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## **From Pin Factories to Gold Farmers: Editorial Introduction to a Research Stream on Cognitive Capitalism, Immaterial Labour, and the General Intellect**

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### **Abstract**

This article introduces a series of essays on the related concepts of cognitive capitalism, immaterial labour and the 'general intellect', which will feature in the pages of *Historical Materialism* from this issue onwards. It outlines the stakes of the theoretical discussion around these concepts and welcomes the recasting in Marxian terms of debates which have often been monopolised by apologetic treatments of capitalist development. It also identifies five areas which future articles in this 'research stream' will be preoccupied with: (1) the interpretation of Marxian notions, especially arising from the *Grundrisse*; (2) the philosophy of history and the schemata of social change that underpin concepts such as cognitive capitalism; (3) the identification of hegemonic social figures (e.g. the immaterial labourer, the 'cognitariat'); (4) issues of philosophical anthropology bearing on the definition of knowledge and intellect; (5) the role of debates on value (and its possible crisis) in assessing the idea of knowledge as a productive force.

### **Keywords**

cognitive capitalism, general intellect, immaterial labour, knowledge economy, philosophy of history, post-industrial society, post-Fordism, service economy, workerism

In the past few years, *Historical Materialism* has strived, both in its pages and in its annual conferences, to mould a non-sectarian international space for debate in Marxist theory. Within the journal itself, this has principally taken the form of symposia around a theorist or book, and of the custom of replies, replies to replies, and so on. By inaugurating this research stream, we hope to take a more active role in identifying and developing theoretical problems, concepts and debates around which to concentrate our intellectual energies in a collective

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spirit of comradeship and disputation. As ever, the choice of opening up a conversation on the related concepts of ‘cognitive capitalism’, ‘immaterial labour’ and the ‘general intellect’ arose from the conjunction of a cluster of submissions to the journal, on the one hand, and from discussions within the Editorial Board, on the other. Though the use of some of these terms has a certain historical and geographical specificity – tied, in several respects, to the development of Italian *operaismo* (‘workerism’) in the 1960s and to its inquiries into the transformations of the production process and of class composition, as well as to the migration (or even political exile) of these problems to a French context – our aim as a journal is to strive towards an internationalisation of the debate, which, whilst acknowledging the contextual specificity of certain discussions, opens them up to different traditions and perspectives. The session on capitalist transformations with Mario Candeias and Carlo Vercellone at the 2005 conference, followed up by the lively discussion around David Camfield’s critique of immaterial labour and the plenary session with Mario Tronti on workerism and the political in 2006, suggest that it is more than possible today to forge a vibrant international space for Marxist debate, among whose benefits is that it can serve to dislocate intra-national sectarianisms by displacing their contradictions, as it were, to an international stage.

Thus, we begin in this issue with Carlo Vercellone’s detailed attempt to glean the elements for a characterisation of a contemporary turn to cognitive capitalism through a reading of the *Grundrisse*, which, whilst developing many of the themes elaborated by the workerist and post-workerist line (for which the *Grundrisse* plays a pivotal role, sometimes in contradistinction to *Capital*), introduces very important and provocative contributions of its own – chief among which is the reversibility of the move from formal to real subsumption, which demarcates Vercellone’s understanding of cognitive capitalism from Hardt and Negri’s account of the tendency to real subsumption in *Empire* and *Multitude*. Some of the themes broached here by Vercellone will be tackled, in a very different guise, by David Camfield’s trenchant critique of Hardt and Negri’s use of the notion of immaterial labour (to appear in *Historical Materialism* 15.2), whilst Paolo Virno will encapsulate the significance for Italian debates on post-Fordism of Marx’s notion of the general intellect, and of the *Grundrisse* in general (15.3). Future issues will also feature *HKWM* entries on ‘general intellect’ and ‘immaterial labour’. Of course, we hope that these articles will foster debate and draw further submissions to the journal on these and related topics.

The genealogy of the notions in question is unsurprisingly contested, and often even somewhat opaque. For instance, the idea of ‘cognitive capitalism’ was

first put forward in the Italian context by Lorenzo Cillario,<sup>1</sup> who approaches it in terms of a theory of real abstraction, in an enquiry still centred on the transformations taking place within the factory itself. As he writes:

What changes, then, is the physiognomy of the place of production which has characterised the history of capitalism: the factory becomes a network of informative productions and the network of productions of knowledge becomes a factory, from which it assumes the susceptibility to being organised according to industrial models and finalised for capitalist valorisation through increments in the productivity of labour.<sup>2</sup>

