reasonable to assume that the most expensive goods are those that require higher quantities of human labour to be produced (space rockets are worth more than airplanes, airplanes are worth more than cars, cars are worth more than bicycles, etc.)? Moreover, isn't it true that an increase in the technical capacity in the production of an object causes a reduction in its price? We should analyze these cases more carefully.

Let's assume that, indeed, it is possible to find numerous cases in which the production of a more expensive commodity requires a higher amount of labour than the production of a cheaper commodity. This, however, would not constitute a demonstration that the amount of labour determines the price: at most, it would be a case of correlation, but not of causality. We have said that prices do not express a 'quantity of time' but a 'degree of social resistance'. Mobilizing a greater amount of labour implies facing a 'greater resistance': resistance from more workers, or resistance from workers who are forced to work harder. The relevant variable, therefore, is not the abstract labour time, but the concrete resistance of the actors involved — a capitalist may increase the price of his goods if his competitors and consumers are unable to exercise a greater resistance; a capitalist may reduce his production costs (and augment his profit margin) if he succeeds in reducing the resistance of his employees, etc. Prices, thus, do not indicate an *equivalence of time*, but a *difference of power*: they are the measure of a *distance* between social forces.

Secondly, a realistic theory of capital accumulation must indeed recognize the possibility that changes in productivity levels will lead to a change in price. This possibility, however, can be admitted as a 'special case', not as a necessary relation. And, more importantly, this special case should not obscure the fact that the relation between productivity and prices is always mediated by power. It is power — the specific action of social groups — that determines the social outcome of changes in productivity.

Power, then, should not be understood as some supplementary force that can be *added* to the material forces of production. On the contrary, power is the factor that *neutralizes* the alleged explanatory power of the material variables. When we speak of power, we speak of the capacity to change those conditions that, supposedly, determine the productivity of labor. Returning to Marx's definition, power means power to modify the level of skill of the workers, power to decide in what direction science and technology will be developed, power to coordinate the process of production, power to modify the scale and efficiency of the means of production, power to modify the conditions found in

the natural environment. 'Power' introduces contingency into the syllogism: the conditions of production are premises from which power can draw any conclusion.

When we discussed the relation between assets and matter, we came to this conclusion: assets act on, and presuppose, the material world, but their properties cannot be explained by material determinations. Our analysis of the relation between prices and production has reached an analogous conclusion: prices presuppose (and act on) the material production, but the dynamics of prices cannot be explained by the variables of the material realm. Power relations are not indifferent to what happens at the level of the productive forces and their associated dynamics. But we cannot ask the conditions of production (a physical question) to account for the dynamics of the redistribution of power (a human issue).

The Two Factors of the Asset: Use-Value and Value (Substance of Value, Magnitude of Value)

We now have all the elements necessary to propose a final definition of assets. Let us put them together.

From a CASP perspective, pecuniary values express levels of power. This means that any process that strengthens the interests of a given social group (be it a group of workers, an individual company, a trade union, a political party, an industrial sector as a whole, or the capitalist class in general) will be *expressed as*, and will *result in*, an increase in their monetary income and/or their monetary value. Conversely, any process that reduces their power, will be *expressed as*, and will *result in*, a reduction in their monetary income and/or monetary value. There is, in short, an identity between accumulation of power and accumulation of capital.[8]

Power, therefore, relates to monetary value in two ways: 1) power is the condition of possibility of value — without performative power, an asset has no use-value: it becomes an inert set of sentences; 2) the monetary value of an asset expresses a degree of social power —the greater the control, the greater the price. Power is the substance of value; prices are the measure of power.

[8] Some of these 'actions' may be directly linked to the realm of production (a technological outbreak, a scientific discovery, etc.). But other actions will relate directly to the exercise of control over other social groups. A revolt, a reform, a political alliance, the diffusion of an ideological doctrine, in short, any process that redistributes power and affects the level of control and resistance of social groups, will have an effect on the monetary value of assets.

Since assets have performative power and a monetary value, we can define them as *units of capitalized power*. These three terms comprise the key elements of our analysis. Assets are 'units' (i.e., discrete entities) because they belong to the sphere of the well-codified transactions. In other words, assets are discrete sets of rights and commands. They are units of 'power' because they are obeyed by the pertinent members of society. Finally, they adopt a 'capital-form', this is to say, they are sold and bought in the market and they are denominated in a monetary value that expresses the degree of social control they are expected to exert.

With this general definition in mind, we can better understand what the concept of *mode of power* means. In all societies, there are specific modes of transferring and regulating entitlements (we can call them power-allocation mechanisms). These mechanisms are very diverse, and in each society different mechanisms coexist and interact — it is clear that even in today's developed capitalism, not all entitlements are assets, not all sets of rights/orders are vendible.

