As is already well known, the theory of capital was in the heat of the debate in the 1960s. In fact, the discussion of the theory of capital and the so-called Cambridge controversies appeared to be a crucial stance in the economic discourse at that time. Note that the famous economist, Joan Robinson, an important participant in this widespread discussion, posed the path-breaking question that referred to the opportunity of the measuring of the capital. All these debates and the Cambridge controversies proved to be a strong basis for a robust critique of circularity of the neoclassical reasoning in economic theory. The grounds are very simple: questioning the sanctified aggregate productive function or the meaning of capital as a single magnitude, necessarily leads us to the reconsideration of the basic postulates of the economic profession, and to the deepest practical issues as well. Actually, the theory of capital as a factor of production has always been host to a lot of dissenting orientation, challenging the mainstream thinking in economic theory. What is at stake here is not only the critique of economic theory, but the engagement of economic discourse in relation to capitalism. Theory of capital could be a catalogue of heresies. The related intellectual exercise is both scholarly and political.

Yet, if we analyze current text books written by orthodox authors it seems that *plus ça change, plus c’est la même chose*. The aggregate production function is still with us, the theory of capital reflects the old beliefs, and the static analysis of microeconomic problems is still presented as a substantial achievement. Consequently, neoclassical reasoning on capital still determines the paths of economic theory. There are well-established conventions in the theory of capital despite the demystifying attacks on the standard postulates made by heterodox economists. The fallacies seem to reappear in altered forms. This is the background of the work of Jonathan Nitzan and Shimshon Bichler. Namely, this book represents a far reaching reconsideration of the theory of capital from a heterodox perspective. The notion of capital, on which the theories of production and distribution rely, is the object of extensive discussion. This notion is a topic of vast practical and theoretical importance in the economic theory. It concerns nothing less than the main pillars of economic theory. The authors make an admirable effort to shed light on the standard issues in the theory of capital such as heterogeneous capital goods, heterogeneity between capital as a factor of production and outputs, surrogate production function, capital as measured value quantity, increasing return, switching of techniques etc. It is not surprising that the
theory of capital makes it possible for authors to rethink and redefine the whole economic discourse. They are convinced that there are crucial problems left unexplained and unaddressed in orthodox theory of capital (As we see later, the capital is not treated adequately in the Marxist camp, either. Despite the differences, Marxist orientations rest on the convergent premises in relation to orthodoxy). This orientation is illustrated by abundant examples showing how far the relations in dynamics of capital may differ from what the orthodox theory claims. The economic theories could not tell us where the substance of capital is located. Therefore, what is capital – precisely this simple question directs the authors in their efforts. This theoretical position is, of course, compatible with the aspects of different theories. In actual fact, their work aims to track the route that brings different critiques concerning the theory of capital into a coherent discourse. The book gives the reader an opportunity to interpret different lines of development of theory of capital. It is a book weighing 460 pages, and comprised of ideas laid out earlier by the authors. Nitzan and Bichler produced an exciting and rich volume situated within radical thinking.

First, this is a highly ambitious book with numerous consequences. There is intention to emancipate economic thought from the etherealized spheres of choice and behaviors or from the paradigm of the disembodied minds. The authors offer nothing less than a comprehensive account of the historical dynamics of the capitalist economic system including the narration on the origin and genesis of capitalism, the transition from feudalism to capitalism, the inner dynamics and the transformation processes of capitalism. Their attention is focused on historical materials loaded with contingencies: it should be known (unfortunately it is not) that the historical dimensions, “historico-relative” aspects are of fundamental importance for the heterodox economists. Accordingly, the profound bifurcations in the history serve to demonstrate the need of denaturalization of capitalism. Besides, the historical accounts prepare the way to articulate the epistemology and ontology of capitalism. Such an articulation may be exceedingly useful.

