Capital as power

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Conventional theories of capitalism are mired in a deep crisis: after centuries of debate, they are still unable to tell us what capital is. Liberals and Marxists think of capital as an economic entity that they count in universal units of utils and abstract labor, respectively. But these units are totally fictitious: they can be neither observed nor measured. They don't exist. And since liberalism and Marxism depend on these non-existing units, their theories hang in suspension. They cannot explain the process that matters most – the accumulation of capital.

This breakdown is no accident. Every mode of power evolves together with its dominant theories and ideologies. In capitalism, these theories and ideologies originally belonged to the study of political economy – the first mechanical science of society. But the capitalist mode of power kept changing, and as the power underpinnings of capital became increasingly visible, the science of political economy disintegrated. By the late nineteenth century, with dominant capital having taken command, political economy was bifurcated into two distinct spheres: economics and politics. And in the twentieth century, when the power logic of capital had already penetrated every corner of society, the remnants of political economy were further fractured into mutually distinct social sciences. Nowadays, capital reigns supreme – yet social scientists have been left with no coherent framework to account for it.

The theory of Capital as Power offers a unified alternative to this fracture. It argues that capital is not a narrow economic entity, but a symbolic quantification of power. Capital has little to do with utility or abstract labor, and it extends far beyond machines and production lines. Most broadly, it represents the organized power of dominant capital groups to reshape – or *creorder* – their society.

This view leads to a different cosmology of capitalism. It offers a new theoretical framework for capital based on the twin notions of dominant capital and differential accumulation, a new conception of the state of capital and a new history of the capitalist mode of power. It also introduces new empirical research methods – including new categories; new ways of thinking about, relating and presenting data; new estimates and measurements; and, finally, the beginning of a new, disaggregate accounting that reveals the conflictual dynamics of society.

The Capitalist Cosmology

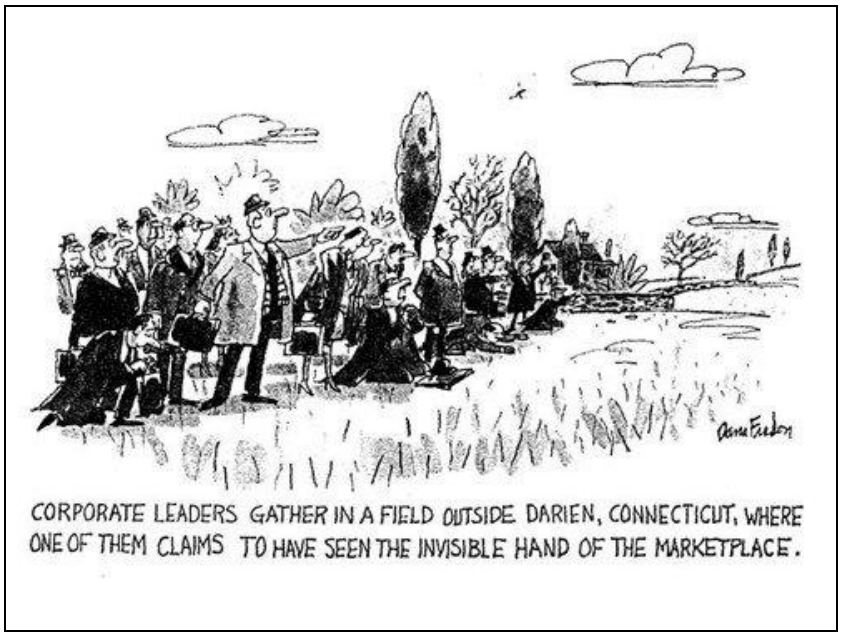
As Marx and Engels tell us at the beginning of *The German Ideology* (1970), the capitalist regime is inextricably bound up with its theories and ideologies. These theories and ideologies, first articulated by classical political economy, are much more than a passive attempt to explain, justify and critique the so-called economic system. Instead, they constitute an entire cosmology – a system of thinking that is both *active* and *totalizing*.

In ancient Greek, *Kosmeo* has an active connotation: it means "to order" and "to organize," and political economy does precisely that. It explains, justifies and critiques the world – but it also actively makes this world in the first place. Moreover, political economy pertains not to the narrow economy as such, but to the entire social order as well as to the natural universe in which this social order is embedded.

The purpose of this paper is to outline an alternative cosmology, one that offers the beginning of a totally different framework for understanding capitalism.

Of course, to suggest an alternative, we first need to know the thing that we contest and seek to replace. To lay out the groundwork, we begin by spelling out what we think are the hallmarks of the present capitalist cosmology.

Following this initial step, we enumerate the reasons why, over the past century, this cosmology has gradually disintegrated – to the point of being unable to make sense of and recreate its world. And then, in closing, we articulate some of the key themes of our own theory – the theory of capital as power.



Foundation I: Separating Economics from Politics

Political economy, liberal as well as Marxist, stands on three key foundations: (I) a separation between economics and politics; (II) a Galilean/Cartesian/Newtonian mechanical understanding of the economy; and (III) a value theory that breaks the economy into two spheres – real and nominal – and that uses the quantities of the real sphere to explain the appearances of the nominal one. This and the following two sections examine these foundations, beginning with the separation between politics and economics.

During the thirteenth and fourteenth centuries, there emerged in the city states of Italy and the Low Countries an alternative to the rural feudal state. This alternative was the urban order of the capitalist Bourg. The rulers of the Bourg were the capitalists. They were the owners of money, trading houses and ships; they were the managers of industry; they were the enterprising pursuers of new social technologies, the seekers of innovative methods of production.

These early capitalists offered an entirely new way of organizing society. Instead of the vertical feudal order in which privilege and income were obtained by force and sanctified by religion, they brought a flat civil order where privilege and income came from rational productivity. Instead of the closed loop of agricultural redistribution by confiscation, they promised open-ended industrial growth. Instead of ignorance, they brought progress and knowledge. Instead of subservience, they offered opportunity.[1]

Theirs was the *future regime of capital*, an explicitly "economic" order based on an endless cycle of production and consumption and the ever-growing accumulation of money.

Initially, the Bourg was subservient to the feudal order in which it emerged, but that status gradually changed. The Bourgs began to demand and obtain *libertates* – that is, *differential* exceptions from feudal penalties, taxes and levies. The bourgeoisie recognized the legitimacy of feudal politics, particularly in matters of religion and war. But it demanded that this politics not impinge on its urban economy. This early class struggle, the power conflict between the declining nobility and the rising bourgeoisie, is the origin of what we now consider as the separation of economics and politics.

The features of this separation are worth summarizing, beginning with the liberal view. Over the past half millennium, liberals have grown accustomed to classifying production, technology, trade, income and profit as aspects of the economy. By contrast, entities like state, law, army and violence are classified as belonging to politics.

The economy is taken to be the productive source. It is the realm of individual freedom, rationality, frugality and dynamism. It creates output, raises consumption and moves society forward. By contrast, politics is conceived as

coercive-collective. It is corrupt, wasteful and conservative. It is a parasitical sphere that latches onto the economy, taxing it and intervening in its operations.

