# On the Valorization of Informatic Labour\*

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#### abstract

The historical emergence and global proliferation of computer-mediated labour has been understood by some contemporary Marxian theorists to provide a unique milieu for the valorization process, and therefore to constitute fresh political possibilities for labouring subjects. This essay reads Hardt and Negri's *Empire* with respect to such a view, and locates a technicist model of valorization at its heart. That model is problematic in that it assumes that the distinctiveness of pre-informatic production consisted in the control of labouring action by management through specifically modernist practices of transcendental ordering, and that the waning of managerial control imperatives therefore represents a historical shift in the character of valorization. The essay then considers an alternative, value-form theoretic model of valorization, and offers a non-representationalist proposal about the role of managerial practices of inscribing informatic labour in the process of its valorization. Contrary to the historical claim in *Empire* that specifically modernist practices of transcendental ordering have waned in the passage to flexible informatic labour, the essay argues that managerial inscription practices enable the historical continuity of modernist transcendental ordering – a continuity that is obscured by the technicist model of valorization. Managerial inscription practices are best understood as technologies of *accounting for* rather than of *controlling* labouring action

#### Introduction

Political theorists of valorization operate in a head-spinning environment due to the convergence of multiple kinds of historical transformation. Multiple, not just at the level of the social phenomena that we seek to comprehend, but also at the level of the conceptual resources – historical events in their own right – that we use as we work. In such a situation, historical continuity can, like the past itself, recede from view. The topic of valorization brings with it all kinds of philosophical puzzles, but the concerns of this Special Issue are also filled with political implications. Because, if the valorization process is historically specific, this implies that regimes of worth, social investment, and care are culturally contingent affairs that are, as such, realized through the choices that people make about how life should be organized. If an understanding of the logic of those choices has implications for how we orient to the political possibilities of the present, a discussion about valorization is itself a political affair.

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I have chosen to consider a line of reasoning that is offered in Hardt and Negri's *Empire*. This book contributes a potential orientation for labour valorization theory in the historical context of global, networked production, and carves a distinctive place for the proliferation of information and communication technologies in capitalist production *as* a site of valorization. Valorization within informatic production, they propose, provides the conditions for emergent, and preferable, political social forms. So, in addition to linking emergent political possibilities to a purported historical shift in the technologies and social organization of capitalist production regimes, Hardt and Negri read that very shift through Marxian value theory.

My objectives neither begin nor end in an assessment of *Empire*, and I do agree with many of Hardt and Negri's claims and normative impulses. And I would like to orient to some of the specific proposals of the book as a point of departure for exploring an alternative way of thinking about the valorization of labour – an alternative that tends to be obscured in a contemporary habit of thinking of which I take *Empire* to be an instance. I am working toward articulating an alternative proposal about the potential political-economic role of standardized inscriptions of formally free labour, in the constitution of value-formed labour as a historically specific category that is intrinsically bound with the social relations of capitalism. I understand capitalism to be a process of generalized market exchange mediated by the money form, and an exploitative process in which the unequal distribution of social wealth is embedded in the production of goods and services. As far as I have been able to deduce from *Empire*, the role of standard inscriptions of formally free labouring action has not been questioned in the claims that are made about the self-valorizing capacities of informatic labour.

I will work through three loosely structured stages in this paper. The first presents a puzzle of valorization theory - the constitution of homogeneity and heterogeneity within and as the commodity form – and I will show how this puzzle is dealt with in Empire, specifically their treatment of 'immaterial labour' as the category which accounts for the origination of homogeneity and heterogeneity. The second looks more closely at some of the presuppositions of that approach and their relationship to Hardt and Negri's contention that the transcendental ordering practices of modernity are waning in the context of informatic capitalism - a claim that is associated with their scepticism regarding the critical-political relevance of postmodernist and postcolonial theory with respect to contemporary managerialism. The third stage of the paper identifies the logic of Hardt and Negri's approach as technicist, and indicates an associated lacuna with respect to contemporary managerialist practice. I then sketch an alternative line of reasoning that could be drawn on as a resource for theorizing the valorization of informatic labour: that standardized inscriptions of formally free, informatic labouring action have a constitutive role in its social construction qua commodity form, and thus are central to a theorization of the capitalist valorization process. Contrary to the claim in *Empire* – that informatic labour is self-valorizing – I suggest the possibility that such practices of inscription are a constitutive moment in the commodification process and are therefore relevant to valorization theory. Inscription might best be understood as an instance of what Hardt and Negri understand to be a specifically modernist practice of 'transcendental ordering'; their persistence in the

organization of labour would therefore provide a continuity across the passage to Empire as a historical milieu for the valorization of informatic labour.

### A Puzzle for Valorization Theory

Although the point tends to be neglected by mainstream economic theory, Marxist economists generally accept that commodities have a two-fold use-value/exchange-value structure. They may serve particular uses, however their capacity to participate in relations of generalized market exchange with other commodities is not thereby established. Insofar as use-values participate in generalized commodity exchange with other use-values, they must also have exchange-value. As use-values, commodities are qualitatively particular, which works against their comparability in the process of generalized exchange since the latter works through a logic of quantitative differentiation. In order to differentiate use values *quantitatively*, their *qualitative homogeneity*. My favorite example of this phenomenon, taught to me by my students in California is: in order to reckon the real difference between a BigMac and a salad, you've got to see them both as calories! (See also Reuten, 1999: 93-95).

Marx was unambiguous on this point in his discussions of the commodity form, maintaining the centrality of homogeneity across difference as an irreducible aspect of the objects of generalized commodity exchange. It was, for him, perhaps the marker of capitalism and reflected the historically specific social relations of which it consisted. The constitutive matrix, qualitative homogeneity across qualitative heterogeneity, obtains both for the commodities that labour creates and for labour itself qua commodity; that is, the double form (use-value / value) characterizes both commodified products and the labour that creates them (Reuten, 1988: 54; Reed, 2003: 68). A longstanding puzzle for Marxian theory has been to discern on what basis the exchangeability of qualitatively particular labours is possible: what is it that constitutes the generality, the qualitative equivalence, across differences? It is often referred to as 'abstract labour' in the sense that whatever this 'it' is, is going to turn out to be what is common to all the qualitatively particular labours qua use-values. The crux of the debate between traditional and value-form theoretic Marxists concerns the social foundation – the historicity - of this abstract homogeneity. Hardt and Negri's treatment of the valorization of informatized production is best seen through the eyes of this question of origination, for in their treatment of the historical shift to Empire they also posit a shift in the genealogy of abstract homogeneity across difference.

