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Contingent Labor and Omnipotent Capital: The Open Secret of Political Economy

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I. Introduction

Despite the passage of nearly 150 years of contentious debate and controversy, not only Marx's Labor Theory of Value¹ but also the corpus of his *methodology*² in political economy of *differentia specifica* of capitalism—particularly the depth of class polarization, height of capital accumulation, and the limitless spread of capitalist social relations in today's twenty-first-century reality—is right on the mark. Marx's incisive and insightful *method* is particularly relevant when put into action at the intersection of contemporary labor process, present technological change, and accumulation of capital beyond the border of nation-state for purpose of illuminating the present-day state of capitalism. As we shall demonstrate below, technological change and accumulation of wealth obtain no *epochal* meaning without a critical examination of the labor process, in the face of unremitting outsourcing and universal contingency of laboring population everywhere.

Our objective in this article is to capitalize on dialectical *interaction* of the above facets and to demonstrate that, from the standpoint of *social capital* (i.e., capital in its macroeconomic meaning); technological change in capitalism is another name for ultimate and unending *cheapening of labor power* across the board. And to this end, this leads to simultaneous value formation and value destruction in conjunction with ceaseless *skilling* and *deskilling* of labor at the various levels of economic activity. Accumulation of global capital and transformation of the labor process are reflective of the twofold expression of the dynamics of global technological change in capitalism, a careful study of which underpins the theoretically-informed strategy for the multitude of organized labor movements and thus proves potentially beneficial to progressive economic and social change across the globe. We intend to explore the role of technological change and its potential effects on the labor process holistically and—far from the fragmented individual production—according to the dynamic of social capital. This entails emphasis on the global spread of capitalist social relations and the extension of the hegemony of social capital over labor power—and by implication, over wage labor—everywhere. Here, we view capitalism as a system of hegemonic social relations that tend to unify the world economy through the

incessant creation of *real subsumption* and renewal of the subordination of labor universally under social capital. The universality of such subordination, of course, can be measured by the spread of capitalist social relations and materialization of *social form* of value— replicated in transnationalization of social capital—across the globe.

Historically, capitalism has emerged as the veritable *tendency* toward production and accumulation of surplus value, following a multifaceted, varied, and tortuous period of “primitive accumulation.”³ The compulsion for increasing the production of surplus value through accumulation, via competition, requires systematization of *expansion* and *intensification* of control, and subordination of labor under capital. Yet, there were (are) physical limits to human endurance beyond which the subject will perish and accumulation would come to the grinding halt. In other words, in this case, subordination and further exploitation of labor essentially depend upon the length and limitation of working day, which ultimately would limit the accumulation of capital based upon the production of *absolute* surplus value. This, of course, is not what *capitalism proper* is cracked up to be.⁴ In capitalism proper, however, via the unremitting pace of technical change, and nonstop subversion of existing skills and formation of new skills, capitalism, as a *sui generis* mode of production, overcomes the *physical* and *moral* limitations of the working day. This expanded production and reproduction is indeed possible by transforming the labor process from *absolute* surplus-value production to the production based on extraction of *relative* surplus value—via the application of technology and intensified labor activity.⁵ This transformation thus changed the course of class struggle universally and set the historical stage for qualitatively new dynamics in the subsumption of labor under capitalism.

In Section II, the concept of social capital shall be explored in order to demonstrate the misuse (and abuse) of this term by present-day liberals and to fall back on its original meaning based upon Marx’s overall project on the *differentia specifica* of capitalist mode of production. Issues surrounding the technical change and global transformation will be clarified in Section III. Here, we emphasize the evolution and epochal import of globalization, dynamics of technological change and value formation, and the universal devaluation of labor power. In

Section IV, we shall introduce and argue the process of skilling/deskilling of labor in terms of Bina's hypothesis of "destructive creation," and its organic synthesis with Schumpeter's "creative destruction," particularly concerning the desirability of a *unified theory*, i.e., a unified dialectic of technological change and skill formation in *differentia specifica* of capitalism. In the meantime, it will be shown that the "deskilling thesis," advanced by neo-Marxist Braverman is a half-truth based on the false impression of Marx's methodology, on the one hand, and total reliance on Marx's *incomplete* theory of skill formation, on the other. The question of labor's global challenges and revitalization shall be discussed in Section V. Despite the residue of traditional appeal to nationalism, we will argue that labor internationalism (i.e., unifying all global struggles in one) is the only credible countervailing response to the transnationalization of capital, and that this question becomes much more urgent in the view of proliferation global social capital, particularly through the preempting pace of technology, and the divide-and-conquer global strategies—such as outsourcing—at nearly all levels of economic activity worldwide; this will be followed by a brief concluding remark.

II. What Is *Social Capital*?

Nowadays, the concept of *social capital* is promoted by the traditionally *axiomatic* and thus *unsocial* (if not *antisocial*) neoclassical economics, and utilized in several social science disciplines, including Economic Development, International Relations, Political Science and Sociology (see Fine 2001). Social capital has also become a buzzword in the World Bank and in the U.S. military establishment—the Pentagon alike. Nowadays, both the bleeding-heart liberals and seemingly tough-minded "radical" economists refer to it with enthusiasm and an air of approval. And, sadly, in the lexicon of neoconservatives "social capital" is the most favorite phrase, only second to "regime change."

On the liberal side, Putnam (1992: 167) defines social capital as "[...] features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions." Others support this view by defining social capital as the

capability of people working in-groups and participating in organizations for a common purpose (Coleman 1988). “‘Human capital’,” though, in this context, “refers not only to skills but also to employers’ policies and to labor-market institutions that promote commitment, flexibility, and cooperation. A more appropriate term [another liberal contender claims] would be ‘social capital’” (Jacoby 1995: xi). On the neoconservative side, Fukuyama capitalizes on the subjective notion of “trust” and “social capital” in the context of state intervention, where social capital would allegedly make up for the absence of “human capital” (Fukuyama 1995: 16-17).

Against all these contemporary revelations, Marx was probably the first to enunciate the significance of *social capital*, as an *outcome* of his multi-volume theory of production, exchange and distribution nearly one hundred fifty years ago. He revealed, in the span of some forty years, that social capital is a macroeconomic *category* reflective of social relations and, as such, indigenous to the *differentia specifica* of capitalism. Quite remarkably anticipating the preoccupation (or, perhaps, ignorance) of modern-day social scientists, Marx aptly concluded that speaking of *capital* as a natural (or, worse, cultural) phenomenon not only misidentifies nature (or culture) but also conceals the fault of *commodity fetishism* (Marx 1977 [1867]: 163-77). Following Marx, and contrary to these distortions, one of us has pointed out:

[The concept of social capital pertains to] the realm of macroeconomic activity and the accumulation process as a whole. It is an all-encompassing network of capital in its collectivity and undivided whole that provides a meaningful historical framework for individual capital. Social capital here constitutes a body composed of the individual cells. However, the [simple] aggregation of all [these] individual cells may not represent the body as a whole (Bina 1997: 47).