Ideally, the economy should be left on its own. *Laissez faire* politics would produce the optimal economic outcome. But in practice, we are told, this is never the case: political intervention, constantly distorts economics, undermines its efficient operation and hampers the production of individual well-being. The liberal equation, then, is simple: the best society is one with the most economics and the least politics.

The Marxist view of this separation is different, but not entirely. For Marx, the liberal project of severing civil society from state is a misleading ideal, if not outright self-deception. The legal act of setting the private economy apart from public politics alienates property; and that very alienation, he says, serves to defend the private interests of capitalists against the collective pursuit of a just society. From this perspective, a seemingly independent political-legal structure is not antithetical but essential to the material economy: it allows the organs and bureaucracy of the state to legitimize capital, give accumulation a universal form and help maintain the capitalist system as a whole.

In other words, Marx readily accepts the liberal duality – but with a big twist. Where liberals see an inconsistency between economic well-being and political power, Marx sees two complementary forms of power: a material-economic base of exploitation and a supporting legal-state structure of oppression.

Historically, the coercive institutions and organs of the state evolve as *necessary* complements to the economic mechanism of surplus extraction: together, they constitute the totality that Marxists refer to as a "mode of production." But the relationship between these two aspects isn't symmetric: in any particular historical epoch, the nature and extent of state intervention are predicated on the concrete requirements of surplus extraction. To illustrate, during the nineteenth century, these requirements dictated the hands-off methods of *laissez faire*; toward the middle of the twentieth century, they called for the macro-management of Keynesianism; and at the beginning of the twenty-first century, they mandate the multifaceted regulations of financialized neoliberalism.

In other words, unlike in the liberal cosmology, where society consists of utility-seeking individuals for whom the state is a specialized service provider at best and a distortion at worst, in the Marxist cosmology the state is necessary to the very possibility of capitalism. But that necessity is conditioned on the state being distinct from – and ultimately subjugated to – the economy.

Following the footsteps of his classical predecessors, particularly Smith and Ricardo, Marx, too, prioritized economics over politics. Enthralled by the methods and triumphs of bourgeois science, he looked for latent reasons, for the ultimate mechanical forces that lie behind and move the social appearances. And just like his bourgeois counterparts, he, too, found the locus of these forces in the "economy."

The productive sphere, and especially the labor process, he argued, is the engine of social development. This is where use value is created, where surplus value is generated, where capital is accumulated. Production is the fountainhead. It is the ultimate "source" from which the other spheres of society draw their energy – energy that they in turn use to help shape and sustain the sphere of production on which they so depend. And so, although for Marx capitalist economics and politics are deeply intertwined, their interaction is that of two conceptually distinct and asymmetric entities.[2]

Foundation II: The Galilean/Cartesian/Newtonian Model of the Economy

The new capitalist order emerged hand in hand with a political-scientific revolution – a revolution that was marked by the mechanical worldview of Machiavelli, Kepler, Galileo, Descartes, Hobbes, Locke, Hume, Leibnitz and, most importantly, Newton.[3]

It is common to argue that political economists have borrowed their metaphors and methods from the natural sciences. But we should note that the opposite is equally true, if not more so: in other words, the worldview of the scientists reflected their society.

Consider the following examples.

- Galileo and Newton were deeply inspired by Machiavelli's Prince. The Prince relentlessly pursues secular power for the sake of secular power. His concern is not the general good, but order and stability. And he achieves his goals not with divine help, but through the systematic application of calculated rationality.

- Hobbes' "mechanical human being" was modeled after Galileo's pendulum, swinging between the quest for power on the one hand and the fear of death on the other – but, then, Galileo's own mechanical cosmos was itself a reflection of a society increasingly pervaded by machines.

- Newton could make up a world of independent bodies because he lived in a society that began to critique hierarchical power and praise and glorify individualism. He envisaged a liberal word in which every body was a lonely soul in the cosmos, inter-acting with but never dictating its will to other bodies. There is no ultimate cause in Newton, only inter-dependence.

- Descartes could emphasize the immediacy of cause and effect – the leaves move only if the wind touches them – because he lived in a world that increasingly contested religious, church-invoked miracles that operated at a distance.

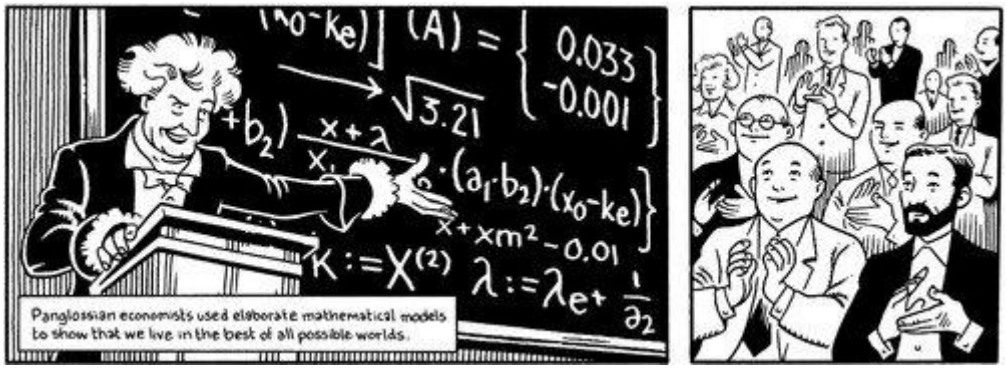
- Lavoisier invented his law of conservation of matter while he was building a wall around Paris, turning the city into a sealed container in order to capture the mass of its taxable income.

- Darwin's "survival of the fittest" was based on Malthus' population theory. And so on.

These relatively recent examples shouldn't surprise us. Human beings tend to impose on the cosmos the power structure that governs their own society. In other words, they tend to politicize nature.

In archaic societies the gods are usually numerous, relatively equal and hardly omnipotent. Hierarchical, statist societies tend to impose a pantheon of gods. And absolute rule tends to insist on a single god and a monotheistic religion. In each case, the forces that make up nature reflect, and in turn are reflected in, the forces that shape society.[4]

Capitalism is no exception to this historical rule. Consider the mechanical worldview. The liberal God is nothing but absolute rationality, or natural law. The language of God is mathematical, and therefore the structure of the universe is numerical. The universe that God created is flat, filled with numerous bodies that are not subservient and dependent, but free and interdependent. These bodies are propelled not by differential obligations, but by the universal force of gravity. They are attracted and repelled to one another not by the will of the Almighty, but through the interaction of force and counterforce. And, finally, they are ordered not by decree, but by the invisible power of equilibrating inertia.



This flat universe mirrors the flat ideals of liberal society. A liberal society consists of equally small actors, or particles, none of which is large enough to significantly affect the other particles/actors. These particles/actors are energized not by patriarchal responsibilities, but by scarcity – the gravitational force of the social universe. They are attracted to and repelled from one another not by feudal obligations, but through the universal-utilitarian functions of demand and supply. And they obey not a hierarchical rule, but the equilibrating force of the invisible hand of perfect competition.

Foundation III: Value Theory and the Duality of Real and Nominal

Capitalism is a system of commodities and therefore denominated in the universal units of price. To understand the nature and dynamics of this architecture, we need to understand prices, and that is why both liberal and Marxian political economies are founded on theories of value – the utility theory of value and the labor theory of value, respectively.