*Empire*'s treatment of the emerging historical shift doubts neither the continuity of capitalism, nor generalized commodity exchange. As such, the historical shift that is being proposed in *Empire* is one in which both the qualitative heterogeneity and qualitative homogeneity of labouring actions is realized. And yet, although they

For treatments of the centrality of this problem to the analysis of capital, and of the basic distinctions between traditional Ricardian Marxism and post-Rubinean value theory, see for example, Postone (1993); and Reuten (1988, 2003).

acknowledge the historical persistence of capitalism as a distinctive milieu in which valorization occurs, Hardt and Negri also posit a historical shift away from industrial production as a distinctive process *for* that occurrence. Industrial valorization is an antiquated, modernist process that is being superseded by informatized production, which gives rise to its own, unique conditions through which capitalist valorization can be realized. This is an extremely interesting proposal, for it entails both a historical treatment of a distinction between industrial and informatized production, and a threading of these forms back through Marx's treatment of the distinctiveness of capitalist valorization.

Although Hardt and Negri maintain Marx's central point on the simultaneous qualitative particularity and qualitative sameness as a structural feature of the labour-commodity form, they maintain that the historical transition from industrial to informatized production involves a transition in how this structure comes about. Here is an example of their proposal:

One consequence of the informatization of production and the emergence of immaterial labour has been a real homogenisation of labouring processes. From Marx's perspective in the nineteenth century, the concrete practices of various labouring activities were radically heterogeneous: tailoring and weaving involved incommensurable concrete actions. Only when abstracted from their concrete practices could different labouring activities be brought together and seen in a homogeneous way, no longer as tailoring and weaving but as the expenditure of human labour power in general, as abstract labour. [2] With the computerization of production today, however, the heterogeneity of concrete labour has tended to be reduced, and the worker is increasingly further removed from the object of his or her labour. The labour of computerized tailoring and the labour of computerized weaving may involve exactly the same concrete practices - that is, manipulation of symbols and information. Tools, of course, have always abstracted labour power from the object of labour to a certain degree. In previous periods, however, the tools generally were related in a relatively inflexible way to certain tasks or certain groups of tasks; different tools corresponded to different activities – the tailor's tools, the weaver's tools, or later a sewing machine and a power loom. The computer proposes itself, in contrast, as the universal tool, or rather as the central tool, through which all activities might pass. Through the computerization of production, then, labour tends toward the position of abstract labour. (Hardt and Negri, 2000: 292-293, emphases added)

The claim regarding the distinctiveness of the present of capitalist valorization, then, is that the use of computers in the production process brings with it a change in the process through which the homogenization of labour is realized. A central theme in *Empire's* conceptualization of informatic production is that of 'immaterial labour' or computer-mediated service labour. *Empire* acknowledges that there might remain a division of social labour between occupations that become truly immaterial and those that continue to be engaged in only 'routine symbol manipulation'. But in those occupations in which computer-mediated service work reigns, the idea seems to be that we can begin to talk about a transition in the logic of the valorization process itself.

Whereas the tools used prior to the computer lead to a differentiation in types of labouring action, when everyone uses the computer, tool-use becomes a homogenizing force. The distinctiveness of valorization today, in other words, is predicated on the distinctiveness of information and communication technologies qua means of

<sup>2</sup> The footnote in the original text refers the reader to Vol. 1 of *Capital*, pp. 131-137.

production: labour is immaterial insofar as it is an emergent property of informatized production. The valorization of immaterial labour is reducible to its informatic character.

### The Homogeneity and Heterogeneity of Informatic Labour

At the same time that *Empire* maintains the continuity of capitalism as the milieu for the valorization of informatic labour, it denies the continuity of the requirement for concrete labouring activities to be abstracted and "seen in a homogeneous way as the expenditure of human labour power in general" (Hardt and Negri, 2000: 292), or abstract labour. Such an abstraction process is no longer necessary, Hardt and Negri propose, because the computer – the tool that all qualitatively particular labours commonly utilize – provides a kind of qualitative equalization, or homogeneity, across them. However, the claim is not only that the computer affords this homogenization process. There is also the claim that the externally imposed abstraction process that characterized preinformatic capitalism wanes in the historical passage to Empire. We find a crucial discussion of this particular historical proposal in the context of Hardt and Negri's criticism of the analytical and political orientation of two research communities that they call postmodernist and postcolonial theory (traced chiefly to Lyotard's critique of modernist master narratives and Derrida's critique of western metaphysics.) What I want to focus on in their critique is the way in which they deduce the contemporary impotence of those theoretical resources on the basis of a particular aspect of contemporary managerialism: its embrace of difference.

According to Hardt and Negri, postmodernist and postcolonial theory are efforts to interrogate and seek liberation from what are now past forms of rule, the lingering influences of the enlightenment, as the source of domination in the present (2000: 137-139). The charge is two-fold: (i) that the analytic and political affordance of these works consist and culminate in the recognition and celebration of difference; and, (ii) that the critique of Enlightenment practiced in these works is misguided because contemporary managerialism embraces a difference that modernity did not. Both points read as follows:

When we begin to consider the ideologies of corporate capital and the world market, it certainly appears that postmodernist and postcolonialist theorists who advocate a politics of difference, fluidity, and hybridity in order to challenge the binaries and essentialism of modern sovereignty have been outflanked by the strategies of power. Power has evacuated the bastion they are attacking and has circled around them to join them in the assault in the name of difference. These theorists thus find themselves pushing against an open door. (*ibid.*, 138)

When postmodernists propose their opposition to a modernity and an Enlightenment that exalt the universality of reason only to sustain white male European supremacy, it should be clear that they are really attacking the second tradition of our schema (and unfortunately ignoring or eclipsing the first). It would be more accurate, in other words, to pose postmodernist theory as a challenge neither to the Enlightenment nor to modernity in toto but specifically to the tradition of modern sovereignty. (*ibid.*, 140)

Hardt and Negri's proposal in this regard stems from a particular understanding of modernity as a historically specific economic form, and as a particular milieu for the

valorization of labour. The distinctive process of that historical moment seems to be what they call 'transcendental ordering' – an externally imposed process of abstraction – as a condition of its possibility. Allusions to transcendental ordering are central to modern sovereignty as a mediating political form.

Empire refers to a dramatic conflict, in circa 1220s-1600s, in which "the immanent forces of desire and association, the love of community," are confronted by "the strong hand of an overarching authority that imposes and enforces an order on the social field" (ibid., 69). The immanent forces of desire and association had emerged as a revolutionary response to the metaphysical dichotomies of the ancien regime, and consisted in humanity's discovery and affirmation of its power in this world; and "knowledge shifted from the transcendent plane to the immanent and, consequently, that human knowledge became a doing, a practice of transforming nature" (ibid., 72). The political structure of the immanent revolutionary forces was distinctive, according to Hardt and Negri, in that "the plane of immanence is the one on which the powers of singularity are realized and the one on which the truth of the humanity is determined historically, technically, and politically. For this very fact, because there cannot be any external mediation, the singular is presented as the multitude" (ibid., 70-73).

