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Re-inventing invention: new tendencies in capitalist commodification

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Abstract

This paper argues that a shift is taking place in the fabric of capitalism as a result of a change in how the business of invention is understood. Using theoretical approaches that rely on the notion that capitalism increasingly tries to draw in the whole intellect, in the first part of the paper I argue that the new understanding of innovation currently shows up as three associated developments: as the mobilization of forethought, as the deepening of the lure of the commodity through the co-creation of commodities with consumers, and as the construction of different kinds of apparently more innovative space suffused with information technology. The second part of the paper then argues that these disclosures are leading to new forms of value, based on generating moments of rightness. There is a brief conclusion.

Keywords: knowledge; invention; intellect; space; value; commodity.

> The functioning of the economy of qualities involves the establishment of forms of organization that facilitate the intensification of collaboration of supply and demand in a way that enables consumers to participate actively in the qualification of products. The establishment of distributed cognition devices, intended to organize real life experiments as preferences, tends to blur habitual distinctions between production, distribution and consumption. Design, as an activity that crosses through the entire organization, becomes central: the firm organizes itself to make the dynamic process of qualification and requalification of products possible and manageable.
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> (Callon *et al*. 2002)

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> In the long procession of history, capitalism is the late-comer. It arrives when everything is ready.
>
> (Braudel 1977: 75)

Introduction

It is always difficult to tell where capitalism will go next as it continues to seek out new sources of profit. After all, capitalism is not a fixed and unforgiving force. Rather, it is a heterogeneous and continually dynamic process of increasingly global connection – often made through awkward and makeshift links – and those links can be surprising, not least because they often produce unexpected spatial formations which can themselves have force (Amin 2004; Bayart 2001; Moore 2004; Tsing 2005). In this paper, therefore, I want to take some really quite specific links in an increasingly globally connected capitalism, links to do with what might still be considered to be its beating heart – the system of production of commodities and the process of commodification – and to attempt to weave them into a general story about what might be happening currently at its leading edge. Conforming to the premise that there is an urgent necessity to anticipate the transformation and command strategies of capital,[1] I want to argue that it is possible to detect a series of novel practices emerging, which are likely to have interesting consequences over the long term, both economically and culturally. Indeed, by constantly putting these two descriptors into play, these practices once again reinforce the argument that political economy can no longer claim an '*isolement splendide, majesteux et décevant*' (Tarde 1902: 97).

I will begin the paper by arguing that these new practices are being forced by a certain kind of desperation, which is the result of a long-term profits squeeze (Brenner 2003a, 2003b), a squeeze that points capitalism in two entirely opposed and closely linked directions which combine something that is often very close to barbarism with an increasingly sophisticated corporate vanguard which seems to be attempting to invent a vitalist capitalism. The juxtaposition is increasingly bizarre.

Thus, one direction is towards increasing exploitation of large parts of the world through what Marx called primitive accumulation (Harvey 2003; Retort 2005). It is clear that a considerable area of the globe is being ravaged by force, dispossession and enclosure as part of a search for mass commodities like oil, gas, gems and timber using all the usual suspects: guns, barbed wire and the law. This primitive accumulation lies close to but is not always coincident with the vast global shadow economy dependent on illegal activities like smuggling, drug and people trafficking and money-laundering, through which trillions of dollars circulate around the globe outside formal legal reckoning (Nordstrom 2004), and produces a stentorian backdrop to this paper, one which should be kept in mind through what follows.

The other direction, on which I will be concentrating in this paper, is to try to squeeze every last drop of value out of the system by *increasing the rate of innovation and invention through the acceleration of connective mutation*. A new kind of productive commotion is being achieved through an active refiguring of space and time, which has the effect of making knowledge into a direct agent of the technical-artistic transformation of life: knowledge and life become inextricable. In other words, instead of being thought of as a passive store, knowledge is thought of as a set of continuously operating machines for 'activating competences, risk taking and readiness to innovate' (Soete 2005: 9). These machines act as interfaces that can change perception. At the same time, they function as a means of boosting difference and inserting that difference into the cycles of production and reproduction of capitalism.

This full-on or *full palette capitalism* relies on a series of practices of intensification which can just as well be read as practices of extensification, since they involve attempts to produce commodity and commodification in registers hitherto ignored or downplayed by using the entirety of available faculties[2] in a wholesale redefinition of productive labour, taking in the collective intelligence (what Virno (2004) calls the 'public disposition') of what counts as intellect and intellectual labour.

> The politicization of work (that is the subsumption into the sphere of labor of what had hitherto belonged to political action) occurs precisely when thought becomes the primary source of the production of wealth. Thought ceases to be an invisible activity and becomes something exterior, 'public', as it breaks into the productive process.
>
> (Virno 2004: 64)

What, I think, is startling currently is the rate of onset of these different but related tendencies and the way that they are now bearing out many of what may have been considered premature general theoretical claims and prognostications. In particular, what I will be presenting could be interpreted as historicizing Tarde's account of an animated economy in which the entities being dealt with are not people but innovations that are constantly trying to multiply themselves, 'quanta of change with a life of their own' (Latour 2005: 15).[3] Thus, what seems to be being produced is a world dependent upon and activated by germs of talent, which are driven by sentiments and knowledge and are able to circulate easily through a semiconscious process of imitation that generates difference from within itself (Leys 1993). The world becomes a continuous and inexhaustible process of emergence of inventions that goes beyond slavish accumulation. In other words, Tarde's analysis in *Psychologie Économique* is becoming true.

The rest of this paper is therefore in three parts. In the first part, I will describe three closely related conceptual-cum-practical developments that, though they have been present in embryonic form for varying amounts of time, came together at the end of the twentieth century. They are now being taken

on, in lock step, as new ways to squeeze value by amplifying the rate of innovation through a general exteriorization of intelligence out from the corporation, in turn redefining what counts as value. These developments should not be seen as extending everywhere but they are, I think, indicative.