Value theories begin by splitting the economy itself into two parallel, quantitative spheres: real and nominal. The key is the real sphere. This is where production and consumption take place, where supply and demand interact, where utility and productivity are determined, where power and equilibrium compete, where well-being and exploitation take place, where surplus value and profit are generated.

Now, on the face of it, it seems difficult if not impossible to quantify the real sphere: the entities of this sphere are qualitatively different, and that qualitative difference makes them quantitatively incommensurate.

For the economists, though, this problem is more apparent the real. Physicists and chemists express all measurements in terms of five fundamental quantities: distance, time, mass, electrical charge and heat. In this way, velocity can be defined as distance divided by time; acceleration is the time derivative of velocity; force is mass times acceleration, etc. And economists, according to themselves, are able to do the very same thing.

Economics, they say, has its own fundamental quantities: the fundamental quantity of the liberal universe is the util, and the fundamental quantity of the Marxist universe is socially necessary abstract labor.[5] With these fundamental quantities, every real entity – from concrete labor, to commodities, to the capital stock – can be reduced to and expressed in the very same unit.

Parallel to the real sphere stands the nominal world of money and prices. This sphere constitutes the immediate appearance of the commodity system. But that is merely a derived appearance. In fact, the nominal sphere is nothing but a giant, symbolic mirror. It is a parallel domain whose universal dollar magnitudes merely reflect – sometimes accurately, sometimes not – the underlying real util and abstract labor quantities of production and consumption.

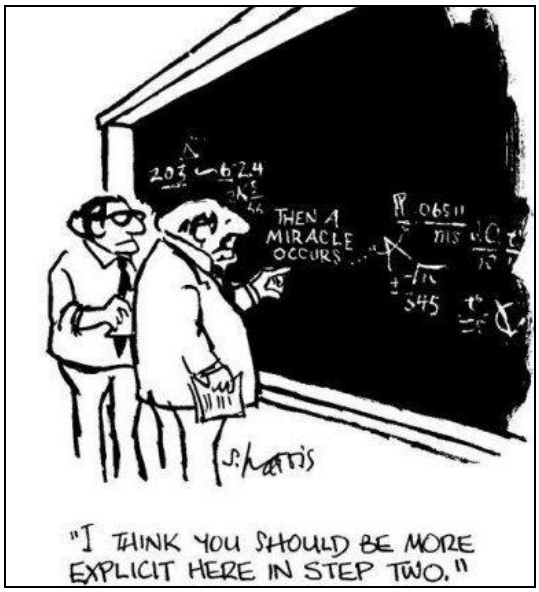
So we have a quantitative correspondence. The nominal sphere of prices reflects the real sphere of production and consumption. And the purpose of value theory is to explain this reflection/correspondence.

How does value theory sort out this correspondence? In the liberal version, the double-sided economy is assumed to be contained in a Newtonian-like space – a container that comes complete with its own invisible laws, or functions, whose role is to equilibrate quantities and prices. The Marxist version is very different, in that it emphasizes not equilibrium and harmony, but the conflictual/dialectical engine of the economy. However, here, too, there is a clear bifurcation between the real and the nominal. And here, too, there is an assumed set of rules – the historical laws of motion – that governs the long-term interaction of the two spheres.

Now, since these principles, or laws, are immutable, the role of the political economist, just like the role of the natural scientist, is simply to "discover" them.[6] The method of discovery builds on the research paradigm of Galileo, Descartes and Newton on the one hand, and on the application of analytical probability and empirical statistics on the other. In this method, discovery takes place through the fusion of experimentation and generalization – a method that liberals apply through testing and prediction (albeit mostly of past events), and that Marxists apply through the dialectics of theory and praxis.

Finally, unlike economics, politics doesn't have its own intrinsic rules. This difference has two important consequences. In the liberal case, the notion of a self-optimizing economy means that, with the exception of "externalities," political intervention can only lead to sub-optimal outcomes. In the Marxist case, politics and state are inextricably bound up with production and the economy. However, since politics and state have no intrinsic rules of their own, they have to derive their logic from the economy – either strictly, as stipulated by structuralists, or loosely, as argued by instrumentalists.

To sum up, then, the cosmology of capitalism is built on three key foundations. The first foundation is the separation between economics and politics. The economy is governed by its own laws, whereas politics either is derived from these economic laws or distorts them. The second foundation is a mechanical view of the economy itself – a view that is based on action and reaction, flat functions and the self-regulating forces of motion and equilibrium, and in which the role of the political economist is merely to discover these mechanical laws. The third foundation is the bifurcation of the economy itself into two quantitative spheres – real and nominal. The real sphere is enumerated in material units of consumption and production (utils or socially necessary abstract labor), while the nominal sphere is counted in money prices. But the two spheres are parallel: nominal prices merely mirror real quantities, and the mission of value theory is to explain their correspondence.



The Rise of Power and the Demise of Political Economy

These foundations of the capitalist cosmology started to disintegrate in the second half of the nineteenth century, with the key reason being the very victory of capitalism. Note that political economy differed from all earlier cosmologies in that it was the first to substitute secular for religious force. But, like the gods, this secular force was still assumed to be heteronomous; i.e., it was an objective entity, external to society.

The victory of capitalism changed this perception. With the feudal order finally giving way to a full-fledged capitalist regime, it became increasingly apparent that force is imposed not from without, but from within. Instead of heteronomous force, there emerged autonomous power, and that shift changed everything.[7] With autonomous power, the dualities of economics/politics, the separation of real/nominal and the mechanical worldview of political economy were all seriously undermined. With these categories undermined, the presumed automaticity of political economy no longer held true. And with automaticity gone, political economy ceased being an objective science.

The recognition of power was affected by four important developments. The first development was the emergence of totally new units. By the late nineteenth and early twentieth centuries, the notion of atomistic interdependent actors had been replaced by large hierarchical organizations – from big business and large unions to big government and large NGOs – organizations that were big enough to alter their own circumstances as well as to affect one another.

The second development was the emergence of new phenomena, unknown to the classical political economists. By the beginning of the twentieth century, total war and a seemingly permanent war economy had been established as salient features of modern capitalism, features that appeared no less important than production and consumption. Governments started to actively engage in massive industrial and macro stabilization policies, policies that completely upset the presumed automaticity of the so-called economic sphere. Capitalists incorporated their businesses, and in the process they bureaucratized and socialized the very process of private accumulation. The singular act of labor grew not simpler and more homogenous, but ever more complex, and workers no longer lived at subsistence. There emerged a labor aristocracy, the workers' standard of living in the main capitalist countries soared, and, with rising disposable income, issues of culture grew in importance relative

to work. Finally, the nominal processes of inflation and finance assumed a life of their own, a life whose trajectory no longer seemed to reflect the so-called real sector.

The third development was the emergence of totally new concepts. With the rise of fascism and Nazism, the primacy of class and production was challenged by a new emphasis on masses, power, state, bureaucracy, elites and systems.

Fourth and finally, the objective/mechanical cosmology of the first political-scientific revolution was undermined by uncertainty, relativity and the entanglement of subject and object. Science was increasingly challenged by anti-scientific vitalism and postism.