This tradition entered into a conflict on account of the impulses of another tradition, "which arose within the Renaissance revolution to divert its direction, transplant the new image of humanity to a transcendent plane" and pose "a transcendent constituted power against the immanent constitute power, order against desire" (ibid., 74). The conflict provided the organizing frame for the Thirty Years War. A mediation of the conflict came about, ultimately but provisionally, through a political form called 'modern sovereignty': "The primary task of this Enlightenment was to dominate the idea of immanence without producing the absolute dualism of medieval culture by constructing a transcendental apparatus capable of disciplining a multitude of formally free subjects. The ontological dualism of the culture of the ancien regime had to be replaced by a functional dualism, and the crisis of modernity had to be resolved by means of adequate mechanisms of mediation" (ibid., 78).

What is so fascinating about this historical moment is its production of a cultural process – what Hardt and Negri refer to as 'transcendental ordering' – that could mediate the struggle of the two traditions, in a way that realizes the second tradition's imperative to control without resorting to the metaphysics that had been troubled by the revolutionary immanent forces that rose against it. Modern sovereignty absorbs within itself the second tradition's impulse to control the immanent forces, but achieves that control through a kind of earthly instantiation of the transcendental apparatus. As *Empire* specifies: Hobbes's figure of a 'God on earth' provides the model for the transcendental apparatus that distinguishes modern sovereignty as a mediating, political form: "On the one hand, the transcendence of the sovereign is founded not on an external theological support but only on the immanent logic of human relations. On the other hand, the representation that functions to legitimate this sovereign power also alienates it completely from the multitude of subjects" (ibid., 84).

According to Hardt and Negri, Hobbes's 'earthly God' paves the way for monarchic absolutism, but also provides the political schema amenable to the realization of

democracy. However, even with this schema at its base, the sovereign authority had to be sustained by a content that fills it; and in sovereignty's democratic guise, the Hobbesian schematic is supplemented by "the affirmation of the market as the foundation of values of social reproduction" (ibid., 85), Adam Smith being the principle locutor of that union. When Smith's synthesis was fully realized, "sovereignty becomes a political machine that rules across the entire society (...) a police power. It must continually and extensively accomplish the miracle of the subsumption of the singularities in the totality, of the will of all into the general will. Modern bureaucracy is the essential organ of the transcendental – Hegel dixit" (ibid., 87-88).

Hardt and Negri rightly suggest that transcendental ordering – or modern bureaucracy – is a contingent cultural practice that is central both to modern sovereignty as a political form and to capitalism as an economic form. However, the important issue is that they also propose that the world is in the midst of a historical shift in which that contingent cultural practice is being superseded in/as the passage to Empire. Also, it is this shift that constitutes the historical frame for the valorization of informatic labour. They suggest that computer-mediated labour is intrinsically homogenous and therefore requires no abstraction from its concrete particularity. Hardt and Negri also argue that the transcendental ordering that would have once provided a mechanism for that very abstraction is, in the passage to Empire, no longer effectively available to perform such function.

The double suggestion rests in the implicit equivalence that they draw between the 'transcendental ordering' of modernity, on one hand, and modernist 'master narratives' and 'binary divisions', on the other. And with that parallel drawn, the alleged ends of postmodernist and postcolonial critique – the recognition and celebration of difference – is *no longer* an effective political strategy, because, in the shift to Empire, it is precisely the difference these political works purportedly celebrate in their critique of Enlightenment that power has adapted to thrive upon. Put differently, the political relevance of postmodernist and postcolonial critique is called into question on the count that transcendental ordering, the distinctive marker of modern sovereignty, is no longer the appropriate object of political economic critique – precisely because the managerialist practices that target the labours of Empire have shunned transcendental ordering. Thus, ask Hardt and Negri, "what if the form of power these critics (and we ourselves) have taken such pains to describe and contest no longer hold sway in our society?" (ibid., 137-138).

## The Politics of Flexibility

Now, there are two things that seem to be being said here: First, the transcendental ordering practices which characterized modern sovereignty as a political form no longer hold sway in our society; and second, difference, which is the object of a fervent managerial embrace, is alive and well at the site of contemporary labouring activities.

<sup>3</sup> Hardt and Negri locate Weberian bureaucracy and Foucault's 'governmentality' and 'disciplinary society' within the paradigm of modern sovereignty.

The suggestion is that contrary to modern sovereignty, which did not embrace difference but rather deployed an earthly transcendental apparatus to order an existing, heterogeneous social field, the new form of managerialist power entails no such transcendental ordering. Difference is no longer the object of an ordering impulse, and therefore, deconstructivist critiques of representational practices/master signifiers – qua modes of transcendental ordering – are no longer relevant to a critique of capitalist power in the era of Empire. Transcendental ordering, modern bureaucracy – the marker of modern sovereignty – was by implication a practice of *not* embracing difference; it is now the *absent* enemy of postmodernist/and postcolonial critique.

But that is not all. We know from Hardt and Negri's description of pre-informatic labour (as seen from Marx's perspective in the nineteenth century) that the differentiated technological base of production gave rise to a heterogeneity at the site of labour, which, as commodified labour, was therefore what required an abstraction process that could ground the homogenization required for generalized commodity exchange. It is clearly not this 'difference' which the new managerialists claim to embrace, since the pre-informatic labour as seen from Marx's perspective in the 19<sup>th</sup> century is now (at least for informatic labour) displaced by a universalizing technological base. Precisely because the historical shift to Empire does not entail the waning of generalized commodity exchange (but only transcendental ordering), both the qualitative homogeneity and qualitative heterogeneity of labouring actions is realized. That is, informatic labour, qua valorized object, must be a process in which both difference and homogeneity are located. So the question becomes, if it is not the heterogeneity that was predicated on the differentiated technological base, what heterogeneities, what forms of difference, are the managerialists now embracing? Whither originates the difference that they celebrate? Whither comes this difference that emerges on the basis of a *universalizing* technical base, and therefore no longer needs to be homogenized through a process of transcendental ordering?

Here is the puzzle stated differently. Hardt and Negri propose that the homogenization of labour is achieved through (and within) the symbolic contents of concrete labouring activity, and that this occurs without any need for the transcendental ordering functions that are germane to the politics of modern sovereignty. However, it is also the case that such homogenization ultimately must be reconciled with the necessity of difference or qualitative particularity within informatized labour as a commodity form. It is as if the conflict of the two traditions of modernity persists, but must be reconciled in the absence of transcendental ordering. Homogeneity across difference persists in the figure of global corporate capital, but it does so in the absence of both the ordering impulses and abstractive, homogenizing capacities that mark the cultural uniqueness of modern sovereignty and the forms of difference that the differentiated production technologies grounded. That is, in addition to being a field of homogeneity, informatized labour must also be a field of difference that is not predicated on the differentiated technological base that characterized pre-informatic production.