The idea that societies can be defined as *modes of power*, means that it must be possible to individualize a society according to its prevalent power-allocation mechanism. In societies where the capitalist mode of power prevails, the trade of assets appears as the main power-allocation mechanism — in other words: *capitalized power* is the system through which the ruling class sustains and reorganizes (in a word: creorders) social reality. Assets are the units of the capitalist mode of power. Capital is the virtual structure in which assets exist. And assets are the particular entities in which capital actualizes.

Finance: How to Do Societies with Signs

We can take the inquiry one step further and ask if the analysis of the relation between the symbolic and the material domains (assets and matter, prices and production) can help us understand that enigmatic field we call 'finance'.

Under the classical scheme, financial signs *represent* the variables and dynamics of the so-called real economy. Prices are nominal representations of *utility* or *labour time*; financial capitals are fictitious replicas of real capitals. But once it has been proven that the concept of value is a theoretical fiction, financial signs can no longer be understood as *representations*. Now, if financial signs are not limited to being the spokespersons of something more real than them (either abstract labor or utility), what is their role within the social order? Can we abandon the metaphysics of representation?

One of the most important consequences of the CASP theory is that it contains a new ontology of finance. The central idea of this ontology is that the financial realm is not the 'mirror' of the real economy, but a language that participates in the creation of social reality — a code that makes possible a specific form of social interactions and power relations.

We should notice, first, that the term 'finance' can be used in two different senses. In a narrow sense, we can understand finance as a specific sector of the economy. Within this sector, institutions like banks, hedge funds, stock exchanges, etc., make money by providing certain services. But in a broader sense, finance can be seen as a language that codifies the society as a repository of actual or potential assets. Finance, in this sense, is the language shared by the capitalist class and the technique through which they reorganize the world to intervene in it according to their interests. In the narrow sense of the term, 'financial institutions' can be differentiated by the type of economic activity they carry out (banks, which create credit-money, are different from automakers or oil companies, which create physical objects). But in the broad sense, banks, automakers and oil companies, insofar as they operate within the capital code, are 'financial' entities. In the first sense, finance is a part of the whole. In the second sense, finance is a mode of symbolizing and reorganizing the whole.

It should be evident by now that when Bichler and Nitzan claim that "all capital is finance and only finance", this sentence should not be read as: 'capitalism is banks and speculation, and only banks and speculation' (an unfortunate interpretation). If we understand finance in the broader sense, this phrase simply acknowledges that social relations involve an irreducible symbolic dimension. Capital can be 'finance and only finance' because the symbolic is a form of reality — so to speak: a fully real way of being.

This 'symbolic dimension' must be clearly distinguished from ideology. An ideology offers a representation of reality: it is composed of statements that describe, or claim to describe, a state of affairs. Financial techniques and signs relate to the 'material world' in a completely different way.

To clarify this point, we can use John Austin's famous distinction between descriptive sentences (which can be evaluated as true or false) and sentences that execute an action (performative utterances), which create or modify symbolic relations between persons — following a typical example, when the judge says "I declare you husband and wife", he does not describe a situation; pronounced under the right circumstances, it generates a symbolic transformation at the

level of social faculties and obligations. This distinction shows that sentences can relate to reality in different ways (Austin 1962).

Ideological sentences belong to the first class. For example, the statement 'capitalism is the best of all possible societies' is a representation of the world, and it can be evaluated with the categories 'true/false' (we can ask: is this a good representation or a misrepresentation of reality?). The financial code, on the other hand, provides a set of symbolic references that organize the actions of human beings. For example, Bichler and Nitzan (2002, 2009) have shown that capitalization is the elementary algorithm of capitalism. The formulas to estimate the present value presuppose a state of affairs, but do not seek to describe it. Rather, they tell a group of individuals how to act. Pronounced under the right conditions (like the statement of the judge) these sentences trigger a specific social practice. As they generalized, these statements have founded a whole discipline: finance, the theoretical dimension of the practice of capital accumulation. At the performative level, the basic capitalization equation, $K = \frac{E}{r}$, transforms social reality: it contributes to the expansion and reproduction of the code of capital.[9]

Understanding finance as a code — a social programming language — allows us to recognize its performative dimension. Like any other language (musical language, architectural language, or written language) financial language makes possible the emergence of new forms of interaction between individuals. The blueprints of architects and the scores of musicians have no interest in representing reality: rather, they tell humans how to intervene on it. They are 'only' signs on a piece of paper (or lights on a screen). However, they make it possible for large groups of human beings to coordinate with a precision and on a scale that would be unattainable if that language did not exist. These signs add an irreducible difference to the set of social practices in which they are involved.