The combined result of these developments was a growing divergence between universality and fracture. On the one hand, the regime of capital has become the most universal system ever to organize society: its rule has spread to every corner of the world and incorporated more and more aspects of human life. On the other hand, political economy – the cosmology of that order – has been fatally fractured: instead of what once was an integrated science of society, there emerged a collection of partial and exclusionary social disciplines.

The mainstream liberal study of society was split into numerous social sciences. These social sciences – economics, political science, sociology, anthropology, psychology, and now also culture, communication, gender and other such offshoots – are each treated as a "discipline," a closed system guarded by proprietary jargon, unique principles and a bureaucratic-academic hierarchy.

But this progressive fracturing didn't save economics. Although most economists refuse to know it and few would ever admit it, the rise of autonomous power destroyed their fundamental quantities. With autonomous power, it became patently clear that both utils and abstract labor were logically impossible and empirically unknowable. And, sure enough, no liberal economist has ever been able to measure the util contents of commodities, and no Marxist has ever been able to calculate their abstract labor contents – because neither can be done. This inability is existential: with no fundamental quantities, value theory becomes impossible, and with no value theory, economics disintegrates.

The Neoclassical Golem

The neoclassicists responded by trying to shield their utils from the destructive touch of power. The process was two-pronged. First, they created a heavily subsidized fantasy world, titled General Equilibrium, where, buttressed by a slew of highly restrictive assumptions, everything still works (almost) as it should.[8] To achieve this end, though, they had to turn their economy into a null domain. They excluded from it almost every meaningful power phenomenon – and they did it so thoroughly that their perfectly competitive model now perfectly explains next to nothing.

The second step was to brand the excluded power phenomena "deviant," and then hand them over to the practitioners of two newly-created sub-disciplines: micro "distortions" and "imperfections", while government "interventions" and "shocks" were passed on to the macroeconomists. The problem is that, over the past half century, macroeconomics has grown into a theoretical Golem. They've expanded tremendously, both

bureaucratically and academically – and that expansion, instead of bolstering liberal cosmology, has seriously undermined it.

Although macroeconomists rarely advertize it and many conveniently ignore it, their models, whether good or bad, are all affected by – and in many cases are exclusively concerned with – power. This is a crucial fact, because, once power is brought into the picture, all prices, income flows and asset stocks become "contaminated." And when prices and distribution are infected with power, the utility theory of value becomes irrelevant.

Now, until the 1950s and 1960s, neoclassicists could still pretend that the extra-economic "distortions" and "shocks" were local, or at least temporary, and therefore redundant for the grander purpose of value analysis. But nowadays, with the micro analysis of distribution, and with governments directly determining 20 to 40 percent of economic activity and price setting and indirectly involved in much of the rest, power seems everywhere. And if power is now the rule rather than the exception, what then is left of the utility-productivity foundations of liberal value theory?

The Neo-Marxist Fracture

Unlike the neoclassicists, Marxists chose not to evade and hide power but to tackle it head on – although the end result was pretty much the same. To recognize power meant to abandon the labor theory of value. And since Marxists have never come up with another theory of value, their worldview has lost its main unifying force. Instead of the original Marxist totality, there emerged a neo-Marxist fracture.

Marxism today consists of three sub-disciplines, each with its own categories, logic and bureaucratic demarcations. The first sub-discipline is neo-Marxist economics, based on a mixture of monopoly capital and permanent government intervention. The second sub-discipline comprises neo-Marxist critiques of capitalist culture. And the third sub-discipline consists of neo-Marxist theories of the state.

Now, it's worth stressing here that both Marx and the neo-Marxists have had very meaningful things to say about the world. These include, among other things, a comprehensive vista of human history – an approach that negates and supersedes the particular histories dictated by elites; the notion that ideas are dialectically embedded in their concrete material history; the link between theory and praxis; the view of capitalism as a totalizing political-power regime; the universalizing-globalizing tendencies of this regime; the dialectics of the class struggle; the fight against exploitation, oppression and imperial rule; and the emphasis on autonomy and freedom as the motivating force of human development.

These ideas are all indispensable. More importantly, the development of these ideas is deeply enfolded, to use David Bohm's term, in the very history of the capitalist regime, and in that sense they can never be discarded as erroneous.[9]

But all of that still leaves a key issue unresolved. In the absence of a unifying value theory, there is no logically coherent and empirically meaningful way to explain the so-called economic accumulation of capital – let alone to account for how culture and the state presumably affect such accumulation. In other words, we have no explanation for the most important process of all – the accumulation of capital.

Capitalism, though, remains a universalizing system – and a universalizing system calls for a universal theory. So maybe it's time to stop the fracturing. We don't need finer and finer nuances. We don't need new sub-disciplines to be connected through inter- and trans-disciplinary links. And we don't need imperfections and distortions to tell us why our theories don't work.

What we do need is a radical Ctrl-Alt-Del. As Descartes tells us, to be radical means to go to the root, and the root of capitalism is the accumulation of capital. This, then, should be our new starting point.

The Capitalist Mode of Power

In the remainder of the paper we briefly outline some of the key elements of our own approach to capital. We begin with power. We argue that capital is not means of production, it is not the ability to produce hedonic pleasure, and it is not a quantum of dead productive labor. Rather, capital is power, and only power.

Further, and more broadly, we suggest that capitalism is best viewed not as a mode of production or consumption, but as a mode of power. Machines, production and consumption of course are part of capitalism, and they certainly feature heavily in accumulation. But the role of these entities in the process of accumulation, whatever it may be, is significant primarily through the way they bear on power.

To explicate our argument, we start with two related entities: prices and capitalization. Capitalism – as we already noted, and as both liberals and Marxists correctly recognize – is organized as a commodity system denominated in prices. Capitalism is particularly conducive to numerical organization because it is based on private ownership, and anything that can be privately owned can be priced. This situation means that, as private ownership spreads spatially and socially, price becomes the universal numerical unit with which the capitalist order is organized.

Now, the actual pattern of this order is created through capitalization. Capitalization, to paraphrase physicist David Bohm, is the generative order of capitalism. It is the flexible and all-inclusive algorithm that *creorders* – or continuously creates the order of – capitalism.

Capitalizing Power

What exactly is capitalization? Capitalization is a symbolic financial entity, a ritual that the capitalists use to discount to present value risk-adjusted expected future earnings. This ritual has a very long history. It was first invented in the capitalist Bourgs of Europe, probably sometime during the fourteenth century, or even earlier. It overcame religious opposition to usury in the seventeenth century to become a conventional practice among bankers. Its mathematical formulae were first articulated by German foresters in the mid-nineteenth century. Its ideological and theoretical foundations were laid out at the turn of the twentieth century. It started to appear in textbooks around the 1950s, giving rise to a process that contemporary experts refer to as "financialization." And by the early twenty-first century, it has grown into the most powerful faith of all, with more followers than of all the world's religions combined.

As Ulf Martin argues in his unpublished 2009 paper "Rational Control and the Magma of Reality," capitalization is an operational-computational symbol. Unlike ontological symbols, capitalization isn't a passive representation of the world. Instead, it is an active, synthetic calculation. It is a symbol that human beings create and impose on the world – and in so doing, they shape the world in the image of their symbol.

