'CAPITALISM'S CALIFORNIAN REVOLUTION': YANN MOULIER BOUTANG, *COGNITIVE CAPITALISM*. POLITY 2011. James Burton

Yann Moulier Boutang's *Cognitive Capitalism*, which first appeared in French in 2007, is premised on the understanding that we are currently undergoing an epochal transition to a new mode of capitalism. Viewing this transition as on a scale with what Karl Polanyi called the "great transformation" that produced the modern market economy, even going so far as to liken it—if somewhat grandiosely—to a second Neolithic revolution (22), Boutang sets out simultaneously to help us better understand this new form of capitalism, and to offer something like a manifesto for how we should attempt to engage with and shape its effects as it comes into being.

The book distances itself from various forms of political and epistemological orthodoxy, attempting to move beyond conventional (descriptive) sociological and economic accounts of contemporary capitalism on the one hand, and established frameworks of left-wing (Marxist) political critique on the other. At every stage, Boutang is keen to suggest that attempts to understand this emerging new form of capitalism by using perspectives that were developed with regard to industrial capitalism, will be found wanting, whether one's aim is to accumulate wealth, or fight against exploitation.

Whether a reader responds positively to *Cognitive Capitalism* is thus likely to be determined less by her particular political persuasion and more by the degree to which she feels attached to *any* established economic or political approach to capitalism; in the contemporary era of political uncertainty, this ought to translate into a wide potential readership. Perhaps the book's most difficult aspect, at least for those subscribing to a strongly left- or right-wing perspective, is the implicit suggestion that cognitive capitalism offers new possibilities – and new reasons for optimism – for both capitalists and their critics. Thus from either a neoliberal or a Marxist perspective it may seem to hold out the prospect of an unwelcome compromise. Yet for Boutang, the transformation is taking place whether we assent to it or not, and the real question is how we engage with it. Nor does this mean a lowering of the stakes of political involvement: the survival of the ecosystem and thus of the human species, their transformation in a new era of biotechnology and living labor, remain radically

open to question, both in the context of the new, emergent form of capitalism, and under continued threat from the older industrial capitalism that is only slowly passing away, and which remains capable of doing immense damage as it does so.

Regardless of whether or one accepts Boutang's core theory that we are in the midst of a new great transformation, the thesis of cognitive capitalism and the terms and concepts he uses to discuss it constitute potentially valuable resources for anyone seeking alternative ways to discuss the contemporary human economic, social and political situation. At the same time, it is quite plausible that no one will be entirely satisfied with the range of Boutang's concepts or the extent to which he develops them. He has (necessarily) chosen to explore some areas more than others, bound to an extent by the fact that the effects of cognitive capitalism are so far-reaching as to touch on almost every area of contemporary life. Furthermore, while some have criticized a degree of vagueness in his elaborations of key concepts, this is partially mitigated by the inherently immaterial and uncertain status of his objects of focus, such as cognitive activity, living labor and complex economies. As process philosophers and fuzzy logicians have been attempting to teach us for over a century, when dealing with complex or nebulous phenomena, it may well be more, not less precise to avoid reducing them to rigid principles and static, clearcut representations. While readers may at times feel a desire for more detailed exploration of some of the lines of analysis and speculation Boutang opens up, simply by awakening this desire with regard to contemporary capitalism – and with it the sense that further elaboration and exploration, as well as new strategies, are indeed possible – the book achieves some of its (worthwhile) aims.

WHAT IS COGNITIVE CAPITALISM?

The transition in which we have been increasingly immersed since the mid-1970s, according to Boutang, is comparable to (though not isomorphic with) the shift from early to industrial capitalism, when mercantilism and slavery as the main bases for generating capital were replaced by industry and waged labor. The third mode of capitalism that is upon us today sees another "radical transformation of the foundations of wealth" (184), away from material, industrial production towards immaterial labor and associated means of accumulating capital. National and global economies are increasingly focused and dependent on financial markets and immaterial goods and services, particularly in the form of "information-goods" and "knowledge-goods". Like many theorists, Boutang recognizes the crucial roles played by digitalization, the Internet and other modern communications technologies in developing the favorable conditions for this "virtualization of the economy". (50) Yet where the theory of cognitive capitalism differs from many other approaches to these trends is in its emphasizing of the thorough-going nature of these changes, their penetration into the basic constitution of both capitalism and life.