Taken together, this 'second round' of concept-practices describes a new distribution of the sensible. The first of these developments has been an obsession with knowledge and creativity and especially an obsession with fostering tacit knowledge and aptitudes through devices like the community of practice and metaphors like performance. However, this stream of thought and practice has now transmuted into a more general redefinition of intellectual labour arising out of the mobilization of the resource of *forethought*, or rather the possibilities of plumbing the non-cognitive realm and 'fast' thinking in general, a search typified by a book like Malcolm Gladwell's recent business bestseller *Blink* (2005). Then, second, there was a desire to rework consumption so as to draw consumers much more fully into the process, leaching out their knowledge of commodities and adding it back into the system as an added performative edge through an 'experience economy'(Pine and Gilmore 1999). This stream of thought and practice has now blossomed into a set of fully fledged models of 'co-creation' which are changing corporate perceptions of what constitutes 'production', 'consumption', 'commodity', 'the market' and indeed 'innovation'. The third development has involved the active engineering of the space of innovation, the result especially of an emphasis on communities of knowledge. Informed by the profusion of information technology and by attempts to construct more intellectually productive environments, especially through the construction of built forms that would hasten and concentrate interaction, this stream of thought and practice has transmuted into a more general concern with social engineering of groups, thereby learning how to combine information technology, built form and group formation in ways that really will deliver the goods. Taken together, these three developments have also foregrounded the absolute importance of design.

Throughout the paper, the reader will notice the difficulty that I have with keeping production and consumption separate: producers try to put themselves in the place of consumers, consumers contribute their intellectual labour and all kinds of work to production in the cause of making better goods, in a kind of *generalized outsourcing*, migrations regularly occur between production and consumption, and vice versa. Innovation can turn up anywhere and is no longer necessarily restricted to particular niches in the division of labour.[4]

In the second part of the paper, I will argue that these new sets of practices foretell a reworking of *value* as a new form of *efficacy*, one that will change the background of the Western world by producing new interactive senses of causality, which are, I suspect, likely to be more effective than the scientific and literary metaphors that are usually assumed to be at the root of changes in perception of causality (e.g. Kern 2004). 'Efficacy' may not seem to be an obvious phrase to use in a discussion of globalized capitalism – it sounds a bit old-fashioned perhaps, a word that has seen better days. But I hope to be able

to convince the reader that it is not only relevant but has genuine analytical grip.

Thus, I will want to argue that a new kind of efficacy is making its mark, one in which the process of satisfactory encounter with the commodity is central. This constructed sense of 'rightness' increasingly figures both as an understanding of how modern economies prosper, as an index of what it is to be a successful agent and as a form of labour resource in its own right, albeit one that it is hard to touch and unlock, through its ability to extend or even redefine *value* in a period when marginal returns are becoming ever harder to make, in the core at least, in the face of generally heightened competition and a homogenization of business models as a result of the parallel spread of narrow concepts of business efficiency. I will offer three models of this new kind of efficacy, three different takes on how it might be characterized.

In the third and concluding part of the paper, I draw some brief conclusions. These are concerned with the procedural, political and theoretical implications of these developments. I will argue that they are producing a different kind of capitalist world, one in which a new epistemic ecology of encounter will dwell and have its effects, a world of *indirect but continuous expression*, which is also a world in which that expression can backfire on its makers.

A forthcoming epistemic ecology

For some time Western capitalism has been suffering from a crisis of profits, although the addition into the world economy of new economic powerhouses like parts of China and parts of India certainly muddies the waters. What evidence there is suggests that, over a considerable period of time, Western capitalism has been in a long-term downturn following on from the post-war boom, based on overcapacity and overproduction. Episodes like the stock-market Keynesianism of the telecommunications, media and information technology boom from 1995 to 2000 did nothing to dispel this secular tendency while investment in information and communications technology – one mooted saviour – has until recently produced at least questionable returns.

But, against this dour background, there have been numerous efforts to alight on new business models that will soak up overproduction and overcapacity, most especially by either engaging more closely with consumers or boosting the rate of innovation. Most of these models have ended up producing ambiguous results in aggregate, partly for minor but important reasons (for example, managers can have very different understandings of what constitutes innovation (Storey and Salaman 2005)) and partly because this kind of cultural engineering is not easy to do and has required constant experimentation to make it effective. But I think that this is now changing. What might be regarded as a set of new fuel sources for capitalism are coming together as a powerful system, new sources of energy that capitalism can tap (Mitchell 2002).

In this first section, I want to outline what these fuel sources are. Taken as a whole, I argue that they add up to a different kind of encounter with the commodity, as an experimental ecology based on continuous interaction sufficiently imposing to resemble an aspect of time itself, a different set of crystallizations of time (Lazzarato 2002a, 2000b). This cultural model of economic change is, not surprisingly, based on and in the continuous interactivity of the media (Manovich 2001). The effect of this *streaming ethos* is, or so I will argue, to begin to restructure what counts as production and consumption and market and innovation so as to bring consumption closer to hand. If this epistemic ecology has an overall goal, then it seems to me to be to make the commodity even more empathetic by enabling it to lie ever closer to the concerns of the consumer, thus echoing Benjamin's (1977 [1938]) pregnant remarks on the soul of the commodity: 'if the soul of the commodity which Marx occasionally mentions in jest existed, it would be the most empathetic ever encountered in the realm of souls, for it would have to see in everyone the buyer in whose hand and house it wants to nestle.'

Activating forethought

> 'It is by logic that we prove. It is by intuition that we discover.'
>
> (Poincaré, cited in Myers 2002: 63)

Let me start my consideration of the reworking of encounter with the commodity by considering the mobilization of forethought as part of a more general broadening of what capitalism counts as intellect and intellectual labour. Cognition is, of course, a vital aspect of human practice but research over many years has shown that it is at best a fragile and temporary coalition, a tunnel which is always close to collapse:

> During the past forty years, in countless laboratories around the world, human consciousness has been put under the microscope, and exposed mercilessly for the poor thing it is: a transitory and fleeting phenomenon. The ephemeral nature of consciousness is especially obvious in experiments on the temporal minima of memory – that is the length of time we can hold on to a clear sensory image of something. Even under the best circumstances, we cannot keep more than a few seconds of perceptual experience in short-term memory. The window of consciousness, defined in this way, is barely ten or fifteen seconds wide. Under some conditions, the width of our conscious window on the world may be no more than two seconds wide.
>
> (Donald 2001: 15)