Capitalists – as well as everyone else – are conditioned to think of capital as capitalization, and nothing but capitalization. The ultimate question here is not the particular entity that the capitalist owns, but the universal worth of this entity defined as a capitalized asset.

Neoclassicists and Marxists recognize this symbolic creature – but given their view that capital is a (so-called) real economic entity, they don't quite know what to do with its symbolic appearance. The neoclassicists bypass the impasse by saying that, in principle, capitalization is merely the image of real capital – although, in practice, this image gets distorted by unfortunate market imperfections. The Marxists approach the problem from the opposite direction. They begin by assuming that capitalization is entirely fictitious – and therefore unrelated to the actual, or real capital. But, then, in order to sustain their labor theory of value, they also insist that, occasionally, this fiction must crash into equality with real capital.

In our view, these attempts to make capitalization fit the box of real capital are an exercise in futility. As we already saw, not only does real capital lack an objective quantity, but the very separation of economics from politics – a separation that supposedly makes such objectivity possible in the first place – has become defunct. And, indeed, capitalization is hardly limited to the so-called economic sphere.

In principle, every stream of expected income is a candidate for capitalization. And since income streams are generated by social entities, processes, organizations and institutions, we end up with capitalization discounting not the so-called sphere of economics, but potentially every aspect of society. Human life, including its social habits and its genetic code, is routinely capitalized. Institutions – from education and entertainment to religion and the law – are habitually capitalized. Voluntary social networks, urban violence, civil war and international conflict are regularly capitalized. Even the environmental future of humanity is capitalized. Nothing escapes the eyes of the discounters. If it generates expected future income, it can be capitalized, and whatever can be capitalized sooner or later is capitalized.

The encompassing nature of capitalization calls for an encompassing theory, and the unifying basis for such a theory, we argue, is power. The primacy of power is built right into the definition of private ownership. Note that the English word "private" comes from the Latin *privatus*, which means "restricted." In this sense, private ownership is wholly and only an institution of exclusion, and institutional exclusion is a matter of organized power.

Of course, exclusion does not have to be exercised. What matter here are the right to exclude and the ability to exact pecuniary terms for not exercising that right. This right and ability are the foundations of accumulation.

Capital, then, is nothing but organized power. This power has two sides: one qualitative, the other quantitative. The qualitative side comprises the institutions, processes and conflicts through which capitalists constantly *creorder* society, shaping and restricting its trajectory in order to extract their tributary income. The quantitative side is the process that integrates, reduces and distils these numerous qualitative processes down to the universal magnitude of capitalization.

Industry and Business

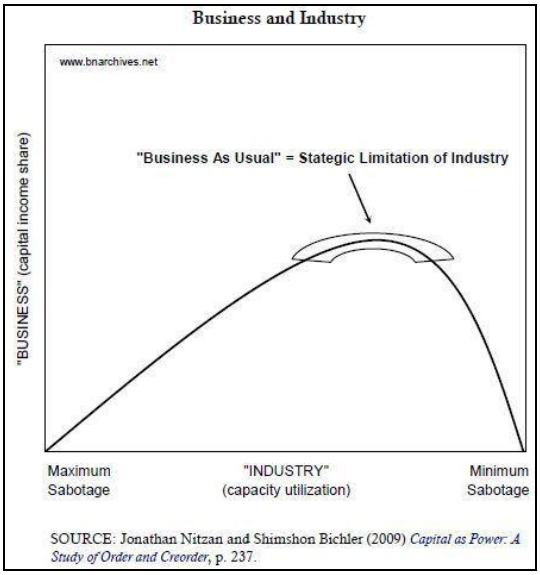
What is the object of capitalist power? How does it creorder society? The answer begins with a conceptual distinction between the creative/productive potential of society – the sphere that Thorstein Veblen called industry – and the realm of power that, in the capitalist epoch, takes the form of business.[10]

Using as a metaphor the concept of physicist Denis Gabor, we can think of the social process as a giant hologram, a space crisscrossed with incidental waves. Each social action – whether an act of industry or of business – is an event, an occurrence that generates vibrations throughout the social space. But there is a fundamental difference between the vibrations of industry and the vibrations of business. Industry, understood as the collective knowledge and effort of humanity, is inherently cooperative, integrated and synchronized. It operates best when its various events resonate with each other. Business, in contrast, isn't collective; it is private. Its goals are achieved through the threat and exercise of systemic prevention and restriction – that is, through strategic sabotage. The key object of this sabotage is the resonating pulses of industry – a resonance that business constantly upsets through built-in dissonance.

Let's illustrate this interaction of business and industry with a simple example. Political economists, both mainstream and Marxist, postulate a positive relationship between production and profit. Capitalists, they argue, benefit from industrial activity – and, therefore, the more fully employed their equipment and workers, the greater their profit. But if we think of capital as power, exercised through the strategic sabotage of industry by business, the relationship becomes nonlinear – positive under certain circumstances, negative under others.[11]

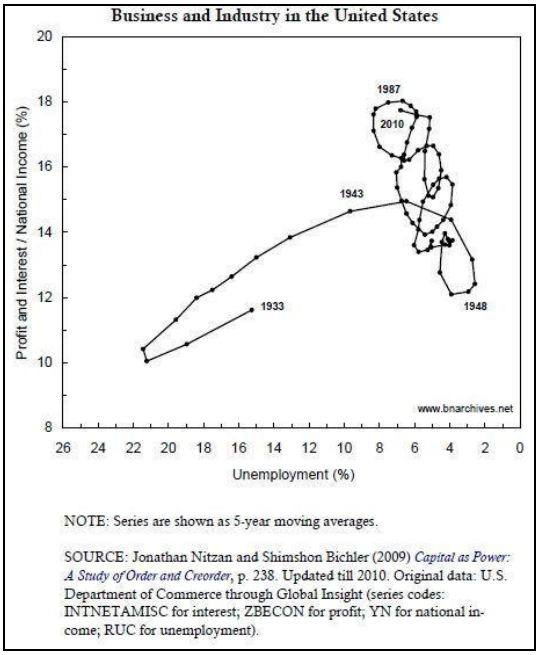
This latter relationship is illustrated, hypothetically, in Figure 1. The chart depicts the utilization of industrial capacity on the horizontal axis against the capitalist share of income on the vertical axis. Now, up to a point, the two move together. After that point, the relationship becomes negative. The reason for this inversion is easy to explain by looking at extremes. If industry came to a complete standstill at the bottom left corner of the chart, capitalist earnings would be nil. But capitalist earnings would also be zero if industry always and everywhere operated at full socio-technological capacity – depicted by the bottom right corner of the chart. Under this latter scenario, industrial considerations rather than business decisions would be paramount, production would no longer need the consent of owners, and these owners would then be unable to extract their tributary earnings. For owners of capital, then, the ideal, Goldilocks condition, indicated by the top arc segment, lies somewhere in between: with high capitalist earnings being received in return for letting industry operate – though only at less than full potential.