For Vercellone, on the contrary, cognitive capitalism is synonymous with a ‘post-industrial’, and ‘post-Smithian’<sup>3</sup> form of accumulation, in which the ‘principal source of value now resides in the knowledges incorporated and mobilised by living labour and not in capital and material labour.’<sup>4</sup> Whereas the focus of the first definition is on the intensified determination of individuality by a form of reflexive self-exploitation, that of the second lies in the tendency of the ‘cognitariat’ to be more and more autonomous vis-à-vis capital. Similarly, as Camfield shows, the notion of ‘immaterial labour’ is riven with tensions, whilst the thematisation of Marx’s notion of the ‘general intellect’ is bound to elicit philological and conceptual disputes.<sup>5</sup>

Aside from the advocacy or critique of such guiding concepts, one of the virtues (as well as the problems) inherent to debates around notions such as cognitive capitalism is their resonance with earlier attempts to identify breaks and shifts within capitalism. Notions such as post-Fordism, post-industrial

1. Cillario 1990 and 1991. It is worth noting that Cillario’s work is not discussed in Vercellone’s recent collection on cognitive capitalism (Vercellone 2006).

2. Cillario 1996, p. 50. For a critique of the link between cognitive capitalism and real abstraction, as well as scepticism towards the idea of cognitive capitalism as an intensification of the alienation of labour, now affecting the very ‘psycho-cognitive structure of individuals’ (Cillario 1990, p. 143), see Rullani 1998, pp. 136–7.

3. Vercellone 2006, ‘Introduction’, pp. 11–15. The French journal *Multitudes*, with which Vercellone collaborates, has been particularly central in these debates, see especially their second issue on ‘the new political economy’.

4. Lebert and Vercellone 2006, p. 31. For recent work by Vercellone and his colleagues on cognitive capitalism, see also Vercellone 2003, and the research materials of the Matisse-Isys research lab at the University of the Sorbonne in Paris: <<http://matisse.univ-paris1.fr/index.htm>>.

See also the acts of the international workshop at the University of Pavia on cognitive labour and immaterial production: <<http://economia.unipv.it/eco-pol/abs/abs.174.html>>.

5. Camfield 2007. For the original formulations of ‘immaterial labour’, see Lazzarato and Negri 1991, and Lazzarato 1996 and 1997. On the ‘general intellect’, see Virno 2002 and 2007.

society, and postmodernism are often present in the discussions of cognitive capitalism, immaterial labour and related concepts. And so are terms which have become crucial to mainstream social sciences and establishment discourses, such as the 'knowledge economy' or 'knowledge-based economy', the 'knowledge society', the German *Wissensgesellschaft*, the French *société de la connaissance*.<sup>6</sup> As Vercellone's essay exemplifies, however, the debate on cognitive capitalism tries to dispel the opacities and instrumentalisations of much contemporary thinking on the centrality of knowledge to production by confronting it with Marxian categories. Vice versa, notions such as 'cognitive capitalism' are also aimed at testing the mettle of Marxism as a theory capable of coping with the dynamics of contemporary transformation. One of the felicitous traits of this resurgence, however heterodox, in the use of Marxian approaches in the deciphering of the present, is that some of the very phenomena which were previously acknowledged, or even celebrated, as harbingers of the collapse of Marxist theory and the demise of socialism (the rise of the 'service sector', the spread of information technologies, automation and the diminution of manual labour in Western economies, and so on), are now tackled with a Marxist categorial apparatus and in the spirit of a broadly communist politics.

One can only welcome, therefore, the attempt to bring Marxist theory polemically to bear on the very terrain all-too often monopolised by government think-tanks, technophilic futurologists and conformist social scientists. Like all attempts to identify the specificity, novelty and potentialities of contemporary capitalism, those which have latched onto terms such as cognitive or immaterial to identify a shift in the organisation of work, the sources of value and the avenues for anticapitalist politics have met with considerable scepticism and critique, some of which will feature in the pages of *Historical Materialism*. Without pre-empting debate by staking out an editorial position, we think it is worthwhile indicating, in a somewhat rough-and-ready fashion, what are some of the key points of contention capable of polarising the intellectual force-field generated by the notions of cognitive capitalism, immaterial labour and the general intellect. As we hope this ongoing series of articles will amply demonstrate, one of the great challenges of debates around a cognitive turn (or lack thereof) in contemporary capitalism, has to do with the manner in which they compel us to bring together strands of Marxist reflection which are all too often kept separate. Let us then simply enumerate some of the nodal points which we hope to tackle in the forthcoming series of articles.