But the message gets worse: the average person can only grasp a few things at a time. And worse: the average person is prevented from becoming aware of most of their thought processes; they are simply not available for conscious

reflection. And worse again: consciousness is notoriously vulnerable to distraction; the conscious mind finds it very difficult to maintain a sharp focus in the presence of other attractions. In other words, conscious awareness is fragmented and volatile: 'our intellectual home, the cradle of our humanity, appears to be the most limited part of our mind' (Donald 2001: 25). This description is something of an exaggeration[5] – it derives from laboratory experiments and glosses over the richness of joint action in which subjects do much better – but it also points to the way in which this minimal conscious perception is constantly backed up by other systems, two of which are particularly important. One is all the non-cognitive relays that hold it in place and do much of what we count as thinking:

> a huge reservoir of unconscious or automatic cognitive processes that provide a background setting within which we can find meaning in experience. By relying on these deep automaticities, we can achieve great things intellectually. We can even carry out several parallel lines of cognition at the same time, provided they are kept out of consciousness. Musicians know this. When professional pianists play, they cannot afford to become overly conscious of their fingering or the specific notes of the passage they are playing, particularly the more rapid ones. That kind of self-consciousness is paralyzing. They have to automatize these difficult passages, or they will make major mistakes. The same rule applies to speaking.
>
> (Donald 2001: 26)

The other is that this minimal conscious perception is boosted and held in place by all manner of systems and environments and sites that extend awareness, systems and environments and sites that are increasingly artificial and increasingly made up of commodities. For example, the system of reading and writing[6] trains people to apply a highly detailed set of eye and other corporeal movements to a set of systematic practices that allow the environment to act as a prosthetic for thinking (and allow resultant ideas to hold still long enough to be worked on and developed). The facts of ethology cut in.

What is new about the current conjuncture is the way in which capitalism is attempting to use the huge reservoir of non-cognitive processes, of *forethought*, for its own industrial ends in a much more open-ended way.[7] In the past, capitalism usually drew on non-cognitive processes by training managers and workers and consumers to conform to set routines grooved into forethought by various kinds of training such that the body could not master its own movements or by trying to elicit conformist reactions to a brand. But, more recently, much thought has been given to understanding forethought not just as a substrate but as a vital performative element of situations, one which can not only produce its own intelligibilities but can be trained to produce ideas. In other domains, this ambition has a long history. One thinks of, for example, a nineteenth-century phenomenon like Delsartism which was a new way of

reading minute body signs from gesture. But now the intention is to read and exploit signs of invention by regarding the body as a mine of potentiality and to generate and harness unpredictable interactions as a source of value by regarding space as more than a map. The automaticity of intuition can then be enrolled to produce better outcomes: it becomes a fund of expertise. For example, in the 1980s and 1990s managerial capitalism turned to various performative methods which were meant to be simultaneously forms of team-building and effective means of producing innovation (Thrift 2005), often based on that famous slogan from Michael Polanyi: 'we know more than we can tell'. Not unreasonably, it was assumed that placing people in new combinations that were simultaneously rearrangements of bodies and of environments would produce new and reproducible tacit knowledges arising out of shifts in the practical intelligence needed to be successful at practical problem-solving (Sternberg 2000).[8] Of late, however, this kind of emphasis on a more effective everyday creativity has been added to, most particularly through the application of models drawn from writings from neuroscience which attempt to mobilize the momentary processes that go to make up much of what counts as human.[9]

Persons are to be trained to conjure up 'unthinkingly' more and better things, both at work and as consumers, by drawing on a certain kind of *neuro-aesthetic* that works on the myriad small periods of time that are relevant to the structure of forethought and the ways that human bodies routinely mobilize them to obtain results (Donald 2001; Myers 2002), to produce more of the kind of ideas that seem to just turn up, which, in reality, are thoughts that we are forever prevented from becoming directly aware of. Intuitive expertise can be learned, for example by paying attention to the smallest corporeal detail, by so-called 'thin-slicing' (Gladwell 2005).

Inevitably, this emphasis on a kind of hastening of the undertow of thought and decision, an open training of intuition, has led workers in this field to pay much more attention to *affect*, because waves of affect are often born in these small spaces of time out of a series of deep expressive habits and out of different emotional 'intelligences'. Further, it has become clear that affectively binding consumers through their own passions and enthusiasms sells more goods. Consumption is itself a series of affective fields[10] and more and more of the industry that investigates consumer wants and desires is given over to identifying possible emotional pressure points.[11] It has also led them to consider the design composition of things in more detail to see if it is possible to provide more in the way of momentary 'thing power', as well as the associated construction of circumstances rich enough in calculative prostheses to allow the neuro-aesthetic to function more forcefully, via the construction of a disposition that can produce a spatial appropriateness in the moment regularly and reproducibly, thereby not so much taming as harnessing chanciness to produce 'small miracles'. In other words, the aim is to produce a certain anticipatory readiness about the world, a rapid perceptual style which can move easily between interchangeable opportunities, thus adding to the sum

total of intellect that can be drawn on. This is a style, arising out of new senses of kinds and collections of matter (Bennett 2004), which is congenial to capitalism, which will do more, an extended set of sense organs, if you like, that will sense the right things, and the right things to do, and, more to the point, will mobilize new structures of forethought out of which can arise new ideas (Thrift 2005).

Activating consumer ingenuity

> [T]he market as a forum challenges the basic tenet of traditional economic theory, that the firm and consumers are separate, with distinct, predetermined roles, and consequently that supply and demand are distinct, but mirrored processes oriented around the exchange of products and services between firms and consumers.
>
> (Prahalad and Ramaswamy 2004: 135)

For some time now, there have been attempts to extend the signature of the commodity, both by enlarging its footprint in time and by reinforcing its content, most especially by loading it with more affective features. A series of different strategies have been involved, which are only now becoming related. Three such strategies are worth noting. One is well-known: the advent of project working around what might be termed 'value proposals', which necessitate a structured flow of work that allows a product to be continuously developed. More and more companies are becoming like project co-ordinators, outsourcing the 'business-as-usual' parts of their operations so that they can be left free to design and orchestrate new ideas, aided by new devices like product life-cycle software which allow product designs to be changed rapidly.

What is striking is that, in certain senses, these commodity projects never end, or are certainly extended in time by slight but significant transformations of performance, because of the need to interact continuously with consumers. And, as the response time of interactivity has speeded up, so different imaginations of the consumer and commodity have been able to come into play (Lury 2004).