Figure 1



Now, having laid out the theory, let's look at the facts. Figure 2 shows this relationship for the United States since the 1930s. The horizontal axis approximates the degree of sabotage by using the official rate of unemployment, inverted (notice that unemployment begins with zero on the right, indicating no sabotage, and that, as it increases to the left, so does sabotage). The vertical axis, as before, shows the share of national income received by capitalists.

Figure 2



And lo and behold, what we see is very close to the theoretical claims made in Figure 1. The best position for capitalists is not when industry is fully employed, but when the unemployment rate is around 7 percent. In other words, the so-called "natural rate of unemployment" and "business as usual" are two sides of the same power process: a process in which business accumulates by strategically sabotaging industry.

Differential Accumulation and Dominant Capital

Now, power, we argue, is never absolute; it's always relative. For this reason, both the quantitative and qualitative aspects of capital accumulation have to be assessed differentially, relative to other capitals. Contrary to the claims of conventional economics capitalists are driven not to maximize profit, but to beat the average and exceed the normal rate of return. Their entire existence is conditioned by the need to outperform, by the imperative to achieve not absolute accumulation, but *differential accumulation*. And this differential drive is

crucial: to beat the average means to accumulate faster than others; and since the relative magnitude of capital represents power, capitalists who accumulate differentially increase their power (to emphasize, capitalist power here relates not to the narrow neoclassical notion of market power, but to the broad strategic capacity to inflict sabotage).

The centrality of differential accumulation, we claim, means that the analysis of accumulation should focus not only on capital in general, but also and perhaps more so on *dominant capital* in particular – that is, on the leading corporate-state alliances whose differential accumulation has gradually placed them at the centre of the political economy.

Figure 3 plots the differential accumulation of dominant capital in the United States since 1950. Dominant capital is approximated here using two slightly different measures: one is the largest 100 firms in the Compustat universe (comprising firms listed in the United States); the other is the largest 100 U.S. firms in the Compustate universe (comprising firms that are both incorporated and listed in the United Sates). The constituents of each group are determined annually on the basis of market capitalization (the reason for using two different measures is that aggregate data for market capitalization cover all listed firms regardless of their country of incorporation, whereas the aggregate profit data of the national accounts pertain only to U.S.-incorporated firms). The chart shows two differential series – one for capitalization, based on the first definition of dominant capital, and another for net profit based on the second definition of dominant capital.

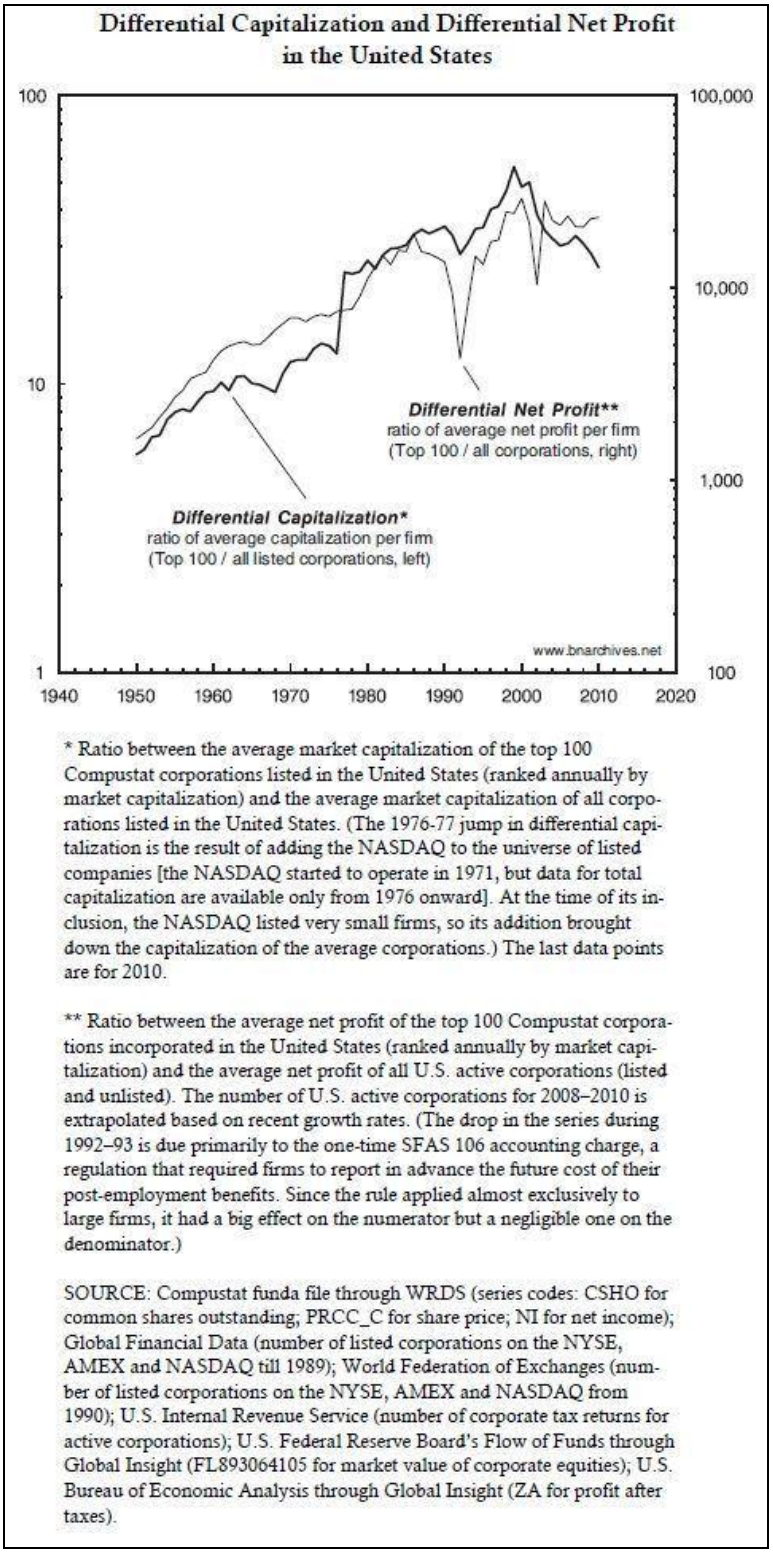
Differential capitalization denotes the ratio between the average market value of dominant capital (U.S.- listed firms) and the average market value of all U.S.- listed firms. The series shows that, during the 1950s, a typical dominant capital corporation had 7.4 times the capitalization (read power) of the average listed company. By the 2000s, this ratio had risen to 35.5 – nearly a fivefold increase.

This measure, though, significantly underestimates the power of dominant capital. Note that the vast majority of firms are not listed. Since the shares of unlisted firms are not publicly traded, they have no market value; the fact that they have no market value keeps them out of the statistical picture; and since most of the excluded firms are relatively small, differential measures based only on large listed firms end up understating the relative size of dominant capital.

In order to get around this limitation, we plot another differential measure – one that is based not on capitalization but on net profit – and that measure includes all U.S.- incorporated firms, listed and unlisted. The computational steps are similar. We calculate the average net profit of a dominant-capital corporation (the total net profit of the top 100 Compustat companies incorporated and listed in the United Sates divided by 100); we then compute the average net profit of a U.S. corporation (total corporate profit after taxes divided by the number of tax returns of active corporations); finally, we divide the first result by the second.

