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Social capital, value, and measure: Antonio Negri's challenge to capitalism

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Abstract

This article engages one of the most important concepts in Knowledge Management, namely, the concept of social capital, focusing upon the problem of measure and value in capitalism, specifically within the period and conditions of post-Fordist production. The article engages work that has emerged from out of the Italian Workerist and Autonomist Marxist movements (as well as French post-structuralist theory) since the 1960s, and it particularly focuses upon the work of the contemporary Italian philosopher and political activist, Antonio Negri.[Note 1] In doing so, it presents a more politically Left development of the concept of social capital than is often possible within the largely Management-defined discourses common to Knowledge Management. At the same time, however, the article points to the importance of Knowledge Management as a symptom of a turn in political economy, even though Knowledge Management, because of its provenance, has been unable to fully explore social capital as a shift in capitalist notions of value.

Introduction

Beyond the under and over determination of Knowledge Management as an actual business practice, Knowledge Management is an important historical symptom of changes in production and in society in late modernity or postmodernity, and it constitutes a conservative symptom of a shift away from traditional political economy, particularly in regard to both traditional capitalist and subsequent Marxist notions of value. As I will argue in this article, the true radicality of Knowledge Management lies not in its being a cause of productive changes, but rather in its expression of changes in the notion of value in relation to production within a post-Fordist economic and social period. The foremost indicator of such changes may be Knowledge Management's well-known insistence on the difference between tacit or implicit knowledge and explicit knowledge, specifically, the creation of the categories of human capital and social capital.

In this article, I would like to undertake a theoretical examination of social capital as a problem of measure and value, specifically examining the relation of capital's production of economic value to social and historical notions of value within the

period of post-Fordism. I will do this largely through an examination of Antonio Negri's work, which, drawing from Marx ([1992]) and from French poststructuralist theory, constitutes an extended analysis of implicit and social knowledge as a critique of representation and the (specifically capitalist) modernist valorization of quantitative measure and efficient production.

Marx noted how capital first and foremost reproduces its social context for production so as to extend and preserve its own economic values and dominance (Tronti, [1966], [1973]). Social reproduction constitutes a condition of capital production and value, and within post-Fordist production, I would argue, one can see this logic played out on a global scale and within terms of what Marx called real subsumption (that is, the subsumption of the totality of reality to the central notions of capital value, i.e., to the logic of commodities and the wage) (see, Day, [2001a]; Dyer-Witheford, [1999]; Marazzi, [1996], [1997]). As I will show, however, one can read this relation between social reproduction and capital production in terms of an antagonism between the terms rather than in terms of their mutual support, and further, one can read their antagonistic relationship as indicative of a social and historical debt that capital has difficulty paying off through the wage and commoditization. The issue of whether capital itself can capitalize social totality and time itself through its own logic of value and production - both within Western societies and the global as a whole - or whether its own logic parasitically remains dependent upon what is, and can never be understood primarily in terms of capital value and management, defines the social and historical struggles of our lives today.

In terms of method, many of the theorists that I draw upon in this article emerge from various Italian autonomist Marxist traditions that appeared during the 1960s and 1970s and continue on to this day, and it would be useful to pause upon this historical context to understand its relevance for our current analysis.

The social and political movements of the 1960s and 1970s that gave rise to the Italian autonomist Marxist traditions were partially provoked by major waves of automation in Italian industry during periods of already tense industrial relations. These conditions gave birth to such workerist organizations as Potere Operaio (Worker's Power) and various other movements such as the student movement, Lotta Continua (Continuous Struggle), and Lotta Femminista (Feminist Struggle). [Note 2] An examination of contemporary writings by some of the leading writers that emerged during this period (e.g., Negri, Berardi, Fortunati) shows a continued concern with the problem of value, particularly the relations between capitalist production values and social values, as mediated and shaped by information and communication technologies. For Potere Operaio the struggle around value was expressed through issues such as the conflict between rhythms of life and rhythms of work; the temporality of life and the temporality of work; social reproduction and capital production. These concerns continue to be central in Negri, Berardi, and Fortunati's work today, though the labor problems of the factory have been enlarged, through new information and communication technologies, to the scale of the social factory.