Here, we attempt to utilize the notion of social capital in its original and intended meaning, in conjunction with change in technology in a macroeconomic framework; and only then we try to conceptualize the effect of technology on the individual capital. Our point of

departure thus relies on a holistic framework that grants methodological priority to *social capital*. In other words, first, we start with the question of structure, and then anticipate the complexities of individual action and choice within the dynamics of technological change. Social capital, thus, tends to encapsulate and reflect the overall structure of social relations in capitalism (see Bina et al. 1998a). Social relations underpin the overall dynamics of capital accumulation from which the indispensable tendencies of capital-in-general emanate. The content of these relations, however, are historically specific to capitalism. The two essential hierarchical levels within social relations in capitalism are (1) the overall social structure and (2) the congruent institutions at each social stage. Both structure and institutions, in turn, encompass the domains of economy, polity, and civil society. In a simple analogy, the distinguishing features of socioeconomic structure in capitalism, in comparison with other historical systems, are perhaps parallel with the basic structure of DNA in human species as opposed to that of other species—including plants and micro organisms. The institutions, on the other hand, may be considered as the evolutionary forms and variations on the basic theme. Yet, in order to capture the dynamics of mutual interactions of basic structure and institutions in capitalism, it is necessary to conceptualize and examine an *evolutionary stage theory* of capitalist development. As a result, social relations are the manifestation of definite, historically-determined structural causation and structural transformation in capitalism.

Social capital, thus, is the embodiment of such evolutionary dynamics, and accordingly reflective of the reconstruction of a historically-specific, all-encompassing culture (as opposed to traditional and archaic variety) of capitalism. Universal culture of capitalism, as opposed to “culture” in pre-given and pre-capitalist terms, is itself an immediate product of the evolutionary dynamics of capitalist social relations. Yet, production of culture has a wider task of social reconstruction—i.e., reconstruction of the pre-given, traditional cultural forms—and subordination (including, contradictory reinforcement) of the archaic forms under capitalism. This is contrary to the popularization of bourgeois writers (including the neoconservative ideologues) who take cultures as given and treat them, without differentiation, either naturally or

despite of capitalism. Moreover, the treatment of culture as raw material for “social capital” is ad hoc and ahistorical. Finally, for obvious reasons, every social system tends to create and reconstruct its own cultural realm. Notwithstanding, there might be cultures that, while not an immediate product of capitalism, would nevertheless contribute to the effectiveness of *civic organizations*. But these cultures are *prima facie external* and thus have nothing to do with the increase or decrease of *social capital*—unless they were internalized already—in which case one cannot speak of social capital *before* social capital. Thus, clearly—from methodological standpoint—it is evident that the liberal view of social capital is no more than a whimsical tautology.⁶

We are also convinced that the contention over culture *vs.* structure is a futile “chicken-and-egg” dispute, because the question itself is utterly unable to take into account the dialectical relationship of the articulation of culture and the structural causation of social capital. We hold the view that capitalism is a versatile social system in which the pre-existing materials and social elements—i.e., those elements that were originated from capitalism’s *internal* dynamics—are likely to be appropriated for the purpose of capital’s reproduction. The domain of “civil society” and “civic organization” in this dynamic is no exception. There are indeed plenty of examples throughout the history of capitalism, such as “primitive accumulation,” colonial conquest, etc., that simply confirm the above points. Moreover, in nearly all these cases, the pre-existing *indigenous* “culture,” may prove either favorable or unfavorable during the rise of capitalism and development of the subsequent civic society. Yet, it would be erroneous to suppose that such *pre-existing* historical conditions are a legitimate part of capitalism proper (social capital) that has yet to emerge. In other words, this would take us to the dilemma of circularity once again. To put it in Marx’s original framework:

But capital is not a thing [or an autonomous social and cultural attribute], it is a definite social relation of production pertaining to *a particular historical social formation*, which

simply takes the form of a thing and gives this thing a specific social character” (Marx 1981 [1894]: 953, emphasis added).⁷

In this connection, it is noteworthy that those who tend to identify “culture” as social capital—i.e., social capital not by its history but by its pre-history—appear to be, both metaphorically and methodologically, intoxicated by *commodity fetishism*. Wider ramification of commodity fetishism (and its uncritical acceptance) is to *invent* capitalism *before* capitalism. This mystifying social state tends to turn the social relations among people into the relation of exchange among the inanimate (material) objects that are produced by human labor:

The mysterious character of the commodity-form [in capitalism] consists therefore simply in the fact that the commodity reflects the social characteristics of men’s own labor as objective characteristics of the products of labor themselves, as the socio-natural properties of these things [...]. It is nothing but the definite social relation between men themselves, which assumes here, for them, the fantastic form of a relation between things [...]. I call this the fetishism, which attaches itself to the products of labor as soon as they are produced as commodities [...] (Marx 1977 [1867]: 164-65).

Finally, we take issue with those who hastily *identify* social capital with the action of *state* (Fukuyama 1995: 16-17). State in capitalist society is both the *mediator* as well as the *product* of the social relations. Indeed, our discussion so far negates any contention that social capital is the product of state intervention. On the one hand, being an immediate result of social relations, the capitalist state without capitalism remains an empty shell—in which case the argument turns circular. On the other hand, being the mediator, the action of capitalist state may lead to promotion or (inadvertent) demotion of social capital—in which case speaking of such actions as social capital is analogous to crude logical reduction. It is true that the intensity of state intervention in capitalist society may accelerate or decelerate the pace of capital

accumulation. Yet, the state itself does not replace social capital, except, perhaps, in the case of highly integrated *state capitalism*, a model that potentially might be a reminder of former the Soviet State.⁸ In this case, classifying state intervention as “social capital,” as neoconservative Fukuyama does, neither allows any social, political, and/or civic space for the relative autonomy nor permits any interaction for mediating capitalist institutions.

III. Technological Change and Globalization

Historically, the control over science and scientific activity, through the introduction of machinery, enabled the capitalist mode of production to overcome the most significant barrier, the limitation of working day. And, once genie was out of the bottle, there emerged universal reliance on application and, by implication, transformative power of technology without end. This, of course, is another of way of looking at the constant urge for enhancement of labor productivity and thus reduction of the value of labor power (per unit of output) by capital. The fact that so much has been written on the mastery of *machine* and *enslavement* of humanity by way of literary novels and/or other genres—particularly in the nineteenth and twentieth centuries—owes to the recognition of this universal state of affair, even by non-economists. Moreover, further intensification of capitalist control over the labor process necessitated massive waves of technological change, either through the secular trends or by way of the cycles of production or both (see *Cambridge Journal of Economics*, “Critical Survey: The Economics of Technical Change” 1994). Therefore, while technology often appears as an external (*alien*) force, its very existence nevertheless springs from the internal dynamics of labor process itself; and its universal effect is to cheapen the labor power beyond the domain of individual capital. With the introduction and diffusion of technological innovations, social labor productivity rises; that is to say, a given mass of living labor tends to transform an ever larger quantity of raw materials and means of production into an ever increased quantity of cheaper commodities. At the level of social capital, technological change increases the technical composition of capital (TCC)—decreases the proportion of *use value* of variable capital relative to use value of its

constant counterpart. This leads to an increase in *organic composition of capital* (OCC)—an increase in value composition reflecting the increase in TCC, prior to the newly-emerged value magnitude—in line with new technology. After the dust settles, so to speak, the renewed circuit of social capital reflects the generalization of new (more efficient) technology together with the reduction in the magnitude of value, prices of production, and thus market prices of commodities.