I have already considered how Hardt and Negri account for the emergence of homogeneity, an achievement that they ascribe to the use of the computer, the universalizing technological base. *Empire* accounts for the emergence of heterogeneity through a tandem claim that computer-mediated service work gives rise to a

heterogeneity at the site of labouring action as well. This seems to be the conceptual function of the notion of what they call the 'second face of immaterial labour', or affective labour. This 'second face', they propose, is

better understood from what feminist analyses of 'women's work' have called 'labour in the bodily mode.' Caring labour is certainly entirely immersed in the corporeal, the somatic, but the effects it produces are nonetheless immaterial. What affective labour produces are social networks, forms of community, biopower. Here one might recognize once again that the instrumental action of economic production has been united with the communicative action of human relations; in this case, however, communication has not been impoverished, but production has been enriched to the level of complexity of human interaction. (*ibid.*, 293)

However, there is more in the claim about the social affordances of immaterial labour; for the proposal is not only that immaterial labour is both intrinsically symbolic and corporeal, but also that it constitutes a form of cooperative activity that differs from that which we encountered in the discussion of labour carried out in the context of the differentiated technological base. That is, the labour that is both symbolic and corporeal is differentiated in a peculiar way that affords it to be self-valorizing. Hardt and Negri propose, in other words, that "cooperation is completely immanent to the labouring activity itself," and that this "affords labour the possibility of valorizing itself" (ibid., 294).

Brains and bodies still need others to produce value, but the others they need are not necessarily provided by capital and its capacities to orchestrate production. Today, productivity, wealth, and the creation of social surpluses take the form of cooperative interactivity through linguistic, communicational, and affective networks. In the expression of its own creative energies, immaterial labour thus seems to provide the potential for a kind of spontaneous and elementary communism. (ibid., 294)

The point seems to be that there is a kind of *intrinsic* heterogeneity that characterizes immaterial labour, qua informatic labour – a kind of heterogeneity that could be contrasted with that which, qua pre-informatic labour, was structured by a differentiated technological base. The cooperative activity that marks informatic labour presupposes this difference and is set into motion across social subjects and the communicative actions in which they engage. However, the heterogeneity is not an emergent property of a differentiated, but rather of a universalizing technological base. And if we reconsider the passage above about the abstraction process that was required to homogenize the labours predicated on the differentiated technological base, we will recall that the contrast between pre-informatic and informatic universality is that, for the former, "the tools generally were related in a relatively inflexible way to certain tasks or certain groups of tasks" (ibid., 292, as quoted earlier) – a claim which is supposed to explain both the specificity of pre-informatic heterogeneity and the possibility for the 19<sup>th</sup> century technological base not to have been capable in, and of, itself to realize the universalization process.

Of course, this all reads like a scholastic hair-splitting exercise. But I feel that it is important to point out that the specific heterogeneity that is being proposed with respect to immaterial or affective labour, is predicated not centrally on the computer (the universalizing tool), but rather (and apropos the comment about inflexibility above) on its character as a tool that must be used in a relatively *flexible* manner. So it seems that what the managerialists must be embracing in their adoption of heterogeneity is a

flexibility that is necessarily associated with the communicative social interaction that is mediated by computer technology, which also provides the universality across such heterogeneity.

The claim thus emerges in *Empire* that the distinctiveness of valorization in the field of informatic production is predicated on the distinctiveness of the labouring actions that are required when computers are the means of production and when informational/communicative services are the products to which those actions give rise. The distinctiveness consists in the potential of computer-mediated service work in, and of, itself to realize *both* homogeneity and heterogeneity, which, again, is a condition of its commodity status, within the site of labouring action. The content of managerialist ideology would then be a crucial factor in the (self-)valorization process, because it must entail the imperative to support – rather than to order – the flexibility that is intrinsic to informatic labour in its process of becoming the flexible social space that technology enables it to be.

#### A Technicist Model of Labour

The historical shift dealt with in *Empire* thus refers to two models of production that could provide the conditions for the generalized market exchange of labours. Each of the models entails a relational matrix of qualitative homogeneity across qualitative heterogeneity. The crucial contrast between them rests not in the relative presence or degree of homogeneity or difference, but rather in the process through which the relation homogeneity/difference originates in each. The homogeneity/heterogeneity matrix of industrial production is said to originate in the differentiation of labouring activities by a heterogeneous technological base. That differentiation requires that an abstraction process that comes from outside the site of labouring actions be imposed on them, such that homogeneity can be manifest. There is a difference immanent to labouring actions as structured by a differentiated technological base, and a homogeneity that is produced from a transcendental ordering that, albeit earthly, can be imposed to constitute the universality of labouring actions qua commodities.

By contrast, Hardt and Negri seem to be arguing that the distinctiveness of commodified informatic labour rests in the way in which both homogeneity and heterogeneity are *immanent* to the production process – they originate from the same act – informatic labour qua computer-mediated social interaction. This seems to be the force of the concept of 'self-valorization': informatic labour intrinsically realizes both conditions of the commodity form, *from the inside out*, so to speak. Informatic managerialism simply allows, indeed embraces, that inside-outward movement.

Here it is important to keep in mind the difference between traditional labour theories and post-Rubinean approaches to theorizing value. As Postone has suggested, traditional Marxism shares Ricardo's standpoint on labour as "a goal-directed activity that mediates between humans and nature, creating specific products in order to satisfy determinate human needs" (1993: 7-8). That is, the idea that value is created by wealth creating activities, where wealth is conceived to be the goods needed to satisfy human

needs. The problem with this model of labour as value-creating activity is that it obscures the historical specificity of wealth in capitalism. Although need satisfying activity may in some historical epoch have been considered to be predicated on such tool-mediated creation of products to satisfy human needs, one of the specificities of capitalism is the centrality of money mediated value as the form of wealth. Thus, products are wealth-creating only insofar as they are value-creating, where value-creation and need-satisfying product creation become interchangeable terms only via the money form.

#### Reuten has characterized the Ricardian approach as technicist:

A crucial characteristic of capitalism is that it is organized around money. Useful objects and labour are socially recognized as useful only by assuming the form of value: money. Thus they are socially recognized by taking a social form distinct from their natural physical makeup. Useful objects thus take the social form of commodities (use-value and value), whence labour also takes this double form of particular (use-value producing) labour and abstract (value producing) labour...Exclusive focus on the use-value aspect leads to a technicist approach. Production is then considered only as a process of production of use-values (as in neo-classical theory) or of embodied labour values (as in neo-Ricardian theory). These approaches may be appropriate for theorizing communal societies, but not for capitalism. Capitalist social relations appear as monetary relations in the first place. Because in these physical-technical theories money is incorporated only – if at all – as an afterthought...they are forced to theorize exchange as a hypothetical construct within the terms of the theory. (Reuten, 1988: 42-43)

Empire's proposals resonate with these technicist and labour-embodied approaches to labour as a source of value. That is, they situate the abstraction process within the concrete actions of the informatic-labouring body – labour in its use value dimension – via an appeal to the symbolic character of those actions. This is very different from a generalization process that is predicated on money-mediated market exchange, because it does not require that the money form play any constitutive role in the process through which valorization occurs.