The introduction of new information and communication technologies were a central, but ambiguous, cause of the workerist movements in Italy during the 1960s and 1970s, and this continues into the present day. As in the United States, the role of these technologies has been ambiguous because the introduction of these technologies has brought workers freedom from, but also further appropriation within, capitalist production and economy. Such technologies have liberated labor from the factory (factory automation) and from the isolation of housework (the telephone, television, and internet), but they have also eliminated vital sources of employment and have coopted many previously private rhythms of life within larger levels of capitalist subsumption.[Note 3] This larger and deeper level of subsumption of everyday life, through the portable and work-at-home office, intellectual labor, continual (work-related) education, and countless other symptoms of late capitalism, is what Marx foresaw in terms of his notion of real subsumption, and it constitutes part of the transition from what Antonio Negri called (following, but extending, Tronti's workerist analysis) the transition from the mass worker to the social worker (see Dyer-Witheford, [1999]; Hardt & Negri, [2000]; Negri, [1996], [1988]).

Knowledge Management - arising out of the social reorganization of labor following the principles of Toyotism, the concurrent shift to a service and intellectually intensive capital environment, and the widespread industrial deployment and consumer availability of new telecommunication technologies - is symptomatic of real subsumption in so far as it seeks the mining, tapping, or capturing of socially produced skills and affects, what might be seen as the unconscious of so-called private or personal knowledge.[Note 4] Although the recent discourse of Knowledge Management was not, of course, part of Italy's 1960s and 1970s economic and social experimentation in labor replacement and control, some of its issues and problems (such as intellectual capital, social capital, affective labor, automation, and value and representation) were central to Italy's social conflicts and their theoretical tracts and these issues and problems have continued to be discussed until the present day. The main importance of returning to these events and discourses in the context of Knowledge Management is that, whereas Knowledge Management as a prescriptive management and consulting discourse does not very well critically investigate its truth claims in social and historical contexts, similar and the same issues have been discussed in other social and historical contexts. The interdisciplinary reading of social capital and value that this article enacts forces critique into prescriptive space by the inclusion of recent historically and socially informed critical discourses reaching back at least 40 years.

Human Capital and Social Capital

What is called tacit knowledge in Knowledge Management is often discussed from two aspects. First, tacit knowledge is often discussed as a type of private knowledge that is not yet formalized and represented in a common and factual manner. Second, tacit knowledge is often discussed as a type of knowledge that is bound to social

processes - foremost, those of language and affect. Although the literature often blurs these two understandings of tacit knowledge (and later, I will as well, for in truth, it is difficult to separate any type of knowledge from the social contexts that generate and situate it), for the moment I would like to refer to the first understanding in terms of human capital and the social syntax that helps generate and situate this human capital as social capital.

As to human capital - that is, the possibility of a unique, private knowledge - it may be more useful to attribute such a quality to the unique history and experiences of a person, rather than to an aspect of mind that is then captured or mined by information or information systems. I would suggest this approach because it better accounts for the social and discursive embeddedness of knowledge and it is mirrored in the tendency of the Knowledge Management literature to often shift from a language of human capital to one of social capital. This phenomenological perspective also tends to break with the idealistic and mentalistic traditions of information science and cognitive science where documents and other linguistic forms are sometimes viewed as capturing or embodying ethereal thoughts or are seen as products of the lone authorial mind. By doing away with this rather mystical aspect of the tradition of mind (in terms of private knowledge, mental states, etc.), I would suggest that we are both better able to account for the social and material aspects of knowledge and information, and we are led away from traditional but misleading models for both understanding and for information retrieval.[Note 5]

If the term human capital refers to unique possibilities of using and producing knowledge by any individual or even group at moments of time, the term social capital refers to the social syntaxes through which that person or group has the possibility of becoming unique, that is, has the possibilities of being recognized as individual or being recognized by some name or group of unique attributes, abilities, or expressions. Social syntaxes are shaped by institutional factors and by various types of materials, as well as contextualized and affected by spatial location, historical contexts, and temporal relations. Generally, we may say that social relations are mediated by language and affect. We might want to view the terms language and affect as mutually exclusive terms, but in reality we are lacking a term in English for expressing language as affect, affects as types of language.