Second, the book, with its technical and theoretical entries, deals with some of the central issues of capital and distribution, questions of economic philosophy, methodology and research methods, and some of the most debated policy and political issues, which provide a rich and articulated picture of capitalism from the angle of the theory of capital. The authors of the book are using the analytic and the synthetic methodology at the same time. For example, the reader can follow the dimensions and achievements of the analytic method concerning the sophisticated technical explanations of capitalization. But, let me emphasize, that what we are confronted with here is not just some technical issue within the specialized field of the theory of capital, but a much more general problem of the position of capital in capitalism. What the authors want to suggest is that the measurement of capital as a factor of production is not only a technical issue since it amounts to the main determination in capitalism. They would refuse any attempt to isolate the technical facts from the social relations. So, technical facts are associated with the broader social context. Hence, the quantitative measure of capital, or the technical estimation of capitalization is itself dependent on the distribution of income, and therefore on the conflict-related relations in society. This orientation requires a synthetic point of view. Aware of the
difficulties in the mathematization of human relationships and economic principles ("algebra of human choice"), Nitzan and Bichler provide an endeavor to rethink the extremely difficult relationship between the quantitative and qualitative aspects of economy. It is no coincidence that the authors systematically treat the theory of capital which strikingly bears the stamp of mathematical method. What is so provocative and heterodox in their approach, is the attempt to reconsider the meanings of quantities in our economic life. The question which they ask is whether the Marxist or neoclassical camp that started from abstract labor or marginal utility are in position to articulate the multidimensional being of capital. There is no intention to deny that mathematization of qualitative relationships, or social contexts may have much to contribute to the explanation of economic problems. The crude opposition between the quality and quantity is hollow. But as long as the standard mathematical techniques are enshrined in the certain theory of capital we are forced to distort the actual forces that determine the economic phenomena in capitalist society. In the measurement of capital we are dealing with the issue of how the quantities are constructed - this problem can not be ignored here.

Third, before making further comments about different aspects of this book, it is to be mentioned that the authors self-interpretation refers to the logic of political economy, in the sense of study of the intertwinement between politics and economics ("this book is not about economics", p. 2). This sounds like a depiction of a standard political-economic book. But in that case we would not go far enough. That is to say, here, the authors try to redefine the frame of relation between politics and economics and to find strong lines of continuity between these spheres. Politics and economics are coterminous. And this course points out that it is illegitimate to look upon economics as a sphere of human interactions delimited from other spheres of humanity. Someone may say at this point: this course is not new. Indeed, we can find similar tendency in methodological approach of Ludwig von Mises (one of the most central representatives of the Austrian theory of economy), that is, the negation of economics as a separate sphere of human activity. But for von Mises the economy is coterminous with the rationality and is connected with every type of human activity. For Nitzan and Bichler the phenomenon of power, actually, the non-neutrality concerning the power in capitalist society, opens the way of continuity between politics and economics. In this respect, their orientation has an exceptionally different significance when compared to the approach of von Mises. The point here is that the authors put power at the centre of the research, and assess that economic theory incorrectly ignores power. But this is not true at all. We are familiar with economic theories that are confronted with power-like phenomena and acknowledge the relevance of power in economy. Someone could say: the capital is affected by power, naturally. However, this is not enough in order to understand the roles of the authors of this book. The central point is that there are no external relations between capital and power realized by the representatives of economic theory post-festum. "The new conceptual framework" says that capital is power; it exists qua mode of power. The authors deconstruct the economic analysis based on the separate being of capital and power. There is an immanent relationship between capital and power. Capitalism is a mode of power. Nitzan and Bichler argue against the silence on power in relation to the realm.
of capital. We need to think the unthought in the theory of capital. This approach brings us at once to the centre of the problem of the theory of capital.