The analysis of technological change in capitalism, therefore, necessitates a three-way distinction among TCC, OCC, and VCC, which *inter alia* denotes the change in the magnitude of value before and after the technical change through crisis. Moreover, these dynamics are the essential ingredients of continuity and change within the production process via the periodic crises of renewal in all market-oriented capitalist economies. This position is consistent with Marx's dynamics concerning the effect of technology, devaluation of labor power, and the law of tendency (and *internal* counter-tendency) of falling rate of profit in capitalism.⁹ As Marx illuminates:

The composition of capital is to be understood in a twofold sense. As *value*, it is determined by the proportion in which it is divided into constant capital, or the value of the means of production, and variable capital, or the value of labor-power, the sum total of wages. As *material*, as it functions in the process of production, all capital is divided into means of production and living labor-power [...] I call the former the value-composition, the latter the technical composition of capital [...]. [In addition,] [...] I call the *value* composition of capital, in so far as it is determined by its technical composition and mirrors the changes in the latter, the *organic* composition of capital (Marx, 1977 [1867]: 762, emphases added).¹⁰

For capital to emerge as a unique *de facto* global entity, it would be essential that there will be a global social circuit in place in terms of *commodity*, *money*, and *productive forms*, thus

inaugurating the unification of spheres of circulation and production, and enabling the possibility of transnationalization capital worldwide. Parenthetically, these definite *forms*—i.e., commodity capital, finance capital, and productive capital—are themselves reflective of the movement and thus a moment of social capital as a whole in *transformation*. Historically, this task has been accomplished through the cumulative transnationalization of commodity, money, and productive capital, thus establishing and spreading a complete network of social capital globally (see Palloix 1977). To be sure, the rise of colossal and integrated entities, known as transnational corporations (TNCs), which are now prevalent and operating throughout the world, is but an aspect of this process. In other words, today's TNCs are cumulative outcome of the transnationalization of social capital in all its forms. As a result, while the existence of TNCs is contingent upon the precondition of transnationalization of commodity and money forms, these mega corporations owe their essential character to the transnationalization of production and globalization of technology.¹¹ Given the fact that the process of technological change is intertwined with restructuring of the transnational labor process—which reflects the necessity of treating the latter beyond the boundaries of nation-state—any relevant analysis of today's technology (regardless of its location) is simply transnational. This is particularly crucial in the view of the increasing activities of TNCs toward the transfer, transmission, and the diffusion of technology, which in turn affect the locus of generation of the technological innovation globally (see *CJE*, “Special Issue on Technology and Innovation” 1995).¹² In an instance, TNCs account for seventy-five percent of all research and development (R&D) in OECD countries (Archibugi and Michie 1995: 130). Hence, it would not be an exaggeration to suggest, as Freeman does, that the transnational corporation has now emerged as:

[...] a very powerful agency tending towards the worldwide standardization of technology and output, in this sense [...] do indeed unite the human race. Since the basic laws of physics, chemistry, biology and other sciences apply everywhere, there is an

underlying unified technology which can in principle be applied anywhere with identical or very similar results [...] (Freeman 1995: 15).

The reader has to bear in mind that the emergence of TNCs is itself a subset of the dynamic forces that brought the world economy into the epoch of globalization. In other words, pointing to the movement of capital, in its manifold configuration, beyond the nation-state alone is indeed necessary but not sufficient for the arrival of globalization. Sufficiency of globalization is where the entire social relations of capital—and thus *social capital*—will take hold over the entire globe. That is where the *social whole* would be able to complete the *conquest* of the entire mode of production. Moreover, this social whole, we contend, has emerged roughly since the early 1970s, and vigorously taken hold throughout the 1980s, 1990s, and beyond.¹³ The result has been the establishment of a newly-formed (global) social relation, along with technological and institutional power structure, beyond the boundaries of nation-states. Globalization as a *process* has rendered obsolete the *international* system, which was centered on the conceptual building blocks of nation-states and national economies. To be sure, the tendency of globalization has become a social whole beyond the inter-state system of now defunct Pax Americana, even before the implosion of the Soviet side and the emergence of today's so-called transitional market economies (see Bina 1993, 1994a, 1994c, 1995, 1997, 2004). This point is both methodologically and ideologically crucial, since globalization obtains its official inauguration, not by the departure of the Soviets *per se* but by internal ravage of the Pax Americana—despite much jubilation by neoconservatives and good ole cold-warriors here in the United States. For more than three decades, the world economy—and along with it global social capital—has transcended the Keynesian notion of national economies. In the context of social capital's competitive attempt at cheapening of labor power, transnational capital has forced unprecedented restructuring of production at the cross-section of both goods and services, including shifts in the location of basic industries, “captive imports,” runaway shops, and of course—outsourcing. The tendency to outsourcing, while primarily has so far been a one-way

street, will no longer remain so if the effects and—more important—*meaning* of globalization are to be taken seriously. Outsourcing is now beginning to be decidedly generalized—transferring multi-directionally the work from any part of the planet to any other—through the widening patchwork of uneven development and deepening class polarization both *intranationally* and *internationally*.¹⁴ At this present stage, global accumulation is centered upon unifying control over the emerging transnational labor processes toward the universal task of disciplining and subordinating in every nook and cranny of the world today (Bina 1997; Bina and Davis 1996, 2000, 2002). This represents the collective *character* and *tendency* of global social capital, and thus reflects the magnitude of worldwide polarization and global crisis in contemporary capitalism.

The present transnational labor process is *prima facie* a point of departure from the past arrangements, i.e., beyond the international trade, or simple transfer of physical capital, financial capital or technology from location to location. This transformation—i.e., in dialectical terms, from potential to actual—mirrors the universal status of *labor* and *capital* as de facto global macroeconomic categories—and, as such, constitutes as the material basis of global class relation. As a result, one needs to approach the very complex and concrete subjects, such as transnational trade, transnational capital movement, and technological change from the standpoint of these two categories.¹⁵ More concretely, for instance, there is a need to reexamine the relationship between the evolution of capitalism in the advanced capitalist countries (ACCs) and its transformation in the less developed countries (LDCs), *beyond* the national boundaries. Attention must be directed toward the global conquest of capitalist mode of production, not to the apparent distinctions contrived by national boundaries or symptomatic distinctions that are often traditionally put forth in terms of regional trading blocs, or the so-called center-periphery dichotomy. The geographical expansion of social capital has always been disruptive and at times with *uneven* pace. For example, uneven economic development presently reveals itself both *intranationally* and *internationally* among both ACCs and LDCs, given the expansion and reproduction of social capital globally. One advantage of starting with the analysis of capitalist

social relations, rather than capital as a national, physical or monetary entity, is the universal insight and recognition of the *internal* (capitalist) transformation of many of the so-called third-world nations today. All of this has occurred in conjunction with the sweeping internal transition that is peculiar to the labor processes of industrialized capitalist countries. The context of this *conjunction* is the transformation of world economy, especially since World War II.

First, a large number of post-colonial states have emerged from the colonial division of labor and “primitive accumulation” of capital since the end of World War II. Import-substitution and its sequel, “export platform,” industrialization were universal economic strategies that, by and large, prepared these countries to overcome their internal barriers to capitalist development, and facilitated their entry into the postwar international market. Moreover, these strategies led to *internal* propagation of capitalism within many of these countries, and paved the way for embracing the *external* penetration of transnational capital. A careful examination of post-World War II land-reform programs in the “Third World” would unmistakably point to widespread separation of the immediate producer from the means of production globally. This resulted in enormous supply of potential wage-labor for import-substitution and, subsequently, export-led industries in many LDCs—as massive rural unemployment and disguised (urban) unemployment had become the hallmark of these countries. Here, in their twentieth century scenario, the land-reform programs of the postwar period, in one shot, have led to creation of *home* market, hand-in-hand with penetration of the *world* market (Bina and Yaghmaian 1988, 1991; Yaghmaian 1989).