The reason why social capital is now seen as so important in production is accounted for variously. The works of economists and historians such as Robert Reich, Manuel Castells, Shoshana Zuboff ([1988]), and French regulation school post-Fordist theorists tend to view this as part of a historical shift in production, from an industrially based production to one stressing symbolic manipulation and social interactions. The Italian theorists, Antonio Negri and Franco Berardi, however, see the increased emphasis upon social elements in production as partly the result of the social movements of the 1960s and 1970s and the Italian workers movements' resistance to the restrictive terms of union based, traditional blue-collar labor, as well as capital's increasingly expansive appropriation of social space (see Berardi [1998]; Negri [1988]). These two readings of the emergence of social

capital as an important element in production[Note 6] - from the viewpoint of capitalist production and from the viewpoint of reactions to it - demarcate the antagonistic forces that have recently pushed social capital into the forefront of questions of value and political economy, today.

Michael Hardt has proposed that an information and communication-based, post-modern, form of production has recently become predominant in the most developed economies (wherein this tertiary sector acts as the dominant controlling force over the primary (agriculture) and the secondary (manufacturing) sectors). He has also proposed that this form of production is characterized by immaterial labor, that is, by labor whose actions are upon, and that produce, nonphysical products (see also, Lazzarato, [1996]; Virno, [1996]).[Note 7] Further, Hardt distinguishes three types of immaterial labor and the resulting immaterial goods: first, human-computer interactions (see also Zuboff, [1988]); second, that which involves analytical-symbolic tasks (see also Reich, [1992]); and third, that of the production and manipulation of affects, which requires (virtual or actual) human contact and proximity (Hardt, [1999], pp. 98-99). Such an analysis is useful because it begins to address different forms of production and valuation within social capital.

History and Valuation

As I have suggested, the problem of whether human or social capital is the fuzzy or qualitative other of quantitative production and measure often occurs within discourses narrating capital's progress or, conversely, within histories of dialectical tensions, and occasional breaks, between capital's economic powers and social resistances to them. For example, as I have mentioned, neo-liberal theorists such as Reich ([1992]) tend to view the development of the tertiary sector of production as a natural consequence of the application of new information and communication technologies into the workplace on a global scale, following other forms of technological progress. In their accounts, such authors are not terribly concerned with explaining the social causes of technological innovation and the social resistances to it. More Marxists inclined theorists, such as Negri, Marazzi, and Virno, however, have, first, viewed technological innovation in the workplace as a consequence of capital's tendency to replace the troublesome and expensive variable capital of labor with the fixed capital of machines, and second, these authors have attempted to account for the tendency of capital to expand its scope, so as to encode the entire globe and every aspect of life in terms of its own logic of value and temporality.

These largely Italian writers have a good historical basis for their arguments, having witnessed the implementation of early advanced information and communication technologies in the 1960s in the Fiat and other industrial plants in Italy, and the revolt of Potere Operaio and other organizations and movements against these technological systems that, along with the demands of management and agreeable unions, restructured the speed, rhythms, and skill demands of workers' labor (see Berardi, [1998], especially pp. 106-107). Although earlier Fordist production also

structured worker's lives in these ways, the introduction of newer information and communication technologies in the factories, within terms of a doctrine of flexible production, was understood by the workers movements (and by student movements, women's movements, etc.) as a greater intrusion of production rhythms upon life-rhythms.[Note 8] The Italian factories at the tail-end of Italy's economic miracle were earlier predictors of the momentous changes produced by automation in the automobile plants in the United States in the 1970s, and they were a harbinger of the extension of post-Fordist flexible and just-in-time production modalities upon workers in virtual offices in the 1980s and 1990s.

Far from constituting a solely economic response to capital in terms of a Leninist revolution centered on the control of production, the Italian workerist movement contained intrinsic social critiques that allowed it to join with other social movements to form a social revolt beyond the economic demands and promises of both management and established unions, and thus, the workerist movements were part of a political revolt that reached beyond the established boundaries of political compromise that took place between these two traditional, Fordist powers. Beginning with the doctrine of the refusal of work (*rifiuto di lavoro*)[Note 9] (a refusal of capital's blackmail to either conform to its current rhythms of production and exploitation or to starve), extending into the feminist refusal to act as a breeding ground for the reproduction of labor as source material for capitalist production and the extraction of surplus value (see Dalla Costa & Fortunati, [1976], Fortunati, [1995]), and leading to demands for a domestic wage and a social wage, the Italian autonomous movements of the 1960s, 1970s, and into the present day are important for studying the role of information and communication technologies in social life. These movements supply early historical evidence of the conflicts and problems that later arise with post-Fordism's extension of capital production into the totality of social life and the instrumentalization of what Jürgen Habermas has termed, communicative reason.[Note 10]