Now, Hardt and Negri seem to be comfortable with a technicist approach to the valorization process, precisely insofar it enables them to interpret the increasing necessity of informatic labour to capitalism to be a demand for a uniquely communal social activity. Indeed, immaterial labour seems to have become so powerful a concept, because it is coded both in the language of Marx's 'general intellect' *and* in the language of managerialist-establishment knowledge society pundits like Robert Reich, the labour secretary under the Clinton-Gore Administration. As far as *Empire* is concerned, both Lazzarato's 'immaterial labour' and Reich's 'symbolic-analytic services' are invoked as the interchangeable codes for Marx's 'general intellect'<sup>4</sup> as the social ground through which generalization across difference will emerge. The harmony of Marx and capitalist managerialists stems, it seems, from the specific claim that is proposed about the political potentialities of immaterial labour, conceived on technicist lines. It is as if Clinton-Gore had provided the technical and ideological conditions for the teleological unfolding of millennial communism.

<sup>4</sup> Jason Read has recently interpreted the self-valorizing labour described by Hardt and Negri as Marx's 'living labor' (Read, 2003: 80-83).

Taking the postmodern managerialists' embrace of difference as an indicator of historical changes in the technologies of capitalist power is an interesting methodological move, reminiscent of Marx's "critical ethnography of capitalist society undertaken from within" (Postone, 1993: 18). And our response to this should be not, 'well, yes, they say they embrace difference, but do they really?', but rather, 'how do we read this embrace of difference back through to its relations with the categories such as value, abstract, labour, the commodity, and capital?'. In order to comprehend the politics of this embrace as an expression of the specificity of capitalism as a contingent cultural form, it seems to me that it is necessary to read through and beyond this embrace of difference to see what kinds of valorization practices it joins.

In this regard, what is not considered in Hardt and Negri's treatment of the new managerialist embrace of difference, is a line of research that emerged quite separately from the claims about the communicative social interaction demanded by the use of computer technologies that could enable flexible, global production.<sup>5</sup> For at least the past 25 years there has been a different line of research going on among sociologists of work in the phenomenological traditions (such as symbolic interactionism and ethnomethodology). They have problematized precisely the claim that labour process technologies – even those associated with 'old-school' industrial production – have a coercive, determinate capacity to control the bodies and minds of labouring subjects. To name only a few, we could draw a clear genealogical line on precisely this point, for example, through Kusterer's Know-how on the Job (1978), Suchman's Plans and Situated Actions (1987), and Ciborra's From Control to Drift (2000). These books share a constructionist theory of human action that eschews a realist and deterministic assumption that underlay critical Marxian sociologies of work such as Braverman's – namely, that the instructions produced in such regimes as scientific management could in advance fully specify and secure the social actions to which they referred. <sup>6</sup>

Contrary to such a realism, constructionist work research emphasizes that all sorts of communicative social (inter)action that is *not* specified in such instructions goes on, indeed must go on, as a means to achieving the concrete *outcomes* for which managerial instructions are initially produced. Such action is intrinsically flexible, and its deviation from specified instructions is not exceptional; rather, it is to be expected from human action, even when managerial regimes attempt to preclude it.

<sup>5</sup> The expression of this we could find at least as early as Daniel Bell's *The Coming of Postindustrial Society* (1973) and Piore and Sabel's *The Second Industrial Divide* (1984).

An exemplary instance of such realism and determinism in Braverman is, for example: "(C)onception and execution must be rendered separate spheres of work, and for this purpose the study of work processes must be reserved to management and kept from the workers, to whom its results are communicated only in the form of simplified job tasks governed by simplified instructions which it is henceforth their duty to follow unthinkingly and without comprehension of the underlying technical reasoning or data" (Braverman, 1974: 118).

### The (Banal) Persistence of Modernity?

I will not delve into an adequate discussion of the constructionist work research traditions and their contemporary handshake with post-industrialists who maintain that capitalist production requires historically unique forms of flexible and communicative social interaction. But I will offer two observations. The first is that constructionist work research and post-industrial theorists share a common disavowal of what traditional Marxian critics of the capitalist labour process used to emphasize as the distinctive marker of the political problematic of capitalist labour: the control of labour by management. However, the refutation is argued on different grounds in each case. Constructionists appeal to a *socio-psychological* claim about the irreducibly creative, social, and communicative character of all human action. Post-industrialists appeal to a *historical* claim about the distinctive techno-organizational demands of global capitalism. In spite of these differences in argumentative foundation, however, each suggests that indeterminate, or 'flexible' social action at the site of labour is a mainstay of the contemporary capitalist production process.

My second observation is that managerialists who frame their own practices with the discursive resources of either constructionists or post-industrial theorists continue to maintain the necessity of standardized representations of the labour process for the organization of the capitalist labour process. No longer wedded to the control imperatives that were once a marker of scientific management, contemporary managerialists continue to uphold the existence of the representational technologies that characterized it. And we have to ask what it can possibly mean that those who embrace - and who tout both the inevitability and need for - flexibility and social heterogeneity in the enactment of the contemporary labour process, continue to go about building and institutionalizing representations of the labour process as though it were a standardized and predictable social process? (Vann and Bowker, 2001/2004).8 While disavowing what used to be the central reason for representing the labour process in advance as a predictable field of action – that is, while disavowing that representations could pre-specify, determine, or standardize the content of labouring action contemporary managerialists continue to insist on representing labouring action as though it were pre-specified. This is interesting, because it suggests that such representational practices may have a political-economic function other than prespecifying and determining labouring action, which capital cannot do without. In other words, perhaps the continued maintenance of what we might understand as 'modern bureaucracy' has a completely different political-economic efficacy than the ordering of human action. Our question now becomes: If standard representations of the labour process continue to proliferate in contemporary organizations of work, but their capacity

In place of the Bravermanian vocabulary of 'instructions' or 'conception' as distinguished from 'execution,' we rather see the vocabularies of, 'schema', 'plan', 'procedural standard', etc.)

<sup>8</sup> We have looked at aspects of this dynamics with respect to managerialists who promote the idea of 'communities of practice'.

to pre-specify and determine labouring action is denied,<sup>9</sup> what sort of justification is their continued deployment in the production process supposed to be based upon?