As expected, the two series have very different orders of magnitude (notice the two log scales). But they are also highly correlated (which isn't surprising, given that profit is the key driver of capitalization). This correlation means that we can use the broadly based differential profit indicator as a proxy for the power of dominant capital relative to all corporations. And the result is remarkable. The data show that during the 1950s, a typical dominant capital corporation was 2,586 times larger/more powerful than the average U.S. firm. By the 2000s, this ratio had risen to 22,097 – nearly a ninefold increase.

Figure 3

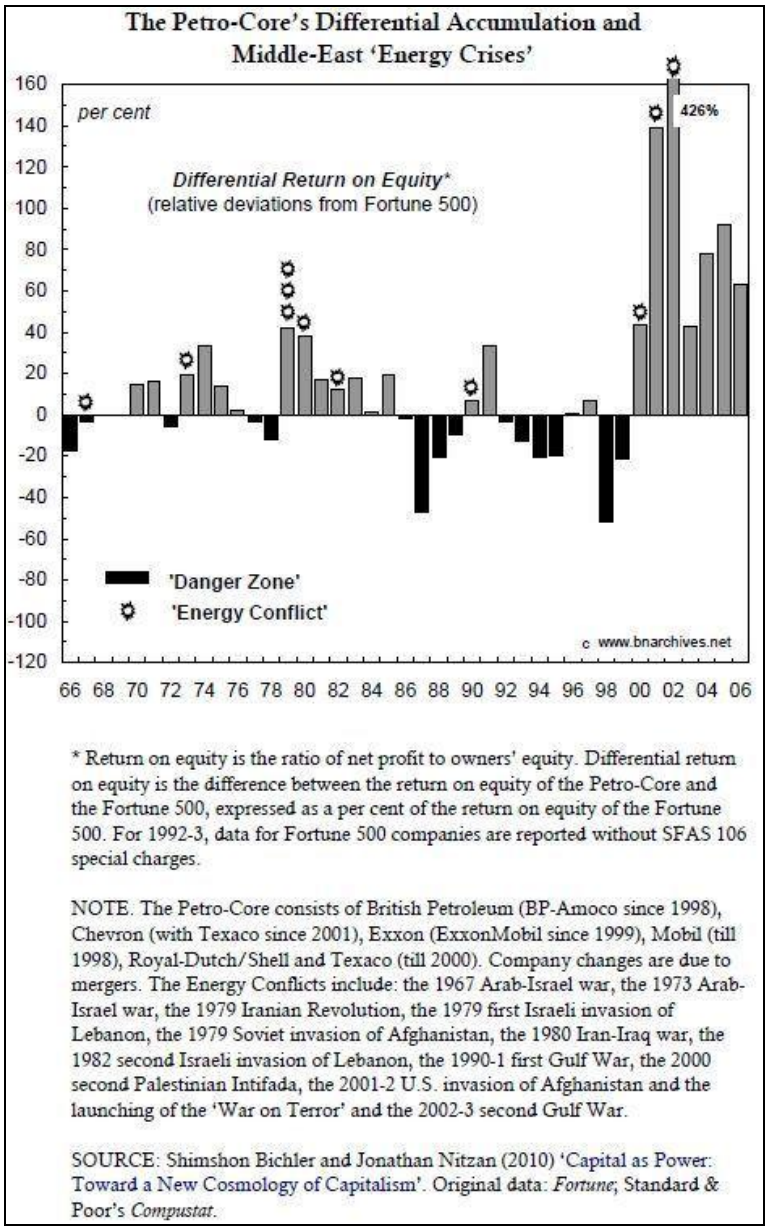


Capital as Power in Middle-East Energy Conflicts

Our research offers various historical studies of differential accumulation in which we examine the quantities and qualities of capital as power. One of these is our work on the Middle East.[12] Figure 4 shows the differential performance of the world's six leading privately owned oil companies relative to the Fortune 500 benchmark. Each bar in the chart shows the extent to which the oil companies' rate of return on equity exceeded or fell short of the Fortune 500 average. The gray bars show positive differential accumulation – i.e. the per cent by which the oil companies exceeded the Fortune 500 average. The black bars show negative differential accumulation; that

is, the per cent by which the oil companies trailed the average. Finally, the little explosion signs in the chart show the occurrences of Energy Conflicts – that is, regional energy-related wars.

Figure 4



* Return on equity is the ratio of net profit to owners' equity. Differential return on equity is the difference between the return on equity of the Petro-Core and the Fortune 500, expressed as a per cent of the return on equity of the Fortune 500. For 1992-3, data for Fortune 500 companies are reported without SFAS 106 special charges.

NOTE. The Petro-Core consists of British Petroleum (BP-Amoco since 1998), Chevron (with Texaco since 2001), Exxon (ExxonMobil since 1999), Mobil (till 1998), Royal-Dutch/Shell and Texaco (till 2000). Company changes are due to mergers. The Energy Conflicts include: the 1967 Arab-Israel war, the 1973 Arab-Israel war, the 1979 Iranian Revolution, the 1979 first Israeli invasion of Lebanon, the 1979 Soviet invasion of Afghanistan, the 1980 Iran-Iraq war, the 1982 second Israeli invasion of Lebanon, the 1990-1 first Gulf War, the 2000 second Palestinian Intifada, the 2001-2 U.S. invasion of Afghanistan and the launching of the 'War on Terror' and the 2002-3 second Gulf War.

SOURCE: Shimshon Bichler and Jonathan Nitzan (2010) 'Capital as Power: Toward a New Cosmology of Capitalism'. Original data: *Fortune*; Standard & Poor's *Compustat*.

Now, conventional economics has no interest in the differential profits of the oil companies, and it certainly has nothing to say about the relationship between these differential profits and regional wars. Differential profit is perhaps of some interest to financial analysts, and Middle-East wars are the business of experts in international relations and security analysts. But since each of these phenomena belongs to a completely separate realm of society, no one has ever thought of relating them in the first place. And yet, these phenomena are not simply related. In fact, they could be thought of as two sides of the very same process – namely, the global accumulation of capital as power. The chart depicts three remarkable relationships.

- First, every energy conflict was preceded by the large oil companies trailing the average. In other words, for an energy conflict to erupt, the oil companies first had to differentially decumulate – a most unusual prerequisite from the viewpoint of any social science.

- Second, every energy conflict was followed by the oil companies beating the average. In other words, war and conflict in the region, which social scientists customarily blame for distorting the aggregate economy, have served the differential interest of certain key firms at the expense of other key firms.

- Third and finally, with one exception, in 1996-7, the oil companies never managed to beat the average without there first being an energy conflict in the region. In other words, the differential performance of the oil companies depended not on production, but on the most extreme form of sabotage: war.

These relationships, and the conclusions they give rise to, are nothing short of remarkable. First, the likelihood that all three patterns are the consequence of statistical fluke is negligible. In other words, there must be something very substantive behind the connection of Middle-East wars and global differential profits.

Second, these relationships seamlessly fuse quality and quantity. In our research on the subject, we show how the qualitative power aspects of international relations, superpower confrontation, regional conflicts and the activity of the armament and oil companies, on the one hand, can both explain and be explained by the quantitative global process of capital accumulation, on the other.