The understanding of labor struggles as the antagonistic historical dialectic between qualitative life-values and quantitative capitalist production values (although accurately reflecting Marx's humanistic understanding of the reduction of workers to the temporality of mechanical production and the corresponding logic of the wage) has become more complex as work has moved out of the factory (i.e., the regulated work environment) and into the home, into education (in terms of corporate supported education and the rise of job-based continuous education), and into structuring our everyday lives and language patterns. Indeed, the Italian struggles of the 1960s and 1970s must be read in terms of a struggle against an expansive, but also an amazingly adaptive, and in some ways liberating, foe. On the one hand, one must recognize in post-Fordist production the extension of the wage into the previous private sphere of everyday life, resulting in not only a job that one never leaves, but also in the subsumption of the totality of life to the terms of capitalist value. On the other hand, one must also recognize in post-Fordist production the freeing of workers from the tyranny of hourly production and from the confines of the factory and the office - that is, from the traditional confines of the

wage - as well as possible reductions in feelings of alienation as workers buy into team activities and other emotional-social systems within recently restructured organizational structures. The historical progression of capital, from what Marx termed formal subsumption to real subsumption, constitutes part of what Tronti ([1966]) and after him, Negri ([1988], [1996]), have described as the transition from the mass worker to the social worker.[Note 11]

Within terms of post-Fordist real subsumption, Hardt and Negri view the new composition of class across traditional industrial class lines in terms of biopolitics (Hardt & Negri, [2000]). Adopting, but giving a more positive reading to this term than it has as it originates in Michel Foucault's works (wherein life itself in late modernity is understood as an object of disciplinary power), Hardt and Negri argue that the new values of immaterial production and affective labor produce a new collective subjectivity centered around a socially shared general intellect that postindustrial production depends upon.[Note 12] For Negri, this new value to subjectivity stands beyond the humanistic dialectic of traditional Marxism and resides in the collective nature of subjectivity itself, grounded in innovation and in social reproduction based on communicative and affective relations (Negri, [2000]). In Negri and Hardt and Negri's works, biopolitics appears as a political force of opposition at the moment that capitalism most depends on the collective nature of subjectivity itself, viewing such subjectivity in the form of social capital. Intellectual and affective labor, expressing human desire, constitute for Negri a vanguard position in political economy today, pointing the way to ontological values that transcend Marxism's traditional dualism of use and exchange values. For Negri, desire inhabits capitalism, but it cannot be reduced to capital accumulation. In fact, desire transcends any accumulation imposed upon life, and it undoes the disciplinary restrictions upon time that capitalism demands. Desire is, in Negri's words, both *smisurato* (immeasurable) and *dismisura* (excessive) in relation to capital. Capital's measured (*misura*) capture and exploitation of desire imposes a restrictive, structural value on that which always-already ontologically gives the possibility of value to capital.[Note 13] The vanguard position of social capital today only exposes its a priori presence in any form of production and its excessive relation to capitalist production.

It is possibly this underlying, excessive value of social capital or reproduction that Negri alludes to in the section entitled Deconstruction, in his essay, *Value and Affect* (Negri, [1999]). The deconstruction alluded to in this essay is that of the dialectic of use and exchange-value in classical Marxism, where use-value is defined in humanistic terms (worker's independence from capitalists, workers' cooperation with one another, historical and ethical values in contrast to capitalism's appropriation of time and capitalism's erasure or appropriation of values other than profit, etc.[Note 14]) in antagonistic relation to, and thus to a certain degree in dialectical dependence upon, capitalism's valorization of exchange-value, commodification, surplus-value (and thus, exploitation), and the wage. For Negri, labor power is simultaneously inside and outside of capital, going beyond the humanistic category of use-value. By refusing to surrender all of Marxism to a

fetishistic, humanist, counterreification (i.e., use-value) that defines itself only as the negation of exchange-value (symbolized by money), and by insisting that noncapitalistic value (i.e., desire) always already inhabits capitalist production, even as it is perverted and exploited by such through the blackmail of the wage, Negri takes Marx beyond Marx,[Note 15] and begins a deconstruction of capital value based on a deepened understanding of the extent to which labor remains always already beyond capital. In *Value and Affect*, Negri passes beyond dialectics in a deconstruction that opens up to an expressionist theory of desire.