To begin with, the transnationalization of the circuit of capital, particularly in its productive form, reinforced the development of relative surplus-value through the application of technology—yet it also relied on the length of working day (absolute surplus-value)—to exert maximum control over labor power in these emerging LDCs. This is the initial attempt for completion of the global circuit of social capital and thus the unity of the spheres of circulation and production beyond the nation-state. Yet, the real subsumption of labor under capital could not have obtained the status of a *sui generis* mode of production through the introduction of

machinery alone. This historical transformation was also dependent upon the *limitation* of working day. In other words, in the absence of such limitation (i.e., working day's *legal* length)—through class struggle and enactment of appropriate protective legislation on behalf of the working class—production based on machinery was bound to coexist with the production of absolute surplus value in these countries (Marx 1977 [1867]: Ch. 10). Here, the successive introduction of machinery has been obstructed by the *elasticity* of working day itself. Today, in many LDCs, more or less, the statutory limitation of working day has already been in place. However, in these societies, the length of the average working day is considerably longer than their ACC counterparts. At the same time, in some LDCs, especially in traditional sectors, the length of the working day has yet to be socially defined and politically established. This is particularly true in those countries in which the employment of child labor is also distinctively overlapping.

Second, over time, there emerged a series of organizational as well as technological transformations that have revolutionized the labor process in the advanced capitalist countries. The motivation for these changes—a sign of expanded and intensified real subsumption of labor under capital—has been an insatiable appetite for expansion of relative surplus value production. Historically, since past two centuries, technology shifted first from artisanal shops to mechanized factory production, then from simple, pre-Taylor factories to, rationalized, post-Taylor assembly lines, and, finally, from assembly-line mass production to continuous and batch processes (Goldin and Katz 1996: 252). These transformations as a whole, and from the standpoint of social capital, have had only one purpose: to cheapen labor power—thus reducing the relative portion of *necessary* labor time to *surplus* labor time spent in production of commodities—across the board. This is, in a nutshell, the fundamental underlying motivation for capitalist production as a whole, whether expressed through neo-Taylorism, self-directed work teams, Fordism, neo-Fordism, flexible-and-lean production systems; or the computerization of production through computer-aided design/computer-aided manufacture (CAD/CAM), or robotics and *nearly* fully-automated manufacturing. Contemporary labor processes now

exceedingly exhibit a unified global theme capable of emerging in many divergent technical and organizational variations.

Transnationalization of capital is a phenomenon that is universally contingent upon reducing the value of labor power via continuous change in technology across the board (see, among others, Shaikh 1979, 1980a; Cypher 1979; Radice 1984; Picciotto 1991; Bina and Yaghmaian 1988, 1991; Bryan 1995; Bina and Davis 1996, 2000; Weeks 1998, Bina 1985, 1988, 1989, 1994b, 1997, 2006). This entails the continuous and progressive *cheapening* of labor power across all industries and geographical locations, in tandem with universal control of labor by capital via proliferation of the most technologically advanced labor processes. Here, several decades of intense devaluation (per unit of output) and technological displacement of workers—in the advanced capitalist countries—find their *cumulative* application, in one giant step, in the labor processes within LDCs. A by-product of this qualitative advance in production of the relative surplus value has been a massive surplus population—a gigantic reserve army of unemployed—at the global level (see Bina 2005). The rise of reserve army and simultaneous intensification of the labor process—via increased capitalist competition—have exerted substantial downward pressure on the value of labor power, which then expressed in falling real wages for the majority of workers worldwide. By 1995, the world has been experiencing the worst employment crisis since the Great Depression of the 1930's. Thirty percent of the global labor force has been either unemployed or underemployed; and there emerged growing labor market inequality across the polarized global divide (see ILO 1995: 2; ILO 1996/97, Chapters 2 and 3). Social capital's global dynamics have degraded the standard of living for workers, while, at the same time, increased considerable wealth and income inequality. Global socialization and hyper-competition, in turn, demand broad and unified counteraction by international labor; counteractions that are global in scope and no less potent than the ones exhibited thus far by global social capital itself.

IV. Technology, Skill Formation, and Labor Contingency

Neoclassical economists contend that as technology advances, it correspondingly creates specialized skills that are conducive to and of use for further application. Thus, advances in technology lead to gradual upgrading of education and skills of the labor force within the economy as a whole (Jerome 1934, Woodward 1965, Griliches 1969, Fallon and Layard 1975, Greenwood and Yorukoglu 1997). In contrast, many neo-Marxian scholars argue that technological change in capitalism leads to continuous deskilling of labor force, thus resulting in the “polarization” of workers’ skills (Braverman 1974, Ch. 20). Consequently, the subject of skilling and deskilling of labor has long been the point of contention between these two schools of economic thought.

Here, based on Schumpeter-Bina synthesis of “creative destruction”/“destructive creation,” we maintain that neither of the above positions reflects the true nature of technological change, and that none of these visions bear any resemblance to actual dynamics of skilling and/or deskilling in contemporary capitalism (Bina 1997, Bina et al. 1998b, 1999). Moreover, neoclassical economists view skilling in ad hoc manner, i.e., anachronistically, *intrinsic* to (person of) individual worker. Ironically, neo-Marxian view also perceives skills as intrinsic phenomenon, i.e., in manner of *crafts*, only to be diminished without limit by unrelenting change in technology. Schumpeter-Bina synthesis, far from both of these positions, on the other hand, is reflective of the dynamics of skilling and deskilling that unite the *material* (use value) and *social* (exchange value) sides of value and price formation in capitalism. So, skills in this *differentia specifica* mode of production are neither natural, hereditary, certified-proof and immutable nor even the autonomous (personal) property of those who pretend to possess them. This view, of course, does not square with either of the two positions above—or vice-versa.

Schumpeter’s thesis of “creative destruction” provides us with remarkable insights into the dynamics of chaotic production in capitalism. He elucidates:

The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers’ goods, the new methods of production or transportation, the new

markets, the new forms of industrial organization that capitalist enterprise creates [. . .] The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrates the same process of industrial mutation [...] that incessantly revolutionizes the economic structure *from within*; incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism (Schumpeter 1976 [1942]: 83, emphasis in original).

Schumpeter has ably placed the dynamics of technological change within the core of production, exchange, and reproduction of capital in its organic unity, contradiction, and thus incessant transformation. He clearly internalized (theorized) the process of change that is the lasting hallmark of contemporary capitalism in his thesis (see also Schumpeter 1928). Moreover, Schumpeter focused on the material side of technical and organizational transformation—a rather sharp focus upon the production of *use value*. *Creative destruction* goes something like this: in order to have omelet, you need to break some eggs,—pure and simple. Yet, whom the omelet is made for, and—more important—on whose behalf the eggs are broken, still remain hidden from the view. This is why the antithesis of “destructive creation” comes to unravel the puzzle and illuminate the hidden half of this equation, namely, the determination of the *exchange value* of skills (see Bina 1997, Bina et al. 1998b, Bina and Davis 2000, 2002, Bina and Finzel 2005).

Schumpeter has emphasized on *creation* so much so that he appears to have missed the equally crucial question of value destruction—a kind of destruction that is in accord with (value-induced) preemptive depreciation that virtually has nothing to do with normal capital consumption or material *depreciation* of use value. Marx, on the other hand, was keen on this tendency and called it *moral depreciation*; yet he did not fully develop it into a systematic framework in which skill formation in capitalism proper (in contradistinction with pre-capitalist crafts) can be adequately tied to wholesale (preemptive) destruction of value via technology.