The increased centrality of knowledge and intellectual labor in this new socio-economic mode do not replace the material side of production, but re-arrange it and take over its dominant role in determining the eventual exchange value of the goods produced. In the process, production becomes more flexible and its geographical locale less important as it "begins to mimic, in its material organization, the versatility of taste." (33) This adds complexity to economies formerly based primarily on the slow fluctuations in the value of manufactured goods, and gives rise to a proliferation of new economies. Not only is it difficult to measure such economies and the creative collective activity on which they are based, they are also difficult if not impossible to manipulate or control. The most radical factor differentiating cognitive from industrial capitalism is not the increased dependence on information and immaterial labor, but on a collective intelligence whose valuable effects may be captured, but which cannot be reduced to pure mechanisms or resources.

Boutang thus distinguishes "cognitive capitalism" from related terms such as "information society", "the knowledge-based economy" and "technological capitalism", which for him describe aspects of the new capitalism, but lend themselves to reductive views, importantly the tendency to reduce knowledge to information. His preferred adjective "cognitive" is used in order to highlight the degree to which value, in modern economies, comes to depend not only on the new storage and processing capacities of modern

information technology, but on the collective use of these capacities by networked humans engaging in non-programmed, creative activity (which he terms "invention-power", after Maurizio Lazzarato). Moreover, it is not simply a matter of directing this invention-power towards set tasks or ends, which would again follow the logic of industrial organization: since creative cognitive activity is not easily measured or controlled, cognitive capitalism, rather than attempting to commodify the products of creative labor, must find strategies "to increase its capacity for engaging in creative processes and for capturing their benefits." (57)

This means that one of the key features of cognitive capitalism is its increasing reliance on what economists have traditionally termed "positive externalities" to generate profit (externalities are indirect costs or benefits accruing from economic transactions that are not transmitted through the transactions themselves). For Boutang, by far the most lucrative such externalities are found in the sphere of networked digital interaction. Entrepreneurial intelligence today thus entails, primarily, the ability "to convert into economic value the wealth that is already present in the virtual space of the digital." (109) Boutang credits the "whiz-kids" of the "Californian digital revolution" with discovering and inventing the new form of value (49) – not only because of their pioneering use of modern information and communications technologies, but also for their maximizing the effects of collective intelligence: he repeatedly refers to the central activity of cognitive capitalism as the "cooperation of brains in the production of the living by means of the living, via the new information technologies" (57).

EXPLOITATION WITHOUT ALIENATION?

One of the reasons Boutang finds a cause for optimism in cognitive capitalism is this very dependence on the positive externalities of collaborative, collective, creative labor. Where the classic Marxian account reveals the worker as alienated through the transformation of the products of his labor into an exchange-value for the benefit of a capitalist employer, it is in the interests of cognitive capitalism to leave the original use-value of the creative labor intact, and indeed in the hands (or circulating among the networked brains) of the cognitive worker(s) among whom it originated. This seems to suggest the possibility of what we might think of as a form of exploitation without alienation (though Boutang uses the more neutral-sounding distinction between first and second degree exploitation). If this controversial idea could be allowed to function well, it would seem to hold out hope of a situation in which everyone wins: the capitalists can exploit without subjugating, and the cognitariat can sustain themselves without giving up their freedom. It is unsurprising that Boutang draws on the "hacker ethic" (Pekka Himanen) and the free software movement as models, with their emphasis on work-as-pleasure, information-sharing and openness.

Some will certainly regard with scepticism the rosy hue that at times seems to surround Boutang's depictions of a scenario in which, it seems, everyone may be able to get what they need and want. Boutang himself is aware that he runs the risk of sounding utopian, or of appearing to offer "a neoliberal apologetics". (92) Yet while he promotes an open-minded engagement with cognitive capitalism, in both practical and academic contexts, trying to convince us that the transformation we are undergoing is genuinely revolutionary and will be long-lasting, he does not claim to have all the answers (or even to have posed all the relevant questions). The cognitive capitalism thesis, while at times presented with polemic confidence, is also part of an ongoing research project, a working hypothesis for exploring and experimenting with phenomena that it takes to be in the process of becoming central to contemporary global life. It is to the book's credit that, whether the reader partakes of Boutang's optimism or rejects it as blind utopianism, his central ideas and hypotheses retain their value as analytic and speculative resources.