At this juncture I want to turn to two kinds of efficacy<sup>10</sup> that a variety of social studies of science researchers are learning to ascribe to standard representations of human action. The first kind of efficacy is that they can be used as resources that could be used to help *guide* (but not determine or control) the actions of human subjects. That is, they have a power that is contingent upon the subject who could use them and subordinate them to his or her own local concerns. Metaphors such as 'appropriation' – as in, 'the subject appropriates the plan as a heuristic to help coordinate his future action' – are often used in this sense. The second kind of efficacy is that they can *provide nomenclatural resources* for *describing* what occurs. That is, they provide statements that could be used in the production of *accounts* or *data* of what action will take or has taken place. In this latter sense, standard representations of labouring action are best understood as *inscriptions* of the labour process. They are nomenclatural technologies whose presumptive referents are the identities, actions, and time that constitute the process through which products are created. Inscriptions can *act in place of* those referents.<sup>11</sup>

Having each of these potential efficacies, managerial conceptions are extremely peculiar organizational technologies, because they can inhabit two very different spaces of production at once – the spaces of action to which they refer, and the spaces of reading that can be far away from such action. That is, they can be used within the space of action as a tool for the labouring subject, rather like a set of driving directions can help one find her way through an intricate terrain. 12 And they can be used *outside* that space as a representation or proxy for the actions to which the directions were ostensibly written to give rise; as such they can speak as and in the place of their ostensive referents. Managerialists who refute the action-determinative capacities of inscriptions of labour while continuing to maintain their centrality in the production process tend to draw on the delicate language of guidance and emphasize only one of their efficacies: the one which is predicated on the centrality of the subject who would use them as resources, appropriate them, subordinate them to her own concerns in the space of labouring action. That is, their capacity to speak as and for labouring subjects tends to be eclipsed by their capacity to be a resource used by those subjects. This is important, because the social space that is emphasized by managerialists in this sense has noteworthy affinities with the social space to which the technicist model of labour reduces the valorization process: each is focused on labour solely as a space of action, or labour in its use-value dimension.

I am concerned about these affinities because they entail an understatement of the political implications of the nomenclatural technologies that continue to be maintained in the face of widespread disavowal that they are deployed as a means of controlling,

<sup>9</sup> Again, constructionists deny that pre-specification *could* happen, and post-industrialists deny that it *should*.

<sup>10</sup> By 'efficacy' I mean 'power to do', which I prefer over 'function'.

<sup>11</sup> See, e.g., Latour (1987).

<sup>12</sup> See, e.g., Suchman (1987).

de-flexibilizing, standardizing the actions of labouring subjects. The point to uphold here is that the capacity of such inscriptions to speak for/as the labouring subject is not cancelled just because they may *also* be used by the labouring subject as a *tool* in the space of labouring *action*. Critical theory of valorization should take seriously that standard representations of labour continue to exist in contemporary work organizations and that they have the power to shape data and accounts about labouring action.

It seems to me that *Empire* does not explore this, although there are moments in the book that would have been ideal for it. Hardt and Negri state, for example, that "the structure and management of communication networks are essential conditions for production in the informational economy," and that "they must be constructed and policed in such a way as to guarantee order and profits" (2000: 297-298). Politically, these production technologies take on a dual form:

In political terms, the global information infrastructure might be characterized as the hybrid of a democratic mechanism and an oligopolistic mechanism, which operate along different models of network systems. The democratic network is a completely horizontal and deterritorialized model. (...) what Deleuze and Guattari call a rhizome, a non-hierarchical and non-centered network structure. (*ibid.*, 298-299)

Coupled with this model, embedded in the new information infrastructures, is a second model that is

characterized by a broadcast system. (...) not a rhizome but a tree structure that subordinates all of the branches to the central root. (*ibid.*, 299-300)

And we have to ask: Why is it not suggested in *Empire* that such a global information infrastructure could function as a contemporary venue for transcendental ordering – a global medium for the persistence of modern sovereignty – as a mechanism through which qualitative homogeneity across qualitative difference for purposes of quantitative differentiation might occur? Why is it not suggested that the global information infrastructure mediates the valorization of informatic labour? Their gesture to postcolonial and postmodern critics' absent object requires avoiding precisely these questions. Indeed, the theoretical reconciliation of the corporate embrace of difference with the spectre of the global commodification of labour nevertheless enables the avoidance of these questions, because the substantive content of informatized labour can itself supply the social ground from which such ordering and homogenization can emerge. The technicist model of labour valorization does a lot of conceptual work in this sense, because it enables Hardt and Negri to position the global information infrastructure as a labour process technology in the sense of being a means of production wielded by labouring subjects; that is, the infrastructure is located as a tool for the labouring subject, where 'labour' is conceived along purely technicist lines.

What has not been interrogated fully enough with respect to such information infrastructures, is that they are media for the inscriptions that provide accounts of the actions that labouring subjects (supposedly) undertake. Because the catch, of course, is that getting through the terrain may require all sorts of actions that the directions do not specify. Inscriptions of labour neither necessarily reflect, nor are necessarily reflected in, the actions to which they refer. Indeed, such inscriptions attain an infrastructural stability precisely in that both of their social functions require no such correspondence.

As Bowker and Star (1999) have discussed at length, in providing a medium for accounts of what action will and has occurred, by whom, and for how long, such infrastructures can do the important work of clearance<sup>13</sup> and erasure.<sup>14</sup>

The technicist model may bring with it an unfortunate casualty in that it obscures the practice of inscribing the actions, identities, and time of 'living labour' involved in the labour process for purposes of accounting. Perhaps such practices are a constitutive moment in the valorization process – both in the so-called modernist and postmodernist production regimes – whose continuity is obscured, paradoxically, precisely because the technicist model of labour leads to a mistaken understanding of the modernist 'abstraction' process as one which finds its efficacy in and as the control of labouring bodies – that is, in and as the antiquated 'other' of 'flexible' labour. The implications of this argument for Marxian valorization theory could be significant.

### An Economics of Anticipation?

Empire maintains that with the proliferation of informatic labour the process of generalization required for the production of qualitative equivalence is realized within the labour process conceived along technicist lines. This emphasizes labour in its usevalue dimension. *Empire's* reading of valorization is one which locates the realization of homogeneity within use-value creating labour, regardless of the specificity of the social relations of exchange for which such use-value creating labour is carried out. Although social interaction and communication that are endogenous to the techniques of the production process are certainly instances of 'social relations', they are not the type of social relations to which relations of production for generalized commodity exchange - social exchange mediated by the money form - can be reduced. That is, the forms of social interaction and communication required by the use of information technologies in the production process are not themselves the kinds of exchange that are necessary for the production of the material wealth whose distinct historical form is money-mediated value. In this sense, although forms of both heterogeneity and homogeneity are accounted for by appealing to the techniques of production, what seems to be unaccounted for is how the quantitative differentiation of the (now) qualitatively homogeneous labours can be socially grounded, so that informatic labour can manifest as a tradable good in money-mediated markets. The notion of self-valorization proposed in *Empire* seems to me to deny the centrality of that quantitative process because it does not embed the problematic of measuring informatic labour into its model of valorization. The problematic of measure, it seems to me, must be an aspect of money mediated market exchange. If this is so, then a reading of the political possibilities for troubling valorization specific to money-mediated market exchange must identify the contingent cultural processes which enable the persistence of measure as a politicaleconomic practice. The central puzzle for valorization theory may thus be to discern, not what technical forms might require more social interaction and communication in

<sup>13 &#</sup>x27;Clearance' is described as the erection of a barrier in the past so that no information or knowledge can leak through to the present.