Within the conditions of real subsumption today, Negri argues, the positing of use-value as the other of exchange-value is problematic (Negri, [1999], p. 81). But, further, positing exchange-value (in terms of money) as an exchange substitute for labor is even more problematic, especially today, because intellectual labor, affective labor, and the global distribution of labor across widely divergent social conditions raise questions in regard to the proper measurement of labor in terms of the wage. For Negri, intellectual labor, affective labor, and a widely divergent labor market offer challenges to the assumption that production can be justly based upon the wage because it becomes clear that the wage has very little to do with measuring productive value. With all three of these issues, for example, it is unclear exactly what quantity of labor the wage is paying for and if it is doing this according to a standardized value, and thus, in a uniformly measurable manner. Not only is the classic dialectic of use-value and exchange-value exposed by the current leading means of production as a humanist mystification, but the very notion of monetary value, as a substitution or compensation for labor, is highly problematic.

For Negri, biopower must be viewed as an originating measureless measure that lies in what is shared, that is, what is, in-common. Social labor expresses the power to act (*potenza*) that is molded, captured, and exploited for profit by the power of production (*potere*). In brief, the power of the multitude is that of *potenza*, the power of generation and transformation through the commonality of communication and affect. Social reproduction precedes capital production, and thus, social capital.

For Negri, the current recognition by capitalism of the transformative potential of social interactions (i.e., in terms of social capital) is a monumental step in the history of modern political economy. However, even while recognizing the measurelessness and foundational power of the social, political economy still attempts to view it in terms of conventions (Negri, [1999], [2000]) and standardized measures (i.e., in through monetary measures, and those imposed by databases, operationalist organizational schemes, etc.). This acknowledgement of the originating power of an a priori social bond, coupled with a yearning for its complete standardization, capture, and mining (that is, the yearning to turn social relations and knowledge into standardized information and social control), symbolizes for Negri a hopeless project for capital at the ends of a modernity that it has largely driven. Historically, capital in its endless conquest of totality has reached the point of attempting to represent and accumulate its unrepresentational and excessive basis in desire.[Note

16] At this point, capital exposes the other that underlies it, and it does so in such a manner that capital value is shown as based only in power relations and, even worse, as itself constituting an inadequate measure for accounting for its own originating sources in production. The narrative of capitalist modernity, of individuals in exchange relations advancing within a progressive history of accumulation toward a unified, global, totality, now collapses into a history of desire, of microgenerations, and of constant ruptures in meaning. Measure collapses into the measureless, globalization into constant and nonrecuperable flows of cosmopolitanism, the modern into the postmodern. As Negri states, the sublime has become normal - as both value and as history (Negri, [1999], p. 87). In postmodernity, capitalism is no longer natural. Lived history cannot be contained by the category of the historical.

Value

If we continue along Negri's line of argument, we see that social affect cannot immediately be understood as social capital, and that the latter term represents only a certain perspective upon, and an appropriation of, social affect (including the phenomenon of language as a whole) within a certain type of political economy. Not only can social affect not directly be understood as social capital, but furthermore, it lies beyond such a translation even as it inhabits the core of capitalist exchange.

As capital (that is, in the form of social capital), social affect must be understood as part of a modernist dialectic that is already defined by the logic and power of capital. The social doesn't naturally occur as capital. Negri's argument suggests that the concept of social capital, like the concept of exchange-value and even that of use-value, is but another historical concept in a dialectic of class antagonism that marks, but also insufficiently addresses, the origin for production in what is in-common, and thus, it inadequately addresses the common element within postmodern fragmentation. Negri's work suggests that this modern dialectic is insufficient to address the origin for production that underlies both social reproduction in capitalism and capitalism's economic production, and that this origin now appears in an irreducible form at the moment when the dialectic has reached its most extreme tensions (through its most extreme appropriations), and thus, has revealed the originary grounds for its own logic.