Moreover, the nature and scope of Bina's antithesis are qualitatively different from *depreciation* alone; Bina's focal point is rather on embedded and *preemptive* nature of modern technology, not as *material* but as *capital*—prior to its very inception. Here, technology (as capital) reasserts itself only through its continual refutation, revealing a familiar pattern. And, unsurprisingly, this pattern is a remarkable depiction of the *material basis* of what is known as the law of value—in its self-assertion and continual self-refutation—under capitalism.¹⁶ Therefore, at this intensified stage, “destructive creation” is qualitatively beyond the customary consumption of capital in terms of either *conventional* or *moral* depreciation that was once normally associated with accepted business practices and/or frequent bankruptcies of yesteryears. The fast-paced, hyper-competitive globalized technology of today turns this *potential* preemption—which is embedded within its structure—to a full-blown *actuality*.¹⁷ That is why, omelet—at the point of return in Schumpeter's case—could very well remain physically (use value) intact and yet lose all its exchange value entirely—while still in the frying pan—say, in competition with French roast. Bina's antithesis focuses on simultaneous skilling and deskilling of labor (technical, mental, and manual), on the one hand, and simultaneity of the act of value production/value destruction via preemptive technological change, on the other hand. This is what is meant, we contend, by the restructuring of social capital in its distinct form in the fast-paced, hyper-competitive, universally-uncertain world of today. And that is why globalization obtains an epochal dimension—noticeably distinct from before (Bina and Yaghmaian 1988, 1991, Bina 1993, 1994a, 1997; see also Bina 19985, 1988, 1989, 1990, 1994b, 1995, 2006, Bina and Vo 2007 for globalization of a specific industry).

According to this antithesis, a viable theory of technological change in capitalism is one of schizophrenia, leading to *extrinsic* skilling and deskilling of labor through the magical wand of capital. Indeed, the process of technological change, and thus skill formation, in capitalism is not unlike the episodes of *schizophrenia*, where intense internal *self-negation* of capital is decidedly on display.¹⁸ “Destructive creation,” thus reverses the order and direction of the structural causation, from destruction for the sake of creation, à la Schumpeter, to creation for

the sake of undermining, and destruction—via Marx’s insightful method. For, as Marx aptly pointed out, in competition everything appears in reverse. And that is why, in this case, neither the *thesis* nor the *antithesis* alone can reflect the total picture of reality; hence the necessity for a synthesis—thus collecting the material side (Schumpeter’s) and social side (Bina’s) of the equation in a complete whole. Otherwise, the status of the theory depends exclusively on physical entities alone—not unlike the neoclassical (and/or neo-Ricardian/Sraffian) undo obsession with physical quantities. More importantly, the synthesis of “creative destruction”/“destructive creation” hopes to extend the application of Marx’s method and Schumpeter’s view of innovations in order to capture the twofold character of *commodity* in the domains of technology and skill formation in a united whole.

Historically, the training and provision of skills associated with traditional crafts and trades were generally under masters’ direct supervision, and subject to inspection and certification of *guilds* in the pre-industrial England (Landes 1969, Kula 1976 [1962]). Prior to the Industrial Revolution, the acquisition of skills, nature of apprenticeship, and the significance of institutional certification of the guilds all pointed to the *intrinsic* property of skills themselves. Under the authority of the guilds, member’s skill was certified, preserved, and protected over one’s lifetime. For instance, a cobbler was a cobbler and kept on as a card-carrying cobbler—with his special skill intact—for as long as he cared to provide service to the community.

Contrary to this *intrinsic* and, thus, self-sufficient characteristic of skills that prevailed in the pre-capitalist societies, present-day “skill formation” depends upon the satisfaction of both *necessary* and *sufficient* conditions that would in due course validate the meaning of skill in an entirely new epochal context—i.e., the context of capitalist social relations. Since skill is a commodity in this mode of production, its validation also depends on the validation of its twofold characteristic, namely, the simultaneous validation of skill’s use value and exchange value. The necessary condition for skill consists of the ability to perform, capacity to know (education), appropriate training, etc. in order to qualify the worker for a particular position. This simply represents the *use value* of skill that—once acquired—*may* remain *intrinsic* to worker’s

performance. Sufficient condition for skill formation, on the other hand, depends upon the validation of market, which is reflective of production and reproduction of capital through the mediation of technology and coercive capitalist competition.¹⁹ This evokes the *exchange value* of skill that is essentially *extrinsic*. Competition, at the level of cheapening of labor power, and among capitalist producers, forces the advancement and adoption of new technology; this, in due course, leads to veritable redundancy of existing skills (technical, manual and/or mental), which, in turn, manifests itself in the universal contingency of labor at all levels of economic activity.²⁰

At the same time, once the newer skills replace the existing ones—by the virtue of further advancement of technology, the existing workers will then become a target of skill validation/invalidation in the labor process. The newly hired workers, however, may have a choice in acquisition of knowledge and training in order to satisfy the necessary conditions that would authenticate the use value of their skills. Yet, these workers virtually have *no* control over sufficient or *extrinsic* conditions that shape the configuration of newly demanded skills by the newer technology. Here, in the absence of equally potent worker's organization and resistance, the province of control is of omnipotent capital. The capitalist *control* and hyper-competitive change in technology simply set the stage for the validation (invalidation) of sufficient conditions in respect to destruction (redundancy) and/or creation of skills across all industries and virtually in every geographical market. In addition, inter-firm (-industry) competition, on the one hand, and intra-firm control of capital, on the other hand, convey the specificity of skilling and deskilling of the labor force at the level of industry. The primary consequence of all this is *tendency* toward universal contingency of labor—a widespread and critical phenomenon—regardless of the caliber or amount of education and training, virtually at any level of economic activity. That is why the word *overqualified* not only finds its connotation within a normal conversation today but also its *overuse*. Moreover, based on the above framework and from this vantage point, viewing worldwide capitalist dynamics opens a new and far-reaching perspective on the effect and significance of the reserve army of *unemployed* and *underemployed*, which plays as a cautionary tale for realistic economic policy and crisis management in the complex,

intertwined, and uncertain world of today. By the same token, this alternative view of skill and skill formation has a significant implication for the organized (and unorganized) labor toward a potential goal of all-embracing, unified worldwide workers' control of the *workplace*.

At this juncture, it is worthy of mentioning that originally “contingent work” is defined as “jobs that are structured to be short term or temporary” by the U.S. Department of Labor in two sets of survey articles (*Monthly Labor Review* 1996, 1998). The framework for contingency utilized in these surveys relies on the empirical estimation of number of temporary jobs during the 1990s in the United States. These estimations, therefore, have nothing to do with the internal dynamic of contingency elucidated above, and thus the measurement of net effects of technological change on the process of skilling and/or deskilling of labor in the United States. Consequently, there must be a distinction between “*contingent work*”—having exclusively to do with the duration and condition of contract—and *labor contingency* proper.

Now, let us turn to the original conception of skills in Marx's monumental study of political economy. The critical study of social construction and reconstruction of *reality* in capitalism owes its profound reflection in Marx's *Capital*. Particularly, Marx was keen and careful on the articulation of concepts, such as “surplus population” and “reserve army of unemployed” (see Bina 2005). At the time when the issues surrounding the subject of population and the controversial propositions by Malthus were on the public's mind, Marx aptly concluded:

The working population therefore produces both the accumulation of capital and the means by which it is itself made relatively superfluous [...] This is a law of population peculiar to the capitalist mode of production; and in fact every particular historical mode of production has its own special laws of population, which are historically valid within that particular sphere. *An abstract law of population exists only for plants and animals* [...] (Marx 1977 [1867]: 783-4, emphasis added).