<sup>14 &#</sup>x27;Erasure' is described as the ongoing destruction of selective traces in the present.

the concrete labour process, but what contingent cultural practices enable the homogenization of qualitatively particular labours for the specific purpose of quantitative differentiation.

I would like to propose that a line of inquiry regarding the valorization of informatic labour could be built by bringing insights from science and technology studies research on the politics and cultural practices of inscription into dialogue with a question that has been articulated by Arthur (2001) regarding the emergence of the 'social substance' of value:

On the one hand, commodities must enter the exchange process as objectified universal labour time, on the other hand, the labour time of individuals becomes objectified universal labour time only as a result of the exchange process. (Marx, 1987: 286)

This statement of the problem comes from Marx's Contribution to the Critique of Political Economy (1859). There he solved it to his own satisfaction by the introduction of money (Marx, 1987: 288-89, 307). But it might be thought that although money certainly posits the labour it represents, and hence by reflection the labour represented by all commodities, as abstract universal labour, the abstraction is still not posited prior to exchange. While abstract labour is no longer considered merely 'our abstraction' (Marx, 1987: 285) but one really posited in and through the exchange of commodities for money, it may yet be true that this abstraction cannot be read back into production. It may still be the case that labour becomes 'abstract' only when products are priced. If this is so, it might be thought that the counting of labour only as an abstraction of itself is a social illusion, a 'shadow form' cast by monetary circulation... Rubin addressed the same 'contradiction' (Rubin, 1972: 147) and rightly pointed out that, if what happens prior to exchange is the capitalist production of commodities for exchange, this leaves its imprint on the process of production itself (Rubin, 1972: 149). This is what was demonstrated above when it was shown that if production is value-formed, that is, undertaken by self-positing capital, then living labour is treated as abstract prior to exchange precisely because it is treated as abstract in exchange. (Arthur, 2001: 23-24, emphasis added)

Our question is now, how might this *imprinting* occur and how does it achieve its position as that which links the abstractness of exchange with an abstractness within production. How might a *treatment* of labour as abstract be concretely brought about? Like Arthur, Postone (1993) maintains the importance of *time* in the process of valorization. He argues that, rather than measuring some concrete expenditure that is *antecedent to it*, the representation of time becomes an active process in the *constitution* of the activities that are purportedly being measured. Such a representation of time is the medium through which both the qualitative equivalence and the quantitative differentiation of qualitatively particular labours becomes possible. We might think of such represented time as a measure that *comes before and outlives* what would seem to be its referent.

Let me try to say it another way. Postone describes how, for Marx, value is a form of wealth that is expressed by its measure, which is an objectification of abstract labour. As that which constitutes a general, 'objective' social mediation, abstract labour is neither expressed in terms of the objectifications of particular concrete labours nor measured by their quantity. Its objectification is value – a form separable from that of objectified concrete labour, that is, particular products. Similarly, the magnitude of value, the quantitative measure of the objectification of abstract labour, differs from the various physical quantities of the various commodities produced and exchanged. Value, then, is measured not in terms of the particular objectifications of various labours, but in

terms of what they all have in common regardless of their specificity – the expenditure of labour. The measure of the expenditure of human labour that is not a function of the quantity and nature of its products is, in Marx's analysis, time:

Although value is constituted by the production of particular commodities, the magnitude of value of a particular commodity is, reflexively, a function of a constituted general social norm. The value of a commodity, in other words, is an individuated moment of a general social mediation; its magnitude is a function not of the labour time actually required to produce that particular commodity but of the general social mediation expressed by the category of socially necessary labour time. Unlike the measure of material wealth, which is a function of the quality and quantity of particular goods, then, the measure of value expresses a determinate *relation* – namely, a relation between the particular and the abstract-general that has the form of a relation between moment and totality. (Postone, 1993: 191-192)

Postone has emphasized that Marx defines socially necessary labour time as the labour-time required to produce any use-value under the prevailing socially normal conditions of production and with the prevalent socially average degree of skill and intensity of labour. Our question becomes: How might we understand these 'prevailing socially normal conditions' and the 'prevalent socially average degrees' that constitute the 'socially necessary labour time'? How are we to construe the development of this peculiar norm, which obtains over all particulars, and, neither derivative nor expressive of any of them in their concrete, use-value creating dimension, is necessary for them to participate in the social interdependence that they enable? It is a question of how such a norm might be translated both from and into the particular labours in relation to which it obtains. Marx implies that the norms must differ from those conditions and degrees attending any concrete, particular time that is required to produce use-values (labour in its corresponding use-value dimension.) Instead, the time of magnitude, which reflects upon a social norm and social average, is an artifact that is otherwise constituted and that confronts the individual moments in which concrete labour is carried through.

As we have seen, phenomenologists work researchers and managerialists who embrace social heterogeneity both urge us to doubt that labour conceived along technicist lines could possibly be the basis upon which such norms are established. Rather, there must be something besides concrete, use-value creating labour (again, labour as understood in the technicist model) that could be constituting such norms. As Arthur maintains, "as abstract, it is a matter of how labours are counted, and not how they are concretely" (2001: 22-23).

Reuten has offered an important insight that is extremely relevant to this point, and to the possible role of managerial conceptions – qua technologies of transcendental ordering – in the valorization of informatic labour:

Because exchange in the market is not accidental but systemic, the abstraction of the equation of a product to some definite amount of money can be anticipated in production. Production is production for exchange and useful objects are produced as commodities. So production is considered a potential money expansion, as valorization (money  $\rightarrow$  production  $\rightarrow$  more money). Before the actual exchange this is an anticipation. Nevertheless commodities produced do ideally represent an amount of value, ideal money. In this sense the actual abstraction in the market is anticipated by an ideal abstraction and the actual commensuration in the market is anticipated by the ideal precommensuration... This anticipation further crucially determines the bourgeois process of production in that it becomes itself form determined. The ideal precommensuration of the commodity gives rise to a further ideal abstraction concerning the labour process: the labour

process is ideally precommensurated in terms of ideal abstract labour or ideal value. (Reuten, 1988: 53-54)