Another means of extending the commodity has proved to be through finding means of aggregating so-called 'long tails' so as to make more goods more saleable. In this model, information technology makes it possible to sell more goods but this is not just a logistical exercise. It involves the active fostering of various consumer communities and their aggregation into critical masses with the result that commodities that would have had only faint sales records in the past because of their isolated 'audience' come to have substantive sales records, which, when aggregated with those of other audiences, produce a substantial new market segment (Brynjolfsson *et al*., 2003). In turn, these new audiences can be worked on: their enthusiasm can be played to, for example

through the medium of websites that act as 'honey traps'. So, for example, Amazon.com now sell more books from the backlist outside their top 130,000 bestsellers than they do from within them, in part through all manner of devices that are intended to capture and foster enthusiasms and automate 'word of mouth'.

One other strategy has been to think of commodities as 'resonating' in many sensory registers at once, increasing the commodity's stickiness (or at least making it more recognizable in among the commodity cacophony of modern capitalism): 'today the value proposition is more intimate and intuitive' (Hill 2003: 20). The aim is to add in more feeling by appealing to registers of the senses formerly neglected, thus stimulating the emotions connected with things, and so generally producing more affective grip for those things – and thus more engaging artefacts that produce more commitment and so sell more. Aided by a set of new material surfaces, commodities must appeal across all the senses, reminding us that the original meaning of the word 'aesthetics' was the study of the senses. Sensory design and marketing have become key (Hill 2003). Thus, car doors are designed to give a satisfyingly solid clunk as they shut. New cars are given distinct smells. Breakfast cereals are designed to give a distinct crunch.[12] Travel experiences are given distinctive aromas.[13] And so on. In turn, this deepening of the sensory range of commodities is related to distinct market segments.

However, the most significant means of squeezing value out of the commodity's signature has been achieved by reworking production and consumption, questioning both categories in the process, so leading to the perception of the commodity as consisting of an iterative process of experiment, rather than as a fixed and frozen thing, on the understanding that 'an organization's capacity to innovate relies on a process of experimentation whereby new products and services are created and existing ones improved' (Thomke 2003: 274). In other words, what is at issue is 'a particular mode of innovating . . . linked to constructions of the market framed by information about the consumer' (Lury 2004: 62), which, in turn, depends upon *a reworking of what is meant by the commodity from simply the invention of new commodities to the capture or configuration of new worlds*[14] *into which these commodities are inserted*.

In the sphere of production, this reworking has been achieved by giving much greater emphasis to the process of rapid experimentation, especially early in the production process, resulting, in particular, from the integration of new information technologies into the product development process, thus allowing a much greater spectrum of possibilities to be tested, thereby speeding up the experimentation–failure cycle and making it possible to produce a process of continuous redevelopment. Specifically, this reworking has drawn on four ongoing developments: using the resources provided by computer simulation, reorganizing production processes so that they can cope with preliminary conclusions and rough data,[15] putting in place systems that explicitly learn from the experience of products and, lastly, shifting the locus of

experimentation to customers because all the evidence shows that users' intellectual labour can itself be a powerful source of innovation (Thomke 2003). The distinctions between exploratory and exploitative innovation therefore become much more difficult to maintain (Roberts 2004) since lots of ideas are being generated at relatively low cost through organizations that are 'permanently beta' (Neff and Stark 2003).

This latter strategy of moving innovation beyond the organization by tapping into the commodity involvements of consumers and others, under the general slogan 'not all the smart people work for you' (Chesbrough 2003), has proved particularly important, and I will therefore concentrate more attention on it. A change in the technical background, most notably the mass codification of all kinds of knowledge and the associated democratization of the learning process that has been encouraged by information technology (Foray 2004), has allowed ingenuity to flourish again. In particular, information technology has reduced the transaction costs of sharing information about commodities and has, simultaneously, made it much easier to construct communities around this sharing. The result has been a flowering of so-called open or user-centred innovation, which may even be comparable to the diffusion of innovations, noted by Mokyr (2002) in the nineteenth century, which resulted from massive cuts in the transaction costs of innovation.

In open or user-centred innovation, consumers are a vital force in research and experimentation:[16]

> Users of products and services – both firms and individual consumers – are increasingly able to innovate for themselves. User-centred innovation processes offer great advantages over the manufacturer-centric development systems that have been the mainstay of commerce over hundreds of years. Users that innovate can develop exactly what they want, rather than rely on manufacturers to act as their (very often imperfect) agents. Moreover, users do not have to develop everything they need on their own: they can benefit from innovations developed and freely shared by others.
>
> (Von Hippel 2005: 1)

Companies are increasingly likely to 'free reveal' in order to increase incentives to innovate, giving away ownership rights in order to obtain other benefits. Though the example often given is open source programming, the democratizing of innovation goes far beyond this particular practice (Von Hippel 2005), by recognizing the enthusiasms and pleasures of consumers' involvements with numerous commodities and entering into a relation with those involvements, thus producing 'experience innovation' (Prahalad and Ramaswamy2004) through shifting the boundary between private and collective.

But it is important to note that not all or even most consumer communities are active innovators. Rather, they are likely to be involved in something much closer to what Barry (2002) and Lazzarato (2002), following Tarde, call 'invention', as a means of distinguishing the practice of iterative improvements

resulting from particular modes of interaction from innovation. In invention, mere use[17] is superseded by pleasure in the activity itself, of which the commodity is an active partner. When a commodity produces a sufficiently compelling experience environment, *consumer communities* will evolve beyond a company's control, thus directly co-creating value and providing the firm with a new terrain of profit – generalized outsourcing – if it is nimble enough to adapt to the new conditions. These communities gather round particular obsessions, which cover an enormous spectrum although many of the prototypes were in music, fashion and information technology. Sometimes these communities resemble mere interest groups, sometimes groups of fickle fans, sometimes hobbyists and sometimes cults. What is clear is that their existence is not predictable, in part because they are engaged in activities which find their own fulfilment in themselves, without necessarily objectifying these activities into 'finished' products or into objects which survive their performance (Virno 2004).