Again, in the same Chapter (25), Marx reiterates his crucial point on relevant methodology for the study of social appropriation and reconstruction in capitalism:

Capitalist production can by no means content itself with the quantity of disposable labor-power, which the natural increase of population yields. It requires for its unrestricted activity an industrial reserve army, which is *independent* of these natural limits (Marx 1977 [1867]: 788, emphasis added).

Yet, to our knowledge, Marx has neither in *Capital* nor anywhere else presented a unified skilling and deskilling theory based upon his own method of analysis illustrated above. To be sure, by and large, the nearly whole of Marx's theoretical writings—*Capital*, *Grundrisse*, and *Theories of Surplus Value*—are seemingly rotating around the question of deskilling in capitalism. This, in large part, is due to the fact that methodologically one cannot engage in a full-fledged analysis of capitalism prior to conceptualization of the preconditions that had led to its rise. Nevertheless, despite the lack of complete theory of skill formation (for capitalism proper), Marx—as the above citations vividly indicate—has indeed left us with a unified methodological blueprint by which to construct such a theory.²¹

Historically, the process of wholesale deskilling of laboring population has always been a product of a tendency toward social reproduction of capital through social construction of new skills. Moreover, the same forces that tend to bring about and regulate the production and reproduction of social capital are also responsible for the simultaneous construction and deconstruction of workers' skills in society. Hence, methodologically, Marx's own theory of skills for capitalism proper remains an incomplete theory. Therefore, it is no wonder that a large number of scholars, particularly in the neo-Marxian and/or monopoly-capital traditions, capitalized—without limit—on the notion of deskilling alone in their otherwise important analysis (e.g., Braverman 1974, *Monthly Review* 1976).²² Thus, mischaracterization of skill formation in capitalism has been celebrated in neo-Marxian terms once again in a special issue

on the twenty-fifth anniversary of the publication of *Labor and Monopoly Capital* (*Monthly Review* 1999).

Parallel with the phenomenon of *instant* deskilling, there is also *instant* devaluation of productive and commodity capitals affected by the “destructive creation” of capitalist technology. It is worth reiterating that such devaluation bears no relationship with the actual depreciation of capital or even “moral” depreciation of capital in the sense of Marx (1977 [1867]: 528). For instance, as can be imagined today, the value of an entire warehouse full of newly arrived computers can be reduced to a tiny fraction by only a public announcement pertaining to the future arrival of yet a newer machine whose technological base has already been known and available halfway through the production of these newly arrived machines. This might be puzzling, but if one carefully deciphers the meaning of popular phrase: *you should compete with yourself* in today’s dog-eat-dog world of business; one is convincingly on board with us. Clearly, this is not the case of destruction of the old according to Schumpeter’s creative destruction. Rather, it is the case of widespread, deliberate, and universal attempt at the preemption of brand new and intact use value—indeed a veritable reversal of the direction of causality that would turn Schumpeter on his head—so to speak.

Thus far, we have established that technological change is a vehicle for cheapening of labor power across the board. This attempt at cheapening—a tendency of accumulation (an independent variable, so to speak) creates competitive struggle among the fractions of social capital manifested through the interaction of individual capitals. Technological change in capitalism is not only reflective of “creative destruction” but also manifestation of “destructive creation.” Technology in capitalism is also a commodity with twofold character of use-value and exchange-value. Consequently, Schumpeter-Bina synthesis of “creative destruction”/“destructive creation” is advanced to capture technology’s twofold character. The value of skilling/deskilling of labor is also reflective of the twofold character of technology in capitalism. And it is within this framework, particularly at the global stage, that omnipotent capital and *universal labor contingency* find their mutuality in endless irreconcilable differences.

V. Labor and Global Challenges

The global evolution of capital/labor relations has a profound influence upon the nature and direction of universal class struggle today. Labor, as an organized entity, has been constantly weakened—if not preempted—through the globalization of labor process and cheapening of labor power throughout the world, especially during the past three decades. Outsourcing is just the visible tip of the iceberg in this enterprise. As *individual* capital moves to restore profitability by resorting to its internal as well as external domain (including *cheap* labor), *social* capital (capital as a whole), manifests its very universal characteristic through the proliferation of social relations, and intensification of global competition via *cheapening* of labor power worldwide. Capitalist competition continuously pits worker against worker, attempting to drive wages, conditions of work and the quality of life to the lowest level possible—locally, nationally, regionally, and now globally. In combating the intensified extraction of surplus value, workers often have to engage in economic as well as political struggle in order to stabilize and improve the terms and conditions under which they are obliged to dispose of their labor power. That is why, consciously and/or unconsciously, the traditional boundaries of workers' organization and resistance have already been transcended; the walls of factory would no longer constitute the theatre of encounter, as the manifold effects of social capital have already permeated not only throughout the economy but also through polity and society at large. In other words, the world is now beyond the massive, multifaceted, and seemingly united demonstrations at Seattle (1999) and beyond.

By transcending social capital's competition for labor power, the expression of working class unity and struggle limits the one-sided, forceful and arbitrary cheapening of labor power. In concrete terms, such encounters limit capital's aggressive quest for increased social control and domination over the labor process. Transnationalization of the capitalist relations, i.e., universal tendency toward the *real* subsumption of labor under capital, brings the common interests of

workers across the national borders into a sharper focus. Workers are commonly affected by the integration of labor processes, transnational R&D centers, and markets across the globe. This by itself is an *objective* condition for labor solidarity the adoption of which needs a common international platform. If in today's world, nationalist strategies are rendered ineffective and less profitable for social capital, why then should such strategies be deemed effective or successful by the organized labor? If workers gain the ability to confront transnational capital through their solidly proliferating international organizations, they can begin to mitigate the deleterious effects of capital's mobility globally. However, this depends upon the existence of organizational capacity for development of working-class consciousness, a proposition that is seemingly hanging in the balance in the view of strategies that so far have been adopted by many labor unions at this juncture.

Today, the continuing globalization of the labor process has provided the material conditions for unity of workers across the presumed insurmountable boundaries of nation-states. The fundamental material basis of this dynamic process is the global accumulation of capital in the presence of divided geography and global space among nation-states, and the *objective* conditions for working class unity. This is a pretext for local struggles that can no longer remain isolated from the global center-stage. While there is a growing objective basis for the unity of working classes worldwide, there are also counter-tendencies that arise from the nature of social capital itself. In this manner, global technological change and intensification of the labor process are frequently tied to creation and proliferation of *contingent* labor and contingent markets, whereby the ultimate display of divide-and-rule obtains its regulating mechanism. For instance, with emerging telecommunications revolution, the semiconductor technology grants a new outlook to the spatial control of capital over the global labor process. As Shaiken points out, "Once the machining knowledge is embodied in the numerical control program, it becomes possible to transfer production from a struck plant to shops that are still working, regardless of whether they are across the street or halfway around the world" (1986: 260). The broadened echo of this transformation can be found in *Cutting Edge* (1997) as well.²³ Capital thus exhibits a

universal tendency to play off, rather successfully, one group of workers against another. This sort of strategy often manifests itself in terms of accelerating process of competition between and within active and reserve armies of workers worldwide, thus aiming to reduce the living standards of workers to a bare minimum across the globe. Additionally, there is a remaining residue of traditional appeal to *nationalism* among workers and unions, particularly in the advanced capitalist countries. For labor movements to succeed in both economic and political fronts something has got to give; they must do away with this unproductive, narrow-minded, and lose-lose posture; on this issue, workers should literally learn from capital! Hence there is no *automatic* remedy for unification of the workers' struggles globally, since the *necessity* of material conditions must meet the *sufficiency* of conscious activities of workers themselves toward one undivided *universal* class. This, of course, precludes any predetermined conclusions about the transformation and future of all-embracing international labor movements at this juncture; the jury, we fear, is still deliberating.