Let me now to explain in more detail some theses following the paths of Nitzan and Bichler. What we must start with, the authors argue, is the dynamics of power that explains the motion of capital in modern economy. Capital is not a category embedded in material reality. It is not a material thing as in neoclassic theory and is not a social relationship as in Marxism, but “symbolic representation of power” (p. 7), “organized power at large” (p. 9), vendible commodity in capitalism, that makes possible the “commodification of power” (ibid.). Therefore, this approach excludes the binary opposition or dualities between economic efficiency and political power, or between state formation and genesis of the capital. Rendering obsolete the stubborn empirical quantifying of capital, this structure of argumentation rests on a crucial assumption: namely, capitalist economy is not to be treated from the perspective of efficiency, but from the angle of power. There is a continuous process of social arrangement in capitalism; in fact, the power manifests as accumulated capital. Marxism and neoclassic economic theories (I suppose that this concerns all theories that follow neoclassical postulates; Nitzan and Bichler tell even the story about the “liberal debacle” in the 20th century) fail, too, in confronting the power; they cannot fit power into value analysis or into the utility logic. Neoclassical and Marxist theories represent the economic reality across the frame of “dual quantity”. They postulate an unobservable ontological entity (value, for example), and are convinced that this entity proves to be quantifiable. Marxists are not able to give explanation on price relations, neoclassical economists are wedded to the mathematical mystification of circular logic. In the realm of economic theory we could see a parallel tendency at work. The abstractions employed by Marxists or the mathematical refinement by neoclassical economists or precision of algebraic formulation do not solve major problems in the theory of the accumulation of capital. Thereby these theories misrepresent how and why capital accumulates, and what is the object of the accumulation of capital. Here seems to lay the decisive danger of these theories and the secret of the confusions which have enmeshed the modern economic thought. There is little doubt that Nitzan and Bichler come much closer to Marxism, but it does not obliterate the fact that in their argumentation we can find a strong homology between modern economic theories concerning the theory of capital. For the authors, the Marxist story of derivation of prices from value is not convincing. The systematic divergence between the observable price of the asset and the unobservable value proves that this narration is flawed.

Theories of capital come to depict the behavior in a distorted form: these theoretical orientations try to explain the productivity of capital depending on capital goods, but the main point is to highlight the capitalization from the position of the bearer of the capital. In addition, focusing on the productivity, mentioned theories misrepresent the essence of capital: this economic phenomenon can not be equated with “productivity” or “production”. The production is only one aspect of capitalization; thereby the sphere of production does not explain the phenomenon of capitalization. Capitalization and production turn out to be two diverse logics. It is necessary to re-examine the conceptual structure that makes it possible for us to comprehend the
processes of capitalization. Capitalization as a fundamental mechanism of capitalism represents the present value of assets and refers to the “expected earnings discounted for the probability that the earnings will not be realized” (p. 153). So, capitalization is to be understood in connection to the expectations and perceived risk concerning the future events. Providing a power-based explication of risk and expectation, Nitzan and Bichler fix our attention to the process-related and temporalized nature of capital.

There is another misleading heritage in economic theory, namely, the distinction between the nominal and real entities, between the monetary superstructure expressed in prices and material base of value. Nitzan and Bichler intend to articulate a theory of capital that transcends the fetish of material production and the division between the real and nominal aspects in economy. Their theory of capital contradicts “nominal and real mismatch”, and “doublespeak” in economic theory, given that the financial sphere also includes material dimensions.

Here begins the next alternative path of the authors of this book: the heroes of their theoretical endeavour are Thorstein Veblen, Lewis Mumford, and Michael Kalecki. Veblen, the leader of the so-called institutional economics movement, has managed to elucidate the absentee ownership, finance and credit as the “central power mechanisms of capitalism” (p. 14). His theory pondered on the far-reaching implications of power in relation to the dynamics of capital in capitalist economy. Separating the industry and business as two opposing realms of economy, Veblen helps to understand the manifestations of power. Narrating on the technology as power, and projecting a technology-based social mega machine, Mumford, an influential historian of technology, has provided a constructive model for the study of capitalism. Capital is a modern mega-machine. When Kalecki, a left-wing Keynesian, developed the meanings of the essential notion of “degree of monopoly”, he substantially contributed to the explication of distribution of income as the definition of power. Outstanding among his achievements was precisely the theory of distribution as power. Kalecki offered a fruitful theoretical amalgam between the class and oligopoly analysis, and the aggregate view of Keynesian.