Consumers have become involved in the production of communities around particular commodities which themselves generate value, by fostering allegiance, by offering instant feedback and by providing active interventions in the commodity itself. Thus markets become less simple means of selling products composed at the terminus of a value chain whose only forms of interactivity are sales figures and the diverse forms of market research and more forums in which interchange takes place around a co-created commodity experience: 'products and services are *not* the basis of value. Rather, value is embedded in the experiences co-created by the individual in an experience environment that the company co-develops with consumers' (Prahalad and Ramaswamy 2004: 121). In turn, producers increasingly become the equivalent of agents, acting as links back to a disaggregated commodity chain and forward into current consumer obsessions. This new view necessarily challenges dominant conceptions of what constitutes a market. The market becomes a forum where dialogue between firms and consumer communities takes place, this dialogue being much more heterogeneous than formerly. The market is no longer outside the value chain, acting as a point of interchange between producer and consumer. Greater interactivity means that 'the market pervades the entire system' (Prahalad and Ramaswamy 2004: 125).

Activating space

A further crucial element in the development of a full palette capitalism is the more active use of space to boost innovation and invention. In line with the increasing tendency to want to gather invention in wherever it may be found, new time-space arrangements have to be designed that can act as traps for innovation and invention. In other words, attempts are being made to extend the environment in which ideas circulate by producing 'thinking spaces' that can continuously pick up, transmit and boost ideas. But, crucially, these spaces

are not sealed. They are insertions within already present flows (Kwinter 2001). They are designed to allow continuous interaction both within and across boundaries by maximizing 'buzz' (Storper and Venables 2004). They are spaces of circulation, then, but, more than that, they are clearly also meant to be, in some (usually poorly specified) way that is related to their dynamic and porous nature, spaces of inspiration incorporating many possible worlds (Lazzarato 2005a).

It is clear that the construction of these thinking spaces could not have become possible without the concerted application of large doses of information technology, which have made many more environments highly equipped and thus 'ready-to-think' (Steventon & Wright 2005). Information technology acts as a means of propagation which is also a means of structuring perception (Liu 2004). It acts as a means of singularization which is also a means of aggregating a multiplicity of voices. It acts as a system of distributed cognition which is also a means of capturing new potential.[18] And it acts to increase radically the general availability of consumer goods and services.

Indeed, information technology forces five features which, taken together, constitute a spatial extension of intelligence. One is simply the sheer amount of information becoming available to consumers all but instantly, especially through software like Google. The second is the greater access to information that has accompanied this trend, both by consumers about products and by companies about products. Access costs have plummeted. The third is that linkages and associations are automatically generated for the consumer. Information is continuously linked, providing short cuts that can arrest time for a moment and make more of an encounter by providing back up, connectivity and inspiration. The fourth is that a certain kind of transparency therefore develops. This should not be overdone but it is quite clear that consumers can now find the means to be better informed and more easily to *learn* about products. Finally, the process of acquisition of information becomes, in principle at least, continuous. It is not fixed but is something that is akin to a never-ending walk. In other words, information technology, through continuous interactivity, offers more reflexivity but a very particular kind of reflexivity that both promotes and inhibits exchange between producers and consumers by instigating performances of its own, which are more than simple mediations (Latour 2005), at the interface, as it tries not simply to approximate being-in-the world but to boost it by constructing new kinds of informed affinity and participation, new communities of all kinds (Dourish 2001).

This settling in of information and communications technology can be interpreted as the product of a further step in what Callon famously calls 'the economy of qualities', which is now producing a new 'post-phenomenological' commodity architecture, a frame that can combine interactive systems (most of which rely on software in one form or another) and commodities with the spaces and times of everyday life, thereby producing an environment filled with applied and firmly embedded intelligence that is involved in constant iteration and feedback (Thrift 2005).

But the settling in of information technology is only half the story. If space now comes loaded with information, still the question of how individuals and groups interact in order to actually generate learning and innovations is hardly closed off. Thus, again usually in a poorly specified way, it is reckoned that space needs to be designed to boost these capacities by maximizing social interaction. In the 1990s, in particular, this form of reasoning was boosted by a general belief that context was crucial because 'knowledge workers do not follow procedures so much as expertly play their contexts. Without an ability to improvise in context, people who are merely following official prescriptions are utterly lost as soon as they stray from known conditions, which of course happens all the time' (McCullough 2004: 150–1). Thus contexts needed to be actively designed as an extension of intelligence. The first of these contextualizations of expert play was achieved through explicit design of group interaction. Building on a long tradition of management thinking about issues like tacit knowledge, this was chiefly embodied in the notion of community of practice. The second contextualization was the construction of physical spaces that would fit with and boost such formations. Again, this built on a long tradition of trying to design teamwork into buildings, a tradition which had passed through an industrial phase and was becoming interested in buildings which could encompass many modes of social interaction by encouraging both concentration and dispersion simultaneously. So, for example, an office building might contain de-cloistered spaces of semi-public interaction and all kinds of dens in which individuals or smaller groups could make their way (Duffy 1997).

However, the early twenty-first century has seen further developments, born particularly out of the domain of production of intensive knowledge like various forms of science, which try to blend action and perception by building spaces of potential movement (Massumi 2004). A new round of buildings is beginning to provide a more general model for how spaces of invention should be built and managed. What do these spaces look like?

A good example of the kinds of spatial prototypes that are now being constructed, which can confidently be expected to become more general models of innovation incubators, is provided by the new generation of biosciences buildings, built as a result of the massive private and public funding that the biosciences have been able to attract through their rhetorical capabilities, and most especially the new generation of therapies that they hopefully prefigure. Concurrent with the rise of the biosciences to such a level of prominence has been a radical redesign of scientific space, reflected in the construction of numerous new 'performative' buildings. For example, every university campus worth its salt is now expected to have its own gleaming temples to interdisciplinary bioscience. These buildings are clearly meant to manipulate time and space in order to produce intensified social interaction so that all manner of crossovers of ideas can be achieved. In other words, the aim is to make architecture more effective by making it more performative.