VI. Concluding Remarks

In this article, we attempted to bring together several theoretical topics, namely, social capital, technological change, skill formation, and transnationalization of capital at the intersection of which lies universal contingency of labor. While each of these subjects is significant on its own, in this article their dialectical interface provides a singular framework for reexamination of conventional understanding of labor and technology in political economy. The subject of globalization, for instance, is still riddled with controversy across the political spectrum—from right to left. We have demonstrated that the process of globalization has an epochal significance beyond common economic categories, and contrary to reductionism of orthodoxy and the heterodox emulation of the same. The world economy has entered a new era that is qualitatively different from what we have experienced before. The capitalist world is not only bigger but is terribly different from what it was before the 1970s. Yet, many protagonists in the globalization debate often resort to business-as-usual economic reasoning and mundane

empirical conclusions to prove or disprove their contested points. These economists frequently look at the marginal, quantitative changes, not the far-reaching epochal transformation that is transpiring under their nose across world economy, world polity, and the global social arena. Moreover, some of these debates still take their point of departure *a priori* from conventional economic categories. In contrast, *globalization*—that we speak of—is reflective of the dynamic reproduction of global social capital, hence crystallization of the global conquest of the mode of production—from its potential state (in Marx’s time) to the full-fledged actuality of today. Thus, to be fruitful, debate on globalization needs to pick its departure from this very point.

The concept of social capital is an integral part of Marx’s critique of political economy and thus pertinent to the analysis of *differentia specifica* of capitalism. Hence, unlike its hijacked—and corrupted, liberal rendition, social capital is *not* a precondition but a very product of modern capitalist social relations. We have thus maintained that social capital is neither *reducible* to “culture” nor to “government policy” nor to “trust” nor to “effectiveness of civic organizations.”

Finally, in order to capture the real impact of technology in today’s fast-paced, hyper-competitive and universally-uncertain world, and to explore the effect of skill formation, we have capitalized on Schumpeter-Bina synthesis of “creative destruction”/“destructive creation.” Here, cheapening of labor power is hand in hand with the perpetual redundancy, and creation and recreation of skill, engrossed in the schizophrenic of technological change worldwide. Thus, contrary to both the neoclassical and neo-Marxian economics, we contend that skill formation and skill redundancy are parts of the same unified process, intimately tied to validation (or invalidation) of technology and renewal of social capital. In this framework, skilling and deskilling are *extrinsic* to individual worker and *intrinsic* to capitalist dynamics. This opens up a window of opportunity to see through the universal contingency of labor at all levels of economic activity. In the meantime, transnationalization of the labor process has provided the *necessary* conditions for the unity of workers across the globe. However, the achievement of *sufficient* conditions is entirely dependent upon the worldwide (united) struggles at the point of

(transnational) production, and within global society—at the junction of which stand manifold economic, political, and ideological challenges—where all irreconcilable differences are emanating out in the open.

Notes

¹ In Marxian tradition, the lack of distinction between formation of value and value accounting has led to manifold confusion that, among others, puts the realm of purposeful human activity (human labor) and outcome of such an activity (physical capital) on an equal footing, thus ignoring the source of value. For some of the debates between the neo-Ricardian/Sraffian and Marxian scholars see, for instance, Steedman (1981), Steedman et al. (1981), Mandel and Freeman (1984), and Fine (1986). See also Roosevelt (1975), Fine and Harris (1977), Shaikh (1982, 1984). Pertinent to this or any other debate the first author wishes to recommend *On Bullshit*, by H. G. Frankfurt (2005). This magnificent essay is a wonderful guide for identifying a situation where the truth is brushed aside and yet it is done so without telling a lie.

² The *value form* in Marx's political economy is necessarily social, representing a moment in reproduction of capital. The value form is also the outcome of primacy of social capital (whole) over the individual capital (part). Therefore, in capitalist mode of production, in which the law of value invariably operates, the part has no *real* significance independently of the whole; in consequence starting with the so-called *micro foundation* (as bourgeois economics does) is simply a methodological excursion onto the fallacy of composition. As Fine (1982) points out: "The specific form that this takes for the Okishians is almost brought out into the open by Roemer (1979) when he demands that Marxist macroeconomics should be consistent with its micro-economic foundations. What Roemer proposes is that macro-economic aggregates of Marxist theory should be built up from the micro-economic behavior of individuals. This is exactly the reversal of Marx's method, which is to proceed from the simplest aggregate categories, such as capital and labor, and to reproduce these at a more complex and concrete level, the 'micro-economics' " (Fine 1982: 113); see also Roemer (1979). For further examination of Marx's method see Bina (2006, particularly section on *real abstraction*). During the finishing touches of this manuscript for publication, one of the authors was watching a public TV-program on the advancement of medicine. This baffling question was raised by a well-known American cardiologist: What is the state of death when most of the tissues and organs in the body are still alive? Of course, this question was a practical one for this distinguished group of physicians. However, this also has a far-reaching methodological implication for us. The *whole* that was pronounced dead, in this case, certainly casts doubt on the liveliness of its constituent parts—namely, the tissues, organs, etc.—regardless of how much or whether these fragments are alive or dead. Yet, it is frustrating to see that very many of our own fellow "radical" economists are seemingly at loss on this very elementary methodological point.

³ The "so-called primitive accumulation, therefore, is nothing else than the historical process of divorcing the producer from the means of production. It appears as 'primitive' because it forms the pre-history of capital and of the mode of production corresponding to capital" (Marx 1977 [1867]: 874-5). All references throughout this article are to Vintage edition.

⁴ See Marx (1977 [1867]), Chapter 10: The Working Day: 340-4, 375-89.

⁵ "The general features of the *formal subsumption* remain, viz. the direct *subordination of the labor process to capital*, irrespective of the state of its technological development. But on this foundation there now arises a technologically and otherwise *specific mode of production – capitalist production – which transforms the nature of the labor process and its actual conditions*. Only when that happens do we witness the *real subsumption of labor under capital* The real subsumption of labor under capital is developed in all the forms evolved by relative, as opposed to absolute surplus-value." Marx (1977 [1867]), "Appendix: Results of the Immediate Process of Production": 1034-5.

⁶ Fine (2001) is an excellent critical book on the way in which both liberal and neoconservative ideologues have ventured to jump on the bandwagon of *social capital*. Our purpose here is to emphasize that by adoption of such a

stance a double blunder has been made: first is high jacking of the concept itself from its original place in Marx's context and turning it to a bizarre tautological buzzword; and second is twisting the *differentia specifica* of capitalism by eternalizing the meaning of *capital* for downright ideological purposes. The meaning of capital has been also fetishized in Becker (1964) via "human capital." Incidentally, this is the same Gary Becker who also served on the Pentagon Board (U.S. Department of Defense) under Richard Perle and Paul Wolfowitz, where his benign economics was reportedly turned into not-so-benign neoconservative practice.