The resulting postmodern is, thus, the moment of the historical break or caesura of the modern, at the moment of modernity's exhaustion and collapse by its own logic. At this point, that generational excess or potenza, which gives the modern its specific powers (potere) - that which gives capitalist modernity the very possibility of its specific controls and, thus, drives - reveals itself (Negri, [2000]). It is not that class antagonism disappears in Negri's analysis, but rather, that it takes another form, that is, of an unrecuperable excess whose ontological autonomy haunts capitalist production like a specter. Behind capitalist production lives the specter of human life and capital's exploitation of it; beyond the neo-liberal global lies the specter of constant change and undoing, of a cosmopolitanism without totality or

standard measure. The speculative drive of modern history as a movement of incremental and measurable progressive elements toward an ultimate telos is haunted, unremittingly, by a temporality of events in which the telos of events is only that of the events themselves. Events, in other words, exist at the edge of time (Negri, [2000]), and measure can find no foothold except in a radical temporality that is beyond measure.[Note 17] The collapse of the modern in the postmodern is not that of a shift from quantitative production into irrationality or primitive tribalism, but rather, it is the opening of that radical temporality that had been previously reified in modernity as the new and in capitalism as the newly desired commodity. Capital - that is, in its most general form, accumulation (in the sense that capital expresses value as accumulation, that is, as capitalization) - faces a crisis as both radical temporality and a logic of an always excessive and difficult to measure productive force eat from within its own logic and temporality of being. In the postmodern, the new of modernity must face the always already and boundless new, so that capitalist modernity collapses not against a revolutionary other that is exterior to it, but into a measureless other that inhabits its core.

Information is not the certainty of factual knowledge, but the hesitancy of appearances and the need for interpretation that appear with the hypertextualization of the social.[Note 18] The logic of capital within the domains of the economic, political, and cultural reach the same crisis of value once the supposedly natural parameters of the real and of (a reified) time are displaced, and replaced by radically shifting parameters for measuring labor, identity, and representation, in general. The problem of defining (or even critically thinking) information, today, is perhaps symptomatic of the crisis of value in which all these domains of capital are based. The problem is not that of the metaphorical use of the term capital between these domains, but rather, their common underpinnings in representation and reified notions of time.[Note 19]

Negri's philosophical analysis of the origins and the exhaustion of modern political economy deepens and brings up to date some of the concrete economic, political, and social concerns of earlier Italian workerist movements and organizations (such as Potere Operaio), to the point where it goes beyond, and breaks from them. On a global scale, Negri's and Hardt and Negri's writings (particularly, *Empire*; (Hardt & Negri, [2000]), propose a communicationally mediated form of social intellect that lies beyond the sovereign state and modernist world bodies. On a more local level, Negri's work demands that capital wealth be viewed as parasitic upon, and hopelessly indebted to, social reproduction (in the forms of child-raising, education, social communication, social relations, personal intellect and experience, etc.), which it exploits for the accumulation and reproduction of wealth. Social capital is a term of domination, even as it suggests in such discourses as Knowledge Management the need to acknowledge that which capital has somehow previously overlooked in the workplace and in production. Knowledge Management in highlighting the problem of social capital has taken traditional political economy to its breaking point at the same time as it has taken traditional political economy to its origins.

Negri's and Hardt and Negri's work may be viewed as deepening the problem of value in political economy to the point of going beyond the logic of the wage. Their work explores the logic of the wage within the current appearance of social capital, and it claims that the social exists before, within, and beyond capital. Although in capitalism, the social, in the form of desire, has always been recognized as the virgin ground for capital to sow and reap profits out of, in the contemporary period this ground has, through intellectual and affective labor, assumed a vanguard role in production that challenges capital's claim to be the natural and just arbiter of the social. In other words, social reproduction today challenges the laws of economic production and the policies and power of capitalist political economy.

Conclusion

The concept of social capital that has reappeared within Knowledge Management opens a Pandora's box of problems for traditional political economy that is difficult to close. Lying behind the difficulty of measuring social production using traditional economic tools is the problem of value. Although, historically, capital has proved adept at transforming itself in relation to social protests against its monopolization of value, today it finds itself stretched to the point of revealing its own central paradox, namely, that capital value is dependent on that which is beyond its own measure, forcing capital to concede that it cannot claim itself as the natural grounds for its own production. This stunning conclusion cannot be overcome by a prescriptive professionalism or by a scientism of Knowledge Management, no matter how large we capitalize the initial letters of this term and no matter how much we claim to be just at the outset of a scientific management of knowledge. On the other hand, if Knowledge Management does historically disappear, it will perhaps disappear because it said too much in the face of modernity's scientific management and capitalism's own self-celebration at the historical moment when capitalism seems so globally overextended. Social capital points to a social that goes beyond capital, yet is the very grounds by which capital can even appear. Echoing Marx, we may conclude that today capitalism faces a specter, and that specter is its dependence upon that which exceeds it, yet is central, for its own advancement and success. The term social capital is the paradoxical symptom of a certain global and everyday overreaching of capitalism in modernity, and its so clear and total appearance, in management discourse, political economy, and in the smallest events of daily life, demand that it be critically evaluated as a critical historical event.