Through the 1990s and into the twenty-first century, these buildings have been being routinely constructed. For example, in the UK alone, the science buildings in the Centre for Life at the University of Newcastle (opened in Newcastle in 2000), the Wellcome Trust Biocentre and the Centre for Inter-Disciplinary Research, both in Life Sciences at the University of Dundee (opened in 1997 and 2006 respectively),[19] or the forthcoming Manchester Interdisciplinary Biocentre, opening at the University of Manchester in 2005, are typical. Similarly, around the world, a series of elite scientific spaces are being constructed which are intended to produce performative, interdisciplinary machines (cf. Livingstone 2003). The best-known model for these spaces is to be found at Stanford University in the shape of Bio-X. However, a series of other such buildings have either just been completed or are under construction, including the QB3 consortium buildings at UCSF in Mission Bay, San Francisco, the Institute for Systems Biology in Seattle and the Howard Hughes Medical Institute research campus at Janelia Park in Virginia.

These buildings usually share a number of features in common. First, they will often include an explicit attempt to represent 'life', whether that be swooping architecture, some forms of public display of science or similar devices. Second, they are meant to be highly interdisciplinary. As a matter of routine, they usually include not only biologists but also physicists, chemists, computing engineers and so on, all clustered around root technologies like genomics, proteomics, imaging and the like. Very often, they will place apparently unlike activities (such as computer laboratories and wet laboratories) side by side or have unorthodox office allocation schedules, all intended to stimulate interdisciplinarity. Third, they are porous. Personnel (for example, scientists arriving and departing on a permanent basis) and information constantly flow through them: as Galison and Thompson (1999) note, the emphasis on co-dependence and co-extension makes it difficult to decide where the experiment begins and ends; rather, there is a global network of software and hardware, with no single object or author, of which the building may capture only fleeting aspects. The experiment, like the building, is partially dispersed, occurring at a number of locations at once. Fourth, in keeping with an architectural rhetoric about changing ways of working, which arose in the mid-1980s and is now an established convention, they are meant to encourage creative sociability arising out of and fuelling further unpredictable interactions. From cafes to temporary dens to informal meeting rooms to walkways that force their denizens to interact (Duffy 1997), the idea is clearly to encourage a 'buzz' of continuous conversation oriented to 'transactional knowledge' and, it is assumed, innovation. Fifth, they are meant to be transparent: there are numerous vantage points from which to spot and track activity, both to add to the general ambience and to point to the values/value of the scientific activity that is going on. In other words, these buildings are meant to encourage a certain notion of interactive knowledge.

It is interesting to note the way in which, very gradually, new working practices are growing within them based upon an art of flexible and temporary

agglomeration in order (supposedly) to guarantee maximum innovation. In particular, I want to point to three developments that are becoming clear. One is a move to agglomerate in a quasi-organic fashion around key individuals who are good at brokerage across structural holes in the organization. Thus, one requirement may be to 'leverage the likeable' so that groups form naturally and so that linkages between groups are maximized; then the concern is to find individuals who form 'affective hubs' (Casciaro and Lobo 2005) as people who are liked by a disproportionate number of other people. But, in the organizations I have looked at, such individuals are just as likely to be those who have a certain scientific charisma and are not necessarily likeable. Whatever the case may be, it is clear that these organizations are searching for people who can act as brokers around which new groups can constantly form. These people will routinely cross the spaces between existing groups and so maximize between-group thinking that might otherwise not exist, very much in line with Burt's finding that people whose networks span structural holes 'are at higher risk of having good ideas' (2005: 349): they are more likely to express ideas, less likely to have ideas dismissed, more likely to have ideas evaluated as valuable and more likely to be relied on to keep on proposing ideas. But the second development in these organizations is to keep the groups on the move so as to avoid group decay and organizational inertia. They are not allowed to coalesce for anything other than a limited period of time (usually six to twelve months) before they are split up and new groups are formed. This is akin to project working but project working that is self-selecting. In other words, what we see coming into existence is an attempt to socially engineer the process of scientific discovery, using the physical environment as a resource but not as a determining factor. Then, the third development is that in some of these buildings a new position in the formal division of labour has started to grow up, crystallizing these kinds of skills. Thus a number of buildings now employ 'pathfinders', selected staff who function on either a full-time or fractional basis,[20] whose function is to make sure that the hopper of ideas is constantly kept topped up through formal job descriptions that give them the freedom to 'find and bind'.

Summary: the role of design

> Design is how we can be dominated by instrumental rationality and love it, too.
> (Liu 2004: 236)

How can we summarize these three tendencies? What seems certain is that their net result has been to show the degree to which design is becoming ever more central to the whole production/consumption process (Molotch 2003; McCullough 2004).

Design has increasingly therefore become re-cast as *interaction design*: the design of commodities that behave, communicate or inform, if even in the most

marginal way, in part by making them into processes of variation and difference that can allow for the unforeseen activities in which they may become involved or, used for which, may then act as clues to further incarnations. In other words, 'the success of a design is arrived at socially' (McCullough 2004: 167), that is through structured processes of cultural deliberation which massage form (Molotch 2003). In a sense, the goal is to produce commodities that are as 'natural' as longstanding commodities like books but to do so in an accelerated way by dint of various collective design processes that spill outside the organizational boundary, including not just the full spectrum of qualitative methods now routinely used by corporations (or at least by the consultancies that they hire) such as focus groups, ethnography of various kinds, style boards, means-end chains, clinics, pre-launches, information acceleration, conjoint analysis and so on, but also fan websites, open innovation and so on.

Thought of in this way, more and more design activity is not defined in relation to a final endpoint. Rather, the 'production process has no final goals, no natural target or final user, but rather continuously feeds on itself. Another way of putting this is that 'through the activity of design the process of production provides information for itself about itself' (Lury 2004: 52). This is another means of understanding co-creation, of course, as a continual process of tuning arrived at by distributed aspiration.

Of poetry and profit

> In a genuinely new economy, what constitutes value itself must change.
>
> (McCullough 2004: 261)

It is obviously difficult to find a common denominator for all these different developments but in this section I will argue that what they signify is a more general change in how and what constitutes the *value* form. No longer can the value form be restricted to labour at work. It encompasses life, with consumers trained from an early age to participate in the invention of more invention by using all their capabilities and producers increasingly able to find means of harvesting their potential.