What I like about the analytical category of ideal precommensuration is the emphasis that it places on anticipation – an anticipation that is embedded in the production process as a reflection of the particular forms of exchange *for which* that production is carried out. It is not so much that the process of valorization requires that future events be anticipated is any realist sense; anticipation need not be action-determinative. Rather, the very expression of such anticipation could be seen to have a performative function that turns on the capacity of language through which the anticipation is brought to life. Perhaps in such a performative manner the anticipation can function *as* the value chain event itself. That could be the force of the 'ideal'. In some strange way, this anticipation straddles labour as a technical space of creating use-values, and labour as a process that has already been mediated by the money form. A point made by Bowker and Star is relevant here; that humans

subvert the formal schemes with informal work-arounds. Indeed, the various approaches are often so seamlessly pasted together they become impossible to distinguish in the historical record. For instance, a physician decides to diagnose a patient using the categories that the insurance company will accept. The patient then self-describes, using that label to get consistent help from the next practitioner seen. The next practitioner accepts this as part of the patient's history of illness. As many of the examples in this book will show, this convergence may then be converted into data and at the aggregate level, and seemingly disappear to leave the record as a collection of natural facts. (1999: 54-55)

What I target in this excerpt is the process through which formalized nomenclatures are drawn on as a way of *constituting* the patient as an ill and fund-worthy subject – two identity constructs that seem only incidentally to be grounded in the bodily conditions of the patient herself. And my proposal is to carry the logic of accounting as described here to the problem of valorization. Rather than the formalized nomenclatures deployed in the inscription of illness, we are dealing with those that are deployed in the inscription of labour. This involves the inscription of the identities, actions, and time that constitute the labour process qua technical event. One of the acknowledged challenges for value form theory is to specify the category of ideal precommensuration in empirical terms, and to describe the cultural process through which it is concretely achieved. And what I want to suggest is that inscriptions of the labour process find their political-economic efficacy precisely as the medium through which anticipation (we might call it the prospective account of a value chain) is locally achieved and stabilized, and through which the labour process acquires its ideal value. I want to suggest that inscriptions play an important role in the valorization process, a role that stems from their capacity to speak for and as the time of the concrete, living labour to which they presumptively refer, even when the flexibility of that labour is too heterogeneous to be heard. Inscriptions of labour may have the efficacy to constitute valorized labour as a wholly virtual event, in other words, an event manifest through prospective and retrospective accounts.

### **Concluding Remarks**

The late twentieth century corporate embrace of difference – indeed the purported necessity of this embrace of difference to the sustainability of capital – is commonly read as a counter-industrial form. Hardt and Negri deduce from this counter-industrial form the dissolution of the political economic technologies of ordering germane to modern sovereignty – transcendental ordering. They are unambiguous on this point, as it provides the conceptual backdrop from which their criticism of the utility of postmodernist and postcolonialist analyses is mounted. However, that conclusion rests on the assumption that transcendental ordering cannot be maintained by the very people who embrace the heterogeneity of communicative social interaction. Hardt and Negri deduce quite a lot from the managerialists' embrace of difference, and do not ask whether there are ways in which transcendental ordering can persist fully in the face of such an embrace. What is overlooked in taking the global corporate managerialists' embrace of difference as an indicator of the 'ceasing to be' of transcendental ordering, is that this difference-embracing regime also embraces something else: the standardized inscription of labouring action.

The potential political-economic efficacy of these infrastructures is obscured if it is assumed that transcendental ordering must mean the *control* of labouring bodies. The embrace of difference necessarily emerges as the giving up of control and thus the counter-image of industrial production. Control, here, is conceived to be the definitive mark of industrial production, and in its absence there is no longer any transcendental ordering. Such control is presumed to be a distinctive marker of industrial production, which provides the backdrop from which a counter-image can be thrown into relief. But crucial to an understanding of the valorization of informatic labour is to question the postmodern managerialists' celebration of flexibility and social heterogeneity *in its conjunction with* continued practices of standardized inscription.

In light of this, it may be precisely the broad recognition and embrace of difference that makes the critical interrogation of transcendental ordering of the sort honed by postmodernist/postcolonialist theory increasingly relevant. For the emergence of the managerialist embrace of difference suggests that what capital has adapted to thrive upon is a disavowal of its own practices of transcendental ordering.

#### references

Arthur, C. (2001) 'Value, Labour and Negativity', Capital and Class, 73(Spring): 15-39.

Bell, D. (1973) *The Coming of Post-Industrial Society: A Venture in Social Forecasting.* New York: Basic Books.

Bowker, G. and S. L. Star (1999) Sorting Things Out: Classification and its Consequences. Cambridge, MA: MIT Press.

Braverman, H. (1974) Labour and Monopoly Capital. New York: Monthly Review Press.

Ciborra, C. and Associates (2000) From Control to Drift: the dynamics of corporate information infrastructures. Oxford, UK: Oxford University Press.

Hardt, M. and A. Negri (2000) Empire. Cambridge, MA: Harvard University Press.

Kusterer, K. (1978) Know-how on the job: the important working knowledge of 'unskilled' workers. Boulder, CO: Westview Press.

- Latour, B. (1987) Science in Action: How to Follow Scientists and Engineers through Society. Milton Keynes: Open University Press.
- Marx, K. (1976) Capital, vol. 1, trans. B. Fowkes. New York: Vintage.
- Marx, K. (1987) A Contribution to the Critique of Political Economy: K. Marx and F. Engels Complete Works Volume 29, London: Lawrence & Wishart.
- Piore, M. and C. Sabel (1984) The Second Industrial Divide. New York: Basic Books.
- Postone, M. (1993) *Time, Labour, and Social Domination: A Reinterpretation of Marx's Critical Theory.* Cambridge, UK: Cambridge University Press.
- Read, J. (2003) The Micropolitics of Capital. New York: State University of New York Press.
- Reuten, G. (1988) 'Value as a social form', in M. Williams (ed.) Value, Social Form and the State. London: Macmillan, pp.42-61.
- Reuten, G. (1999) 'The Source versus Measure Obstacle in Value Theory', in *Rivista di Politica Economica* No. IV-V April-May, pp.87–115.
- Reuten, G. (2003) 'Karl Marx: His Work and the Major Changes in its Interpretation', in W. Samuels, J. Biddle and J. Davis (eds.) *The Blackwell Companion to the History of Economic Thought*. Oxford: Blackwell, 148-166.
- Rubin, I. I. (1972) Essays on Marx's Theory of Value, trans. from 3rd ed. (1928) Detroit: Black and Red.
- Suchman, L.A. (1987) *Plans and Situated Actions: the Problem of Human Machine Interaction*. Cambridge, UK: Cambridge University Press.
- Vann, K. and G. Bowker (2001) 'Instrumentalizing the Truth of Practice', *Social Epistemology*, 15(3) July-September, pp.247-262. [Republished in A. Amin and N. Thrift (eds.) (2004) *The Blackwell Cultural Economy Reader*. Oxford, UK: Blackwell Press, pp.40-57].

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