Firstly, there is the issue of the interpretation and critical application of Marx's own concepts and methods. As Vercellone exemplifies in the article included in

6. Gorz 2003. For an attempt to combine Marxism and certain Poulantzian and Foucauldian themes in a critical grasp of the 'knowledge-based economy', see Jessop 2005.

this issue, much of the debate about a supposed cognitive or immaterial shift orbits around an intense exegetical and philological debate concerning Marx's texts and the *Grundrisse* in particular. As mentioned above, the peculiarity of Vercellone's account lies in problematising the seemingly irreversible or even realised tendency to real subsumption posited by Negri and others, and arguing for a return, in radically different guise, of figures of formal subsumption and primitive accumulation, for instance in the necessity to impose intellectual property restrictions on knowledge which would otherwise escape the circuits of capitalist valorisation.<sup>7</sup> Where authors such as Virno speak of the 'full factual realisation of the tendency described by Marx, without however any emancipatory or even conflictual aspect', other readings of the *Grundrisse* see its discussion of the social individual and the general intellect as indications of a potential which could only be realised beyond capitalism.<sup>8</sup>

The question of how to bring Marx to bear on the present and vice versa, as well as that of *which* Marx to call upon (with the possibility of playing the *Grundrisse* against *Capital*, for instance), links closely to the second issue that traverses these debates around the cognitive and the immaterial: that of historical time, understood in terms both of periodisation and of the philosophy (or teleology) of history. While all the proponents of theses that belong to the semantic and theoretical field of cognitive capitalism stake some claim to identifying a kind of novelty – however radical, unprecedented or reversible it may be – in the transformations of labour and capital accumulation, the historical schemata underlying these claims vary considerably. Thus, we have Virno's attempt to renovate the concept of historical materialism via Bergson and Benjamin, in order to grasp the manner in which capitalism 'only now' reveals those capacities of living labour which were 'always already' there.<sup>9</sup> Alternatively,

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7. Lebert and Vercellone 2006.

8. For example, Postone 1993. It is also worth noting Gorz's emphasis on Marx's own oscillation in his choice of terminology for the scientific and/or cognitive tendency within capitalism (not just 'general intellect' but 'general state of science', 'general social knowledge', 'general forces of the human mind'), as well as his claim, echoed by Vercellone, that Marx pre-empts the theory of 'human capital' when he rehearses the possibility of man himself representing fixed capital (Gorz 2003). In his very recent book-length interview, *Goodbye Mr. Socialism*, Negri too focuses on this idea of variable capital becoming fixed capital: 'When... today the General Intellect becomes hegemonic in capitalist production, that is when immaterial and cognitive labour becomes immediately productive, intellectual labour-power frees itself from [the] relation of subjection and the productive subject appropriates the very instruments of work that capital previously pre-constituted for it. We could say that variable capital represents itself as fixed capital' (Negri 2006, p. 135).

9. Virno 1999.

as in the work of Cillario, the exacerbation of the ‘cognitive’ elements in capitalism can be seen as an effect of the intensification of real abstraction, which becomes ‘reflexive’ and magnifies alienation through forms of self-exploitation, but introduces no historical caesura.<sup>10</sup> In the case of Vercellone and a number of his collaborators, the concept of cognitive capitalism is explicitly schematised in terms of a conception of history which combines a Braudelian *longue durée* as refined by Arrighi, a regulationist attention to the institutional mutations that accompany the transformations in the division of labour, and the legacy of the workerist reading of the *Grundrisse* – all in order to hone in on cognitive capitalism as a ‘crisis’ or ‘twilight’ of industrial capitalism, ‘a veritable historical reversal within the long-term dynamic of capitalism.’<sup>11</sup> These historical debates are also invariably confrontations with non-Marxist periodisations and teleologies, from Rifkin’s ‘end of work’ to Fukuyama’s ‘end of history’, from the post-industrial society to the postmodern.

This question of the philosophy of history, as Massimiliano Tomba persuasively argued in his intervention in the Tronti session of the 2006 *Historical Materialism* conference, is indissociable from our third line of inquiry, the ‘sociological’ (and political) question which revolves around identifying the bearers of these supposed breaks or transformations in capital. In those authors that lay claim to a workerist legacy, this theme is linked to that of class composition, understood as the tense conjunction of a ‘technical composition’ – which, for Negri, today qualifies labour as ‘immaterial and service-based, cognitive and co-operative, autonomous and self-valorising’ and political composition, fleetingly revealed in the battles around ‘precarity’ and is, according to him, currently devoid of political representation.<sup>12</sup> As demonstrated in Camfield’s forthcoming intervention, a critical engagement with the theses of cognitive capitalism and immaterial labour involves a confrontation on the terrain of class composition, which cannot dissociate the ‘sociological’ and ‘political’ levels. The idea of labour as inextricable from a production of subjectivity, or from practices of ‘reflexivity’, is, of course, of great importance in this regard.