> Capitalists are interested in the life of the worker, in the body of the worker, only for an indirect reason: this life, this body, are what contains the faculty, the potential, the *dynamis*. The living body becomes an object to be governed not for its intrinsic value, but because it is the substratum of what really matters: labor-power as the aggregate of the most diverse human faculties (the potential for speaking, for thinking, for remembering, for acting, etc.). Life lies at the center of politics when the prize to be won is immaterial (and in itself non-present) labor-power.
>
> (Virno 2004: 82–3)

Thus, capitalism increasingly uses the whole bio-political field as labour is redefined as what Marx in the *Grundrisse* called the 'general intellect' (1973: 706), or as general social knowledge acting as a direct force of production organizing social practice (Negri 1991; Lazzarato 2002a). Whether this reserve of virtuosity, 'the subjective, affective, volitional aspects of production and reproduction which tend to become the main sources for the extraction of surplus value' (Toscano 2004: 211), should go under the heading of immaterial labour, as some Italian Marxist writers would have it, is a moot point[21] but it seems important to signal in some way the degree to which capitalism increasingly attempts to draw on the whole of the intellect. Finally, what it means for the value form is, to say the least, unclear. Perhaps the best solution may be to go back to the discussions of value by Tarde in *Psychologie Économique* and use them to renew inspiration, as Lazzarato (2002, 2005) has done. Notably, Tarde wanted to bring together three kinds of value: *valeur-utilité* (economic activity conventionally understood), *valeur-verité* (the activity of knowing) and *valeur-beauté* (aesthetic activity) and I will try to operationalize these categories in a contemporary setting.

What does seem certain is that the developments I have outlined in the previous section add up to more than the sum of their parts. They have begun to form a new distribution of the sensible which simultaneously constitutes a living means of generating more and more invention. It is as if someone had found a way to form and then mine a new phenomenological substrate.[22] In particular, another kind of model of causality (cf. Kern 2004) is gradually starting to evolve, one which has been coded by words like network or creativity or complexity but which I will want to describe rather differently by making an argument about the quality of '*efficacy*'.

Efficacy is variously defined by dictionaries – as the 'ability, especially of a medicine or a method of achieving something, to produce the intended result', as 'the capacity or power to produce an effect' or as 'the ability to produce desired results'. In other words, efficacy constitutes a certain kind of capability, a force. Efficacy can take on a number of different forms, of course. For example, anthropology is chock full of examples of efficacy which Western cultures find odd, even outlandish, centred on practices like magic, witchcraft, divination and sorcery (Peek 1991). In the past, these kinds of practices would have been interpreted as evidence of a comprehensive cosmology. Nowadays, they are more likely to be seen as moments in a habitus of structured improvisations, fixations if you like. But, whatever the case, they are seen as expressing the lines that trace out how a culture is conceptually determined,[23] the beliefs a culture holds in what works and what does not which are enshrined in all manner of bodily dispositions, objects and ecologies.[24]

I want to argue that, of late, as a result of the conjuring up of a particular sensory configuration of time and space in which commodities can unassumingly nestle, which I examined in the previous section, a different kind of efficacy is gradually being foregrounded. It is a form of efficacy that I will call

'*rightness*' in that it is an attempt to capture and work into successful moments, often described as an attunement or a sense of being at ease in a situation, although it is both more and less than that: more in that it is now being constructed as a reproducible technology for harnessing potential, less in that the necessarily formulaic nature of this technology is bound to mean that certain sensings of potential are diminished or even go missing. This search after a certain sense of rightness has always been an intrinsic feature of the operations of capitalism, of course. One only has to think about the importance ascribed to reading financial markets of various kinds, which, in large part, is about knowing when to buy and sell various financial instruments and which has been described in books and primers that date back to the nineteenth century and before. And it is not that it has never been noticed or commented on. For example, in an address to the Harvard Business School in 1932, John Dewey identified one of the key skills of business to be a quality of foresight which was also a sense of timing. But I want to argue that it has become a more highly sought-after quality, which it is now thought can be actively engineered on a mass scale.

What seems certain is that the implementation of this new version of efficacy demands that capitalism becomes '*both a business and a liberal art*' (McCullough 2004: 206), in that what is being attempted is continuously to conjure up experiences that can draw consumers to commodities by engaging their own passions and enthusiasms, set within a frame that can deliver on those passions and enthusiasms, both by producing goods that resonate and by making those goods open to potential recasting. It is a Latourian (1996: 23) sense of the world made incarnate by a co-shaping which is an intrinsic property neither of the human being nor of the artefact.

If one wished to specify this tendency more concretely, it would be as an attempt to mass produce commodities as so many experiences of a sense of rightness through a series of new practices of innovation that draw directly on consumers' collective intelligence.

How might we understand this new form of efficacy that lies somewhere between business and art? Are there models of value which might shine a light on it? I will end this section very speculatively by noting just three possible models which might act as sources of inspiration for further thinking about what is currently happening to value and how it will be rendered sensible and, in certain senses, calculable in new ways:[25] an instrumental model, a characterological model and an aesthetic model, each echoing Tarde's three kinds of value. In the first model, rightness is understood as a general cultural model of how to attain ends, in the second as a model of correct epistemological deportment and in the third as an aesthetic quality. In each model, a certain kind of belief in the world is manifested, which is effective in exerting influence in certain ways.

Rightness as a general cultural model of instrumentality

Let me turn first to a general cultural model of how the world is conceived as turning up next. This is a model of consuming the world that presumes a different carpet of expectation, one based on a form of opportunism that rewards the skill of manoeuvre among interchangeable opportunities.[26] Perhaps the best analogy that can be drawn is with the Chinese concept-practice of '*shi*'. That concept-practice (which is indeed an attempt to collapse that distinction) originally derived from warfare but soon moved into many other domains, including everyday life. It tries to capture and work with the propensity of things by cultivating a potential born of disposition (Jullien 1995). A person is expected to exploit the potential of the conditions she encounters. She must organize circumstances so as to derive profit from them. She must find the line of force that exploits the configuration she finds to hand. This is not a personal capacity: 'human virtues are not intrinsic, since the individual neither initiates nor controls them, but are the "product" (even in the materialistic sense of the word) of an external conditioning that is, for its part, totally manipulable' (Jullien 1995: 30). The tactical disposition of things is more important than moral qualities: manipulation not persuasion is what counts. The tactic must be devised to evolve along with the situation, and must therefore be constantly revised according to the propensity at work. Thus a disposition is effective by virtue of its renewability and does not have to be decisive and direct. There is no finality. Rather, 'the fundamental objective of all tactics is to ensure that dynamism continues to operate to one's advantage' (Jullien 1995: 34) and that the hands of an opponent are tied by the situation. All reality is a deployment, a continuous deployment.