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Endnotes

In this essay, I will focus upon the the aporias of capital through the paradoxical concept of social capital, and I will do this mainly through a close reading of Negri's deconstruction of the logic of capital in his essay, *Value and Affect*. Steve Wright has suggested to me, based on a reading of an earlier version of this article, that it would be useful to briefly note some critical autonomist Marxist critiques of Negri's reading of value. Because Negri's own text is little known, and because the logic of his critique is sometimes difficult to follow, I have decided only to note the following critiques, leaving the essay to trace and explicate Negri's sometimes difficult, and often missed, argument. Therefore, the reader seeking critiques of Negri's reading of traditional political economy, foremost, his reevaluation of the traditional Marxist notions of the working class, the wage, and use-value, may wish to begin by consulting the readily available texts of Caffentzis ([1998]), Gambino (undated), and Turchetto ([2000]) listed in the references.

2

There are numerous accounts of these movements. For some print accounts, see Wright ([2002]), Berardi ([1998]), Hardt ([1996]), Negri et al. ([1988]) (a fuller version, available in Virno & Hardt, [1996]), Birnbaum ([1986]), Castellano ([1980]), and Lotringer & Marazzi ([1980]).

3

On what Marx termed the double character of such technologies, serving both use and exchange values, see Fortunati, [1998]. See also, Tronti, [1966], p. 123.

4

Deleuze and Guattari ([1983], [1987]) offered in their works (originally published in French in 1972 and 1980) an interesting and influential view of capital as a mechanism of capturing and commodifying desire. We will touch upon this view later with Negri's writings, wherein a concept of desire is developed more fully within an ontologically based politics. Such a view avoids many of the more crude, condemning and apocalyptic platitudes that characterized the orthodox Marxist Left during the Cold War, and was an attempt to genuinely account for and engage the historical power and the popular appeal of capitalist modes of production and culture.

5

Different types of discursive critiques of the idealistic or mentalist models of knowledge and information in documentation and information science may be found in Day, ([2001b]), Frohmann ([2001]), and Seely Brown and Duguid ([2000]). Harré's discursive psychology constitutes an explicit engagement with this tradition in cognitive psychology and AI (see Harré, undated).

6

Based on my argument, above, from hereon I will use the term social capital to include a socialized understanding of human capital.

7

Since the production of services results in no material and durable good, we might define the labor involved in this production as immaterial labor - that is, labor that produces an immaterial good, such as a service, knowledge, or communication (Hardt, [1999], p. 94).

8

An excellent anthology of articles from the period that demonstrates the centrality of life-rhythms and other similar social concepts against the newer mandates of capital production is Castellano ([1980]).

9

On the refusal of work, see Berardi ([1998]), Hardt ([1996]), and Tronti ([1966]).

10

The following passage written by the Gramsci Group, published in the Milan newspaper Rosso (number 7, December 1973) gives a good taste of the issues that underlie a joining of the workerist movements with other social movements in Italy during this period: Family and sex, the conditions of youth and of women, affective and intellectual repression, marginalization of whomever is not normal, these are the everyday concrete ways through which capital imposes the slavery of the factory and of life. The worker who is revolutionary in the factory and reactionary in the family and in bed is not an invention. This is a result of a material violence of capitalism, the violent nature of the acceptance to repress one's own needs in order for the worker to reproduce him or herself as workforce. These are not compatible. The contents of this liberation are not given from only the factory, even if they have

a profound connection with the refusal of work and workers' alienation. From the student protests, from the youth movement in general, from the women's liberation movement, from the struggles against marginalization and repression are born discourses and materials on the family, on sex, and on social and personal roles; embryonic (and only embryonic, but extremely important) proposals for a total struggle against the world of capital, proposals that are tendentially incompatible with a society in which one lives for the sake of working and where one reproduces to work anew. With the movements that express these themes, we need to have a rapport that is, and will be, also contradictory, but that constitutes a dimension of a discourse toward the liberation of all and each that cannot be ignored. From the refusal of work and from the contents expressed by these movements - and despite the contradictions - emerges an unambiguous thought: enough of the society where one lives for the sake of work (Castellano, [1980], pp. 92-93; trans., R. Day and Francesca Novello).