The same applies to financial signs. Just as architectural blueprints are not 'fictitious houses', and musical scores are not 'imaginary symphonies', capitalization (contrary to Marx's belief) is not the creation of a 'fictitious capital', for the simple reason that capitalization is not a 'portrait' of a state of affairs, but the blueprint of a social process. Capitalization makes it possible for large groups of human beings — the capitalist class — to coordinate with a precision and on a scale that would be unattainable if that language did not exist.

[9]The capitalization formula discounts an income stream E by an assumed rate of return r, giving an assets' capitalized value, K.

To summarize, nominal entities constitute an emergent property of social reality. Their existence generates unique and irreducible dynamics. Finance does not produce the world, but it does organize the world of those who inhabit it: it provides the code in which capitalists plan and execute the process of capital accumulation; the code through which capitalists command and workers obey; it organizes productive processes under the double imperative of accumulating capital and retaining control over society. As true Marxists, financial signs do not merely interpret the world, they change it.

Fictitious, Material, Unproductive, Abstract...?

In light of the results of this inquiry, we can revisit some of the oppositions that structure how conventional theories understand capitalism. At the beginning we asserted that there is a tendency to distinguish between a financial economy and a real economy. Is it useful to retain these distinctions?

Material/Immaterial. Finance is often defined as opposed to a 'material' sphere. According to our findings, the distinction material/immaterial is useless.

The objective of our analysis was to construct a framework in which all economic transactions have the same ontological status. This allowed us to assert that all assets are *material* (including 'purely financial' ones) and that all assets are *symbolic* (including the ones that confer power over physical objects).

Instead of the two-tier ontology (a material economy separated from a financial economy), it is possible to study the process of accumulation of capital through two large groups of transactions: those that confer control over physical objects (machines, natural resources, etc.) and those that confer control over monetary flows. It is true that investments in the production of goods and services make the reproduction of life possible (without the production of use values society would cease to exist). But that does not make the 'purely financial' transactions 'less material' (if the expression has any meaning). Transactions oriented to the production of goods, as well as transactions oriented to the appropriation of monetary flows, constitute the reality of capitalist domination. And both are exchanges of entitlements.

The distinction between 'material production' and 'production of signs' must be replaced by an ontology that recognizes that the former is organized and reshaped through the latter.

Productive/Unproductive. Are we better served if we define finance as opposed to a 'productive economy'? Production of goods and services is a pro-

cess in which groups of individuals cooperate in order to achieve a specific goal: building a machine, teaching mathematics to a group of children, playing a piano concert, creating a vaccine... In all these cases, production refers to a set of physical interactions between individuals and exterior objects. Financial operations, on the contrary, do not produce objects or offer services. Therefore, it seems reasonable to differentiate the sphere of productive processes from the exchange of assets.

Once again, things are more complicated. The fact that the exchange of assets does not participate directly in the process of the production of commodities, does not mean that they do not produce anything. As the inquiry showed, assets do something at least as relevant as the production of things: they allocate the power of deciding what will be produced. Financial activities are 'productive' in the sense that they reproduce and reshape power relations. Now, if assets are the units of capitalized power, and if power is (among other things) power over production, then production is ultimately governed by the ownership of assets. Assets do not produce commodities: they give orders to those who do.

In conclusion, the distinction between the 'productive' economy and the 'unproductive' sphere of finance is misleading. Instead, a distinction should be made between the field of production of commodities (a material process oriented towards a common goal) and the field of reproduction of power relations (a process of reciprocal resistance between groups with opposite interests). Disciplines such as physics and engineering seem to be best suited to study the former. If we study power relations, we must focus on the latter.

Real/Fictitious. It should be clear now that the distinction between 'real values' and 'fictitious values' rests on fragile metaphysical assumptions. First, financial signs cannot be good or bad representations, simply because there is no 'real value' to represent. Secondly, we have seen that there is no ontological difference between assets that grant the control over physical objects (commodities, machines, buildings) and claims on future earnings.

The most important consequence of the above analysis is that it allows us to give an answer to a recurrent question: does production determine finance, or does finance determine production?

Once again, the difference between the two senses involved in the term 'finance' helps to clarify this question. If we understand finance as the economic activity carried out by institutions like banks, hedge funds, speculators, etc., the question does not offer any difficulties: it is clear that production does

not need finance, and it is clear that finance is impossible without production. Without production of goods there cannot be finance because there will not be human life. We can say, then, that production is 'determinant': a condition of possibility of finance.

But if we understand finance, in a broader sense, as the code of a mode of power, then it is possible to assert that finance is the sphere that determines production: not because financial signs produce commodities, but because they provide the code that allows the ruling class to decide what commodities will be produced, in what quantity, how, by whom, etc. In this sense, finance precedes production: finance is a precondition for the production process to be carried out under the control of the capitalist class. Without production, there is no finance; but without finance, there is no accumulation of capital.