In chapters three to six, following his elaboration and analysis of the key features of cognitive capitalism in the first three chapters, Boutang explores how several contemporary socio-economic phenomena might be re-framed using the perspective of the cognitive capitalism hypothesis. In each case, he finds reasons for optimism in the possibility that what may seem, from the perspectives of emancipatory politics and ethics, to be unwelcome expansions of capitalism's reach, may now be construed as effects relating more to the transition

itself than to what it produces – to the conflicts and tensions between two ultimately incompatible capitalist modes, rather than to the cognitive capitalism that is emerging.

For example, financialization, which many regard as the epitome of post-Fordist neoliberalization, is viewed by Boutang not as the rapacious growth of old capitalism but as its attempt "to control something that can no longer be controlled by the Fordist regime" (139) - namely, the invention-power of cognitive capitalist modes of production and accumulation, and the new forms of immaterial valuation to which they give rise. Thus the possibility is raised that financialization marks the gradual decline rather than expansion of key features of industrial capitalism. Another example is the sphere of intellectual property. The greatly increased social, cultural and economic importance of information-goods over recent years has led to unprecedented levels of activity in attempting to manage, control and legally assess the rights and means by which economic value can be derived from the socio-cultural valuation of such goods. Boutang suggests that cognitive capitalism is "synonymous with a creeping crisis of property rights" (101) comparable to the struggles over enclosures at the beginning of the Industrial Revolution. Yet where the enclosures of land and resources formed, at least for Marxist historians, the basis of industrial capitalism's dominance, the new attempts to enclose intellectual property - the multi-faceted and often vicious attempts to prevent "piracy", inhibit peer-to-peer information sharing and monopolize areas of the informational economy - ultimately for Boutang have "little future" (107). Not only are they incompatible with the fundamental principles of democracy, he suggests, but more importantly for his own thesis, cognitive capitalism depends upon the very freedoms that such efforts seek to restrict:

Due to the nature of the raw material it exploits and seeks to transmute into economic value, it becomes absolutely necessary to allow spontaneous cooperation to create itself unhindered. Without the richness of the multitudes who "pollinate" society through the wings of the digital, the honey harvest (that of traditional capitalism) weakens; but then, above all, we can bid farewell to the profit opportunities offered by the knowledge society. (108)

Here Boutang uses one of his favorite metaphors, the notion of pollination, an idea that is central to his subsequent (untranslated) book, *L'abeille et l'économiste* (2010) [*The Bee and the Economist*]. The major distinguishing factors between industrial and cognitive capitalism are encapsulated in the difference between focusing on the production of honey versus the value of pollination: the central role played by externalities, of collective, networked invention-power and implicit knowledge, and the qualitative difference between old and new forms of exploitation are all at work in the idea that the bees' pollinating effect on the local environment (on which they also ultimately depend) is far more important in generating "wealth" than the honey they directly produce.

ALLERGIC REACTIONS

This difference is also crucial to the feature of the transition from industrial to cognitive capitalism in which the political stakes are perhaps highest: the revolutionizing of traditional notions of class and division of labor, and the possibility of moving beyond the wage-labor system. Boutang attends to the way precarity has in recent years become an increasingly normal condition of work: under-employment and lack of job security (and therefore a lack of financial and health security) are effects of the rise of the knowledge-based economy and the transformation of the nature of work (flexible production requires part-time labor, short-term contracts and so on). Yet instead of aligning himself with left-wing struggles in democratic societies to protect what remains of the wage-labor system, and to halt the erosion of welfare provision and income entitlements for workers, Boutang suggests that what we really need is to leave behind altogether the notion of being paid a wage in remuneration for a calculated amount of work. From his perspective, the movement towards precarity and intermittency as defining features of working life only has pernicious effects on the general welfare of a population because it is not accompanied by the emergence of an adequate set of social institutions. If social security were to be decoupled from employment altogether, and made a basic provision that is "guaranteed,

universal, and as unconditional as possible" (134), then many of the negative effects would disappear, and the benefits to both workers and capitalists could be optimized. Thus at the center of his "manifesto for the pollen society" (chapter seven) he passionately advocates the adoption of a guaranteed social income.