Fourthly, it is worth noting that the debates on cognitive capitalism, immaterial labour and the general intellect – to the extent that they tackle the hypothesis of knowledge as the main productive force<sup>13</sup> – are frequently obliged directly to tackle modern theories of thought and intellect,<sup>14</sup> but also to engage with

10. Cillario 1990.

11. Vercellone 2006, ‘Introduction’, p. 12.

12. Negri 2006, p. 92.

13. Vercellone 2006, Rullani 1998, Negri 2006.

14. For a pioneering example, quite influential on the Italian debate on intellectuality and real abstraction, see Sohn-Rethel 1978. More recently, see Virno 2003.

developments in psychology, linguistics and the cognitive sciences, and even ethology and computing, in order to forge the theoretical tools to confront the centrality of knowledge to contemporary capitalism. Thus, seemingly arcane debates on cognitivism, naturalism, distributed cognition, or even mirror-neurons, have been identified as bearing lessons for those who wish to grasp the changes undergone by labour and subjectivity under contemporary conditions. The journal *Forme di vita*, co-edited by Virno and published by DeriveApprodi, has focused over the past few years on bridging the gap between the sciences of mind and the political economy of immaterial labour. In so doing, it has also sought to evaluate the contemporary relevance of other philosophical theories of knowledge, cognition, invention and affect, for instance those to be found in the German tradition of philosophical anthropology (Gehlen, Plessner, etc.) or in the post-cybernetic work of Gilbert Simondon.

Fifth, a very different, and possibly far more crucial, philosophical and theoretical debate concerns where we might stand with regard to the arguments about immaterial labour and cognitive capitalism. This is the issue – which has already been broached in critical discussions of Hardt and Negri’s work in *Empire* – of the status of (the labour theory of) value, and of the idea, which is often seen as inextricable from this cognitive or immaterial turn, that value is somehow ‘immeasurable’.<sup>15</sup> How crucial is the argument on value to the positing of a caesura or transformation which would move us from the material to the immaterial, from the industrial to the cognitive? Is it possible to assume the importance of the concept of cognitive capitalism without fully ascribing to Lebert and Vercellone’s thesis that ‘the reference to homogeneous time no longer allows us, in a great number of cases, either to describe or to organise work, nor to present the time of direct production as a trustworthy measure of the value and costs of production’?<sup>16</sup> And if this value cannot be measured, in what sense are we to understand that knowledge external to capital is now ‘the principal source of value’?<sup>17</sup>

Finally, to close off a by no means exhaustive set of questions, it is worth thinking to what extent this cognitive or immaterial turn can be given a global scope, in terms of the organisation of ‘immaterial’ labour, of its relationship to finance capital,<sup>18</sup> or of its possible political composition. Is such a turn, if it does

15. For a perspicuous critique of the idea of the end of value as measure, voiced from a position broadly faithful to the tenets of workerism, see Wright 2005.

16. Lebert and Vercellone 2006, p. 32.

17. Lebert and Vercellone 2006, p. 31. It is interesting to see how certain authors, such as Gorz, are tempted by this conundrum to resuscitate humanist and phenomenological concepts of value, understood in terms of Husserl’s theories of intentionality. See Gorz 2003.

18. See the articles by Dockès, Chesnais, Serfati, and Paulré in Vercellone 2006.

indeed accurately grasp a set of epochal phenomena, truly worldwide? If so, in what ways is it subject to uneven and combined geographical development? What are the effects of a centrality of knowledge production in dominant countries on countries of the periphery (for instance in terms of outsourcing), or on those bearing the brunt of imperialist policies? We could take the following recent news item as a kind of allegory or enigma for those who wish to test the theses of cognitive capitalism against the reality of a conflictual, asymmetrical and changing world:

One of China's newest factories operates here in the basement of an old warehouse. Posters of *World of Warcraft* and *Magic Land* hang above a corps of young people with drowsy eyes glued to their computer screens, pounding away at their keyboards in the latest hustle for money. The people working at this clandestine locale are called 'gold farmers.' Every day, in 12-hour shifts, they kill monsters and harvest 'gold coins' and other virtual goods that they can sell to other online gamers. From Seoul to San Francisco, gamers who lack the hours or the patience to work their way up to the higher levels of gamedom, are hiring young Chinese to play the early rounds for them. 'For 12 hours a day, 7 days a week, me and my colleagues are killing monsters,' said a 23-year-old gamer who works in the makeshift factory and goes by the online code-name 'Wandering.'<sup>19</sup>

How 'new' is this factory? How distant, in its revelation of the violence of capitalism, the disciplining of labour and the process of capital accumulation is this very real 'virtual sweatshop' when compared to Smith's notorious pin factory? Is it an inadvertent sign of the tension between real and formal subsumption that those toiling way in this postmodern phantasmagoria are given the eerie name of 'gold farmers'?

We think that the articles which are scheduled to appear in this 'stream', and the ones we hope will be elicited by them, will begin to delve deeper into the real mechanisms and emancipatory potentials that lie between the pin factory and the gold farm, and in so doing allow the pages of *Historical Materialism* to host a dynamic international debate. Perhaps this will permit us to slay monsters other than those in *World of Warcraft* or *Magic Land*...

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19. Barboza 2005.



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