Once we dispense with the distinction fictitious/real, we can recognize that the accumulation of capital (as any other mode of power) is both a symbolic and a material process: power is exercised over the world and the bodies of subjects, but the financial code organizes and reshapes the power relations among human beings.

Abstract/Concrete. Finally, if the Marxist concept of *value* is nothing but a theoretical fiction, there is no reason to preserve the distinction between concrete labour and abstract labour. Instead, it seems more reasonable to distinguish between a *concrete labour* that produces goods and services and *equally concrete* activities that reproduce and modify power relations. The former involves physical interactions between a group of individuals and a set of external objects. The latter involves power relations between different social groups — and, in fact, social theory already has a concept to designate it: class struggle.

Conclusions: From Abstract Labour to Concrete Power

Let us, therefore, assume an exchange of non-equivalents ...

(Karl Marx, *Capital, Vol 1.* p. 262)

From our long journey through the analysis of assets and finance we can draw some general conclusions.

1. Assets are entitlements. The analysis of assets shows that the entities exchanged on the market are not 'things' but entitlements: sets of rights/orders with performative power. The 'owner of something' is 'the subject

entitled' to demand a certain group of actions from a certain group of individuals.

2. To have assets is to have power: power over the community's natural resources, power to shape the field of action of other individuals, power over future streams of income, etc. For a social ontology based on power relations, the ownership of ordinary commodities — that is, the right to control certain use-values — is of little relevance because these assets contain the smallest amount of power. The most valuable assets, on the contrary, are the ones that grant control over the action of large groups of individuals.

3. Prices express 'degrees of social power'. Against the belief of productivist theories, prices do not quantify the degree of resistance that nature opposes to the productive forces of society, but rather the reciprocal resistance of social groups with opposing interests. The system of prices is a map of a web of resistances. This thesis allows us to shift from an explanation of capitalism based on the *equivalence of value* between commodities, to an explanation based on the *differences of power* between social groups. By recognizing the symbolic dimension of capitalist relations, then, we do not fall into any 'idealistic' trap, we simply acknowledge that the object of study of a theory of accumulation of capital is not the production of commodities but the reproduction of power.

4. Finance is the code of the capitalist mode of power — the social programming language with which the capitalist class reshapes society and controls the process of social reproduction. The fact that assets and other financial entities are 'symbolic' does not make them fictions: they are the conceptual instruments of a power technology. Finance, in a broader sense, cannot be opposed to the 'industrial' or 'material' production, since industrial production is organized in and through the financial code. Paraphrasing Austin, the capitalist mode of power is a practical answer to the question of how to organize societies with numbers.

5. We can now understand why social theory cannot provide a conclusive answer to the problem of the relation between the real economy and the financial economy. This is not a difficult question, but an ill-posed problem. The analysis of assets has shown that we no longer have to ask how the real economy is connected to the financial economy because, first of all, that separation does not exist. What does exist is the power to allocate resources through the ownership and transfer of entitlements.

By abandoning the idea that there is a 'real economy', we can concentrate on studying the 'real domination'.

6. Assets are the units of capitalized power. Capital is the virtual structure that makes the existence of assets possible. But capital only exists in and through the assets that 'actualize' it. For capitalists, accumulating capital means increasing the value of their assets. Conversely, increasing the value of assets is the objective that guides the practice of capitalists. The capitalists can afford to produce more or produce less. But they cannot afford to let the value of their assets fall. To understand what makes the value of assets increase (or decrease) is to understand what capital accumulation consists of.

Now it must be clear why assets tend to be absent in the researches of radical thinkers: the conventional framework simply has no room for them — assets, like the rest of the financial entities, are admitted too late, after the 'material' elements have been given the monopoly of the explanatory power. CASP theory, on the other hand, offers the framework in which assets can be easily recognized as a gear of capitalism. Assets, as the analysis showed, are units of power, discrete entities that entitle owners to have control over (and benefit from) the action of social groups.

This article has offered only initial clues to elaborate an ontology of finance. Many questions remain to be answered. For example, I have defined capital as a 'virtual' structure. This concept needs to be clarified: what are the ontological properties of the 'virtual'? We have also seen that assets are only a subset of economic transactions, and that economic transactions are only one way, among other possibilities, of allocating power. How do specifically capitalist power relations interact with other power-allocating mechanisms? And how do assets interact with other forms of economic transactions? How do formally recognized assets interact with the vast world of the illegal economy?

For more than a century, our understanding of capitalism has been misled by the assumption of equivalence between commodities. The shift towards differences of power constitutes a much more promising field for research. *Let us, therefore, assume an exchange of non-equivalents...*

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