Third, all three relationships have remained stable for half a century, allowing us to predict, in writing and before the events, both the first and second Gulf Wars. This stability suggests that the patterns of capital as power – although subject to historical change from within society – are anything but haphazard.

Toward a New Cosmology of Capitalism

This type of research has gradually led us to the conclusion that political economy requires a fresh start.

At about the same time, in 1991, Paul Sweezy, one of the greatest American Marxists, wrote a piece that assessed *Monopoly Capital* (1966), a deservingly famous book that he wrote together with Paul Baran twenty-five years earlier. In that piece, Sweezy admitted that there is something very big missing from the Marxist and neoclassical frameworks: *a coherent theory of capital accumulation*. His observations are worth quoting at some length because they show both the problem and why economics cannot solve it:

Why did *Monopoly Capital* fail to anticipate the changes in the structure and functioning of the system that have taken place in the last twenty-five years? Basically, I think the answer is that its *conceptualization of the capital accumulation process is one-sided and incomplete*. In the established tradition of both mainstream and Marxian economics, we treated capital accumulation as being essentially a matter of adding to the stock of existing capital goods. But in reality this is only one aspect of the process. Accumulation is also a matter of adding to the stock of financial assets. The two aspects are of course interrelated, but the nature of this interrelation is problematic to say the least. The traditional way of handling the problem has been in effect to assume it away: for example, buying stocks and bonds (two of the simpler forms of financial assets) is assumed to be merely an indirect way of buying real capital goods. This is hardly ever true, and it can be totally misleading. This is not the place to try to point the way to a more satisfactory conceptualization of the capital accumulation process. It is at best an extremely complicated and difficult problem, and I am frank to say that I have no clues to its solution. But I can say with some confidence that achieving a better understanding of the monopoly capitalist society of today will be possible only on the basis of a more adequate theory of capital accumulation, with special emphasis on the interaction of its real and financial aspects, than we now possess. (Sweezy 1991, emphases added)

The stumbling block lies right at the end of the paragraph: “the interaction between the real and financial aspects.” Sweezy recognized that the problem concerns the very concept of capital – yet he could not solve it precisely because he continued to bifurcate capital into “real” and “financial” aspects. And that shouldn’t surprise

us. “Whatever happens,” writes Hegel (1821: 11), “every individual is a child of his time; so philosophy too is its own time apprehended in thoughts. It is just as absurd to fancy that a philosophy can transcend its contemporary world as it is to fancy that an individual can overleap his own age, jump over Rhodes.” Sweezy and his *Monthly Review* group had pushed the frontier of Marxist research for much of the post-war period, but by the 1990s their ammunition had run out. They recognized the all-imposing reality of finance, but their bifurcated world could not properly accommodate it.

As younger researchers socialized in a different world, we didn’t carry the same theoretical baggage. Uninhibited, we applied the Cartesian Ctrl-Alt-Del and started by assuming that there is no bifurcation to begin with and therefore no real-financial interaction to explain. All capital is finance and only finance, and it exists as finance because accumulation represents not the material amalgamation of utility or labor, but the *creordering* of power.

To challenge capitalism is to alter and eventually abolish the way it *creorders* power. But in order to do so effectively, we need to comprehend exactly what is it that we challenge. Power, we argue, isn’t an external factor that distorts or supports a material process of accumulation; instead, it is the *inner* driving force, the means and ends of capitalist development at large. From this viewpoint, capitalism is best understood and contested not as a mode of consumption and production, but as a mode of power. Perhaps this understanding of what our society is could help us make it what it should be.

Notes:

1. The historical tension between the civil urban space of economy and capital and the coercive violent space of politics and state is explored from different perspectives in Robert Lopez’s *The Birth of Europe* (1967), Charles Tilly’s *Coercion, Capital, and European States, AD 990-1992* (1992) and Henri Lefebvre’s *The Urban Revolution* (2003).

2. This separation haunts even the most innovative Marxists. Henry Lefebvre, for example, introduced the notion of urban society as a way of transcending the base-superstructure of Marx’s industrial society – only to find himself describing this new society in terms of … economics and politics.

3. The fascinating evolution and path-breaking heroes of the mechanical worldview are described in Arthur Koestler’s unparallel history of cosmology, *The Sleepwalkers* (1959). The philosophical underpinnings of the scientific revolution, particularly in physics, are examined in Zev Bechler’s *Newton’s Physics and the Conceptual Structure of the Scientific Revolution* (1991).

4. The history of the notion of force, from ancient thought to modern physics, is told in Max Jammer’s *Concepts of Force* (1957). The social myths of the gods are narrated in Robert Graves’ *The Golden Fleece* (1944) and analyzed in his study of *The Greek Myths* (1957).

5. The notion of abstract labor was first articulated by Karl Marx in his *Contribution to the Critique of Political Economy* (1859). The term util was coined by Irving Fisher in his Mathematical Investigations in the *Theory of Value and Price* (1892).

6. The notion that there exists an external rationality – and that human beings can do no more than discover this external rationality – was expressed, somewhat tongue in cheek, by the number theorist Paul Erdös. A Hungarian Jew, Erdös did not like God, whom he nicknamed SF (the supreme fascist). But God, whether likable or not, predetermined everything. In mathematics, God set not only the rules, but also the ultimate proofs of those rules. These proofs are written, so to speak, in “The Book,” and the mathematician’s role is simply to decipher its pages (Hoffman 1998). Most of the great philosopher-scientists – from Kepler and Descartes to Newton and Einstein – shared this view. They all assumed that the principles they looked for – be they the “laws of nature” or the “language of God” – were primordial and that their task was simply to “find” them (Agassi 1990).

7. The difference between heteronomy and autonomy is developed in the social and philosophical writings of Cornelius Castoriadis – see, for example, his *Philosophy, Politics, Autonomy* (1991).

8. We say “almost” since the issue isn’t really settled. The highest academic authorities on the subject still debate, first, whether, even under the most stringent (read socially impossible) conditions, a unique general equilibrium can be shown to exist (at least on paper); and, second, if such equilibrium does exist, whether or not it is likely to persist.

9. The notion of enfoldment, or the nesting of different levels of theory, consciousness and order, is developed in David Bohm's *Wholeness and the Implicate Order* (1980) and David Bohm and David Peat's *Science, Order, and Creativity* (1987).

10. Cf. The Theory of Business Enterprise (Veblen 1904) and *Absentee Ownership and Business Enterprise in Recent Times* (Veblen 1923).

11. Note that these considerations pertain only to the quantitative aspect of industrial activity; they do not deal with the qualitative nature of its output, or the conditions under which the output is produced. Obviously, these latter aspects are equally important, and here, too, business sabotage often operates to restrict the human potential by forcing social activity into trajectories that are as harmful as they are profitable.

12. See, for example, Jonathan Nitzan and Shimson Bichler, *The Global Political Economy of Israel* (2002: Ch. 5), Shimshon Bichler and Jonathan Nitzan, "Dominant Capital and the New Wars" (2004) and Jonathan Nitzan and Shimson Bichler, "New Imperialism, or New Capitalism?" (2006).

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