With these theoreticians, Nitzan and Bichler are building a theory of capitalism that is interpreted “as a creation of order, creorder” (p. 18). This notion is intended to fuse the “state and becoming”, “stasis and dynamism” (ibid.) in the economic life of capitalism that is considered as a persistently “growing system”. By stating that the capitalization can not be depicted in accordance with the standard logic of maximization of profit, or maximization of surplus value, the authors provide a heterodox plot on the driving forces of capitalism. Contrasting to the logic of maximization, that is to say, to the process by which a firm determines the price and output level that returns the greatest profit, Nitzan and Bichler develop the logic of differential accumulation. The augmentation of the power of dominant capital needs differential accumulation regimes, in fact differential earnings and capitalization, and not the logic of maximization or average return. This step keeps distance from the perspective that every factor of production should be awarded at its average productivity. Let me quote a typical assessment of this book: “although capitalists constantly try to cut their costs, this endeavour merely keeps them running on empty. The
way to beat the average is not to cut cost but to increase prices. Those who inflate their prices faster than the average end up redistributing income in their favour – and in so doing augment the elemental power of their organization and boost their differential accumulation” (p. 19).

The gist of this argumentation is that the process of capitalization has nothing to do with the explanation of economic determinations propagated by Marxism or neoclassicism. These theories fail in connecting the explanation to the neutral determinations (“laws of nature”, or “laws of history”, “inner laws of capitalism”) ignoring the power-related process of capitalization. There is only determination based on the practice of ruling class which appears to be the ultimate source of economic determinations. The authors make clear that their aim concerns the reinterpretation of the determinism in economic theories. Someone could say that this point is crucial in Marxism, too: capitalists get a profit because of their peculiar social power. True, the theory of value in Marxism performs exactly of function highlighting the power-related feature of capitalism. The theory of value serves to bring the social relations in economic contexts. But some warnings should be given. As explained in this book, the authors narrate a story from the standpoint of capitalists who create the “creator”. This includes self-valorizing practices of capital, the practice of determination by capital concerning the measurement of economic success. Hence, Nitzan and Bichler lead us to the self-referentiality of capital that transcends the standard relationships between quantity and quality, and the usual techniques of measurement in capitalist economy. They exclude the struggle between labor and capital as a factor of explanation, and accept only the relevance of multifarious relationships between the bearers of capital. The relationships between different capitalization practices represent a mechanism that is amenable to theorization of capital. The above mentioned notion, “differential accumulation”, evidently demonstrates this orientation. In short, this is not Marx’s standpoint. His argumentation does not present the viewpoint of the capitalists. The emphasis is on the relationship between capitalists in order to explain the logic of a system, is what Marx refuted. The competitive relationships within the context of differential accumulation regimes are the result, and not the cause. But, from the perspective of the authors of the book we can find here the decisive limit of Marx, and Marxism. The Marxian version of labor theory of value (that products can be commensurate on the basis of quantities of human labor) is refuted in order to emancipate the economic thinking on capital.

Critiquing Marxism and neoclassical theories, Nitzan and Bichler plead for the interpretative move in political economy. They demand non-dual account of economic reality mediated by the reinterpretation of theory of capital. Demonstrating the temporal constitution of capital, the authors offer an analysis of capitalization defined in relation to the expectations and risk. Their endeavour to bring to light the power-relatedness of capital has a lot of merits and could change our perceptions on the quantitative aspects of capitalist economy. They have proved that economic theory amounts to the uncritical acceptance of quantitative dimensions as given. Such an approach runs counter to mainstream reasoning. It is welcomed. I believe that we can read a worthy contribution to political economy. But, in spite of the praiseworthy intentions, the approach followed in this exciting book raises a number of significant
questions. What is crucial here is whether the alternative Nitzan and Bichler propose is radical enough. For example, I am not convinced that value theory is redundant. The argumentation of this book on capitalist “creorder” is based on the standpoint of capitalization. It focuses on the aspect of the anticipating expectations of the representatives of capital. But is it not a reductive view?

Is it not too simplistic to exclude the conflicts between the capitalists and non-capitalists from the realm of analysis of the capital? Can this view represent the most relevant parts of totality in capitalism? Can we stop here?