11

For more on formal and real subsumption, especially in terms of new information and communication technologies, see Dyer-Witheford ([1999]), especially chapter 3.

12

Dyer-Witheford ([1999]) nicely develops this theme in Negri's work. I would suggest that later works by Negri, however, such as *Kairòs*, *Alma Venus*, *Multitudo: nove lezioni impartite a me stesso*, (Negri, [2000]) tend to read class recomposition more along lines of ontology rather than primarily as a result of technological innovation (compare, e.g., Negri, [1989], with Negri, [2000]). In Negri and Hardt's *Empire* (2000), a similar tension exists between attributing class recomposition to technological innovation and attributing it, in the manner of an always-already existing class, to natural or human ontology. (For the ontological roots of Negri's work see, Negri ([1998], [1991b]). For a more Heideggerian influenced reading of the ontological social bond (which, nevertheless, has influenced Negri's work) see Agamben ([1993], [1996]) and Marx's notion of species-being (Marx, [1992]). (I am indebted to Nick Dyer-Witheford and his paper, *The New Combinations: Revolt of the Global Value-Subjects* [forthcoming, *Centennial Review* 1(3)] for alerting me to the importance of the concept of species-being in Marx's works.)

13

On the theme of the gift of Being (the *es gibt*; there is/literally, it gives) see Heidegger ([1996]), Agamben ([1993]), Derrida's works in the 1970s and 1980s, and in terms of community, Nancy ([1991]). Although it is true that Negri's work is more explicitly engaged with Spinoza's work and Deleuze's development of that, the

themes of an a priori excess and remainder (which gives capitalism its very possibility of measure and value) also speaks to the influence of deconstruction and Heidegger's work upon Negri's writing, and I think that it would be short-sighted to dismiss this influence, especially as it relates to the influence of Giorgio Agamben's work on Negri's work and insofar as it appears in Negri's *Value and Affect* (Negri, [1999]).

14

One of Negri's most in-depth analyses of temporality in capitalist production may be found in *La costituzione del tempo. Prolegomeni* (Negri, [1997]).

15

See Negri's *Marx Beyond Marx: Lessons on the Grundrisse* (Negri, [1991a]).

16

The foundational reading of desire as a constitutive force for capital occurs, of course, in Gilles Deleuze and Félix Guattari's two volumes of *Capitalism and Schizophrenia: Anti-Oedipus and A Thousand Plateaus* (Deleuze & Guattari, [1983], [1987]).

17

This article is not the place to examine the historiographic implications of Negri's thought, but as might be suspected from the above, they are considerable.

18

Although over a decade old, it seems to me that Shoshana Zuboff's notion of the textualization of sociality (Zuboff, [1988]) remains unthought in terms of its richness and radicality. This notion reaches back into earlier French poststructuralism and its notion of *écriture générale* and Foucault's notion of discourse, and it maps the necessity of the skills of close reading in not just a critical modernism, but especially, in a postmodernism dominated by communication and information technologies. In digital culture, the rapid textualization and textual appearance of the social demands the corresponding development of nimble and rapid reading skills. Far from giving way to an information age characterized by a modernist sense of facticity, the postmodern information age (digital culture) requires that the skills of critical reading and interpretation are more important

than ever. Much has been made of communities of practice in the knowledge management literature, but it is also necessary to examine how texts, and now, large scale digital discourses, force a more primary event of what we may call heterogeneous communities of interpretation (that is, in-common informational objects that provoke communities of reading and discourse about their content, meaning, and implications). The widespread appearance of social texts with multiple communities of interpretation around them (and their thematic and formal variations through subsequent readings), in fact, have fragmented communities of practice and have sometimes created highly flexible, dynamic, and heterogeneous discursive communities. One may suggest, in fact, that, at least at the level of the State, technological systems have driven modernist social systems to the point of exhaustion or collapse, so that provoking the appearance of such an entity as the State, at least as a nationalist community of practice, is increasingly difficult to achieve. One should remember, however, that the collapse of the nationalist State does not erase classical modernist logics of power at more microsocial and discursive levels and that the State continues to appear as the guarantor for their power.

19

Such a statement, however, does nothing to undermine the necessity of addressing the general concept of capital in these different domains, for example, as an accumulative economic system based on exploitation and inequality (that is, namely, as capitalism).

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