⁷ Sadly, the trace of vulgar imprint and ideological influence of Becker's "human capital" are also perceptible in the literature of radical political economy.

⁸ Note the references in #13 on the social relations in the former Soviet Union.

⁹ There has been a great deal of discussion over this longstanding and controversial issue in Marx. Despite the undo emphasis by many that LTFRP is a long-run proposition (in the same vein as in Classical tradition), we contend that this "law"—which is considered by Marx as the most important tendency in capitalism—is indeed reflective of the renewal of the circuit of social capital through the periodic crises. In other words, both the tendency and countertendency of the falling rate of profit are *internal* (not external) to the renewal and formation of value. Following the generalization of technical change, this tendency, along with the counter-tendency, together leads to change in the magnitude of *existing* value. Here, the countertendency results from the internal contradiction of the process, which by necessity revealed as internal contradiction of the law itself. Thus, according to Marx's own method (i.e., concern for internal dialectical development)—and despite the enormous literature to the contrary—LTFRP is *not* an empirical proposition.

¹⁰ See Fine (1982: 117-21); Bina (1989: 162-68).

¹¹ "It is rather insufficient to argue that since capital is potentially a global phenomenon from its birth, its de facto accumulation makes it "global" and thus subject to immediate transnational jurisdiction, (as Bryan (1995) seems to have implied). Such an argument confuses the potential development of capitalism with its developed form—it assumes a global capitalism before development of global capitalism.... It is within this context [i.e., the evolutionary development of global capitalism] that the transnationalization of three basic forms of capital provides us with a stage theory appropriate for evolution of globalization and, ultimately, the recognition of worldwide hegemony of social capital." Bina (1997: 48); see also Bina 2006.

¹² Some of the articles in this special issue appear to revert to a national framework. Yet despite this shortcoming this volume contains pertinent materials on technological change. See also Rosenberg (1982, 1994) for an excellent discussion on technology.

¹³ On the one hand, the post-World War II system under the hegemonic *Pax Americana* brought about fundamental changes in the socioeconomic structure of the so-called Third World through forceful economic reforms in which the imposed authoritarian regimes represented the darker side of capitalist relations. These transformations, along with significant transitions within the advanced capitalist countries themselves, unleashed the forces of globalization and thus undermined the limited institutional wherewithal and the hegemony of the *Pax Americana*. On the other hand, the long-standing illusion of "socialist" and "communist" society under "market socialism" and central planning has come eventually to its historical halt in the late 1980s. For those who had no illusions, of course, these attempts in their actuality were no more than different forms of development toward capitalism. In the meantime, there emerged growing patches of "Third World" within advanced capitalist countries, and fragments of "First World" within the "developing" countries. Hence the demise of the tripartite division of the world toward globalization and deepening of uneven development across the polarized, yet organically connected, world. See Bina and Yaghmaian (1988: 124-40), Bina and Yaghmaian (1991: 107-30), Bina (1993: 1-20), Bina (1994a: 3-30), Bina (1995: 167-71), Bettelheim (1976), Bettelheim (1978), Sweezy (1980), Bahro (1981), and *Review of Radical Political Economics* (1981).

¹⁴ An indication of outsourcing's multi-directional trend has been already detected in India's newly developed software industry. See A. Giridharadas, *The New York Times*, September 25, 2007: A1, A14.

¹⁵ Economics literature on globalization is unmistakably uneven and confused. This is true for radical economics, in general, and for neo-Marxian/neo-Ricardian economics, in particular. The main problem with the pro-and-cons of globalization is the fact that they tend to present diametrically opposite interpretation by looking at the same set of data. Another problem with this literature is that the focus of the analysis is, by and large, on the quantitative dimensions without defining globalization in its qualitative and *epochal* dimension. Finally, many of the so-called radical writings on globalization are indeed no more than pale carbon copies of their neoclassical counterparts (e.g.,

Kleinknecht and Wengel 1998). For recent neoclassical views on globalization see “Symposium: Globalization in Perspective,” *Journal of Economic Perspective* 12, Fall 1998.

¹⁶ Therefore, the law of value is the *real abstraction* (as opposed to axiomatic or idealized abstraction) in that it is produced by the actual material phenomenon itself. In our example, the reality of technological change creates its own abstraction, which in turn constitutes as the source of theory (of value). For further discussion see Bina 2006.

¹⁷ Pertinent question here is how capital’s *potential* turns to *actuality* through historical evolution. Therefore, those writers on the (traditional) left, who rely on the embryonic potential of capital as global and quickly dismiss that today’s globalization is not *epochal* but rather more of the same (e.g., Bryan 1995 or any recent writings by the monopoly-capital crowd). These self-proclaimed Marxists are not only missing the very first lesson of dialectic (and method in political economy) but also, in practical terms, deceiving themselves by not looking deeply enough out of their window.

¹⁸ One of the authors of this article devised the analogy of *schizophrenia* to capture the periodic debasement (and crisis) of today’s labor processes through which intense internal self-negation of capital is on display. Here, the seditious voice of *change* in technology resembles the incoherent brain signal of a schizophrenic patient who is frequently at the mercy of *fractured* perception of one’s own internal emotions, on the one hand, and the impression of external reality, on the other.

¹⁹ Marglin 1974 is a fairly good source for the analysis of capitalist *control* of the labor process.

²⁰ During the last three decades or so, there emerged an articulate literature on Marxian competition in capitalism. See, among others, Clifton 1977, Shaikh 1980b, Weeks 1981 (Ch. 6), Semmler 1984, Bina 1985 (Ch. 6), Bina 1989, 2006, Dumenil and Levy 1987, Glick and Ehrbar 1990, Botwinick 1993. For early contributions see Schumpeter (1928, 1942, Ch. 7).

²¹ It is now apparent that already there are three strikes against *Monthly Review/monopoly-capital* view of capitalism. These impeachable faults are: (1) succumbing to bourgeois misconception of competition/monopoly, (2) dismissing Marx’s value theory for the present-day capitalism, and (3) missing on the real meaning and dynamics of skill formation in capitalism.

²² See Bina et al. 1998b and 1999. The closest Marx had come to the issue of *skilling* in capitalism is in this passage: “The principle of developed capital is precisely to make special skill superfluous, and to make manual work, directly physical labor, generally superfluous both as skill and as muscular exertion; *to transfer skill, rather, into the dead forces of nature*” (*Grundrisse* 1973: 587, emphasis added). The scholars on the left tend to rely exclusively on the historical process of deskilling in Marx. However, given that skills in capitalism are socially reconstructed, the dialectic of deskilling has to anticipate its own limit. In this context, the limits of deskilling are established by the new round of skilling and vice-versa. As a result, many neo-Marxian writers seem to have failed to grasp the dynamics of skill formation and skill redundancy in capitalism proper. The failure of neoclassical economics on the subject of skills is somewhat different. The notion of skill is treated as an autonomous entity subject to individual choice. In this manner, choice and scarcity occupy the place of internal dynamics of capitalism. Consequently, neoclassical economics has no specific theory of skill formation, other than treating it as an independent factor of production in the so-called aggregate production function. See Dow (1997) for a critical examination of so-called mainstream economic methodology.

²³ Shaiken (1986) is a straightforward volume, while Davis et al. (1997) appears to be uneven on technology and somewhat unclear on theoretical grounds.

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