Many problems may be (and have been) raised in relation to the theory and elaboration of cognitive capitalism and the pollen society. It is by no means clear, for example, that the second degree forms of exploitation which Boutang associates with cognitive capitalism, as opposed to the first degree forms characteristic of industrial capitalism, are ethically and politically more favorable – though this is an implicit aspect of the "optimism of the intellect" he promotes. While this remains open to question, the risk of legitimating exploitation should not be neglected. Even if we accept that waged labor is both practically and politically no longer desirable, the question of "who jumps first" in terms of abandoning it – especially when the political orthodoxy of various camps is still a long way from embracing the possibility of a radical transformation of capitalism – would be extremely delicate. Giving up the struggle to defend against the erosion of (for example) public sector workers' income, pension funds and the basic entitlement to social security could be catastrophic in an era in which right-wing politics wedded to neoliberalist capitalist principles remains strong.

Another concern would be the possibility that the externalities generated by vast networks of interacting brains may not be universally positive, or not equally valued by all. What if some of the bees turn out to be allergic to pollen? Though Boutang wants to find new grounds for agreement between old adversaries, or rather, to convince them of interests they already share, it may well be that just as many are resistant to taking up their places within the cognitariat as are turning away from old ideologies and politics, not to mention the likelihood of new cognitive classes becoming riven by their own hegemonic structures and divisions. Nevertheless, Boutang is not unaware of such issues, and surely not resistant to their being addressed. Indeed, at various moments he acknowledges the scepticism his claims are likely to engender, even to the extent of including a welcome new chapter in the English edition, which deals with the question of whether cognitive capitalism has been stopped in its tracks (or "stillborn") by the unprecedented effects of the so-called economic crisis that has dominated global affairs since the book's original publication.

Whatever shortcomings it may have, *Cognitive Capitalism* certainly achieves its aim of helping "remove the epistemological obstacles to a shift of paradigm" (149) – developing new ways of thinking about what most agree appear to be wide-ranging contemporary transformations in the relationship between economy, politics and culture. What makes it recommendable to a wide readership is the fact that, wherever Boutang leaves us thinking there is more to be thought and said about an issue, he also frequently leaves engaging productively in such cognitive activity. To use his own metaphor, while some parts of the book may be less rich in honey than others, its value in terms of pollination, in terms of its capacity to generate cognitive value in collaboration with dynamic networks of heterogeneous brains, more than compensates.

Numerous philosophical approaches to the critique of modern social development focus on the reduction of the human to object-like or machinic status, from Marx's alienation to Foucault's accounts of disciplining, from Bergson's engagement with mechanization to Heidegger's critique of modern technology as that which renders both humans and nature as "standing-resource" [Bestand]. If there is even a possibility of a form of capitalism whose exploitation, as Boutang seems to imply, no longer necessarily entails such a reduction, one which "co-produces labour as a living activity" and allows both knowledge and life to remain in a form that is "irreducible to machinism" (54), this would have huge relevance for a wide range of contemporary areas of critical theory, philosophy and cultural studies: while some may simply reject such a hypothesis as an apology for biopower, others might find it productive to engage critically with its potential implications. Whether the cognitive capitalism thesis reflects reality or attempts to shape it, or is considered merely an idea, in an era increasingly characterized by ecological, biopolitical and posthumanist modes of existence and thought, it is valuable simply to pose the question of where the baseline for ethical and political resistance will lie, if and when the horizon of capitalist and imperialist power can no longer be regarded as the reduction of the living to the status of the dead.

JAMES BURTON is currently a post-doctoral research fellow in the Institute for Media Studies at the Ruhr-University, Bochum (Germany). His research, funded by the Alexander von Humboldt Foundation, concerns the relationships between fiction, philosophy and contemporary culture. He has previously taught at Goldsmiths (UK) and the University of Klagenfurt (Austria), and has published on topics including political theology, philosophy of time, and the relationship between philosophy and science fiction.