> Reality was not regarded as a problem but presented itself from the beginning as a credible process. It did not need to be deciphered like a mystery but simply to be understood in its *functioning*. There was no need to project a meaning onto the world or to satisfy the expectations of a subject/individual, for its meaning stemmed in its entirety, without requiring any act of faith, from the propensity of things.
>
> (Jullien 1995: 264–5)

This sense of rightness as a continuous deployment seems to me to encapsulate much of what is now happening in the world, a disposition to and for change that regulates itself as it goes along in a kind of hyper-instrumentality.

Rightness as a mode of governance of knowledge

Tapping into consumer capacities also relies on a model of government of knowledge that will produce a background for new practices of innovation. The second model of value may be understood as a dislocated liberalism which performs power-knowledge in novel ways based on the practices of character

formation (Joyce 2003). Above all, this form of power-knowledge is motivated by a fear of stagnation, and is reminiscent of largely forgotten practices of government that individualize personal character and totalize it, practices, which were especially popular in Britain and North America from the late eighteenth to the early twentieth century, that aimed to govern through the ethical possibilities and constraints of improving 'character' by imposing 'good habits'.

It seems to me that we are seeing something like this form of 'ethological governance' (White 2005), based on a form of power-knowledge that analyses human character and its formation, recurring through the galvanizing of the consumer realm as commodities increasingly use characterological means to communicate themselves. Liu (2004) shows how modern commodities increasingly assume such characterization as a means of providing dramatic unity to an experience. Commodities become directors to and of character and are committed to the goal of self-transformation as part of a more general mimetic model of culture based on the prevalence of media, using example rather than discipline and imitation rather than coercion: 'the paradigmatic body of our societies is no longer the mute body moulded by discipline, but rather it is the bodies and souls marked by the signs, words and images (company logos) that are inscribed in us' (Lazzarato 2005: 8).

Rightness as an aesthetic

And so to the final model of value, a model which I want to approach through the figure of Wallace Stevens. Stevens was not only a successful businessman, he was also undoubtedly one of the twentieth century's greatest poets. Widely regarded as having written some of his finest work in his sixties and seventies, Stevens is now judged by many writers to be the quintessential modernist poet.

One of Stevens' key aims was to resonate with the moments of sudden rightness in an ultimately bewildering world, those moments of everyday life when 'mere' things seem to light up, seem to become 'precious portents of our powers' (Stevens 1960: 174):

> The dark metaphysical activity of the poet is described in musical terms, where rightness would be a kind of harmony between mind and world. In this sense, our being-in-the-world would be experienced as emotional attunement, which is one rendering of Heidegger's *Stimmung*, which is otherwise rather flatly rendered as 'mood'. Metaphysics in the dark is a kind of music where rightness means sounding right.
>
> (Critchley 2005: 39)

Such a determined pursuit of rightness can be interpreted as presaging one aspect of the new model of efficacy, one with many forebears, of course, but one which heralds a different kind of belief in the *causation* of the object. If the

word 'belief' has a quasi-religious tone, that is as it should be, for this form of efficacy, a 'metaphysics in the dark' (Critchley 2005), consists of enlarging the powers of objects through a series of procedures and technologies for building their capacities, including working on the appropriate spaces and times in which they are to be found (Mitchell 2005). But, this is not a revelatory or edifying belief. Rather, it is a boost to what we regard as mundane certainties about how the world will turn up next, about what *is*, with all the imperfections we often see kept in, confirmed by a combination of vivid sensory stimuli, new forms of narrative and a controlled element of surprise. In a sense, the aim is simply to see the thing itself, to see things as they 'merely' are, through a material aesthetics (Verbeek 2005) that allows objects to be turned into 'poetics'. Things as portents of our powers remain remote from our intentions but not necessarily from us.

Conclusions: 'Always sell hope'[27]

In these conclusions, I want to make three points, one procedural, one political and one theoretical. The procedural point has been made many times now but it still bears repeating. That is the increasingly bizarre and bitter disjuncture between a fluid core of producer-consumer practices that mark time and an impoverished periphery in which something close to anarchy often reigns in what is often an extended battlefield (Nordstrom 2004) of uncivil wars conducted by sanctioned by decentralized powers – warlords, gangsters, sects – that the modern state was meant to banish.

The disjuncture is only underlined by the fact that some of the same companies are involved in both worlds, participating in both a new kind of capitalism and in primitive accumulation through their activities in finance, engineering and construction, and the extraction of primary commodities.

And then there is a political point. At times in this paper, I have come close to depicting a world in which capitalism is a force so strong that what it wishes simply comes into existence. But that is simply incorrect. There are two ways of reading the developments I have outlined. Certainly, one of these is capitalism as a leviathan not only making its way in the world largely unimpeded but using all manner of consumers' own passions to stoke the engines a bit more. In other words, what we have here is simply a further depressing episode in what Sheldon Wolin (2000: 20) has called 'inverted totalitarianism', in which economic rather than political power is dominant, in which change and movement have been appropriated for the care and feeding of the brainy classes, and in which what was the political has become pure tactics: 'democracy is embalmed in public rhetoric precisely to memorialize its loss of substance'. This case seems to me to be unarguable.

But I have also stressed another side to these developments. In order to generate more invention, innovation situations have to be designed that are more open-ended and less predictable. For example, to engage more fully with

consumers in the ways outlined above requires an acceptance that they will not always do what the producer wants. Since they are often engaged in activities that are their own fulfilment, they may import all manner of other factors, they make unexpected judgements, they may decide that they are in charge, they may even turn on the producer. Consumer passions do not just run to fan websites. They also run to ethical consumption (Barnett *et al*. 2004), to websites and blogs that can be openly and even savagely critical of their object, and to all manner of other fractious communities that want to object to particular commodity associations – or even to the commodity system itself. For example, they may point to the profligate and almost certainly unsustainable expenditures of energy that have arisen with the turn to information and communications technology and suggest design alternatives (Thackara 2005). There is, in other words, an uncomfortable *status quo* in a world in which, if 'marketers' only real choice is to become more dependent on emotional ties or face ever-dwindling profits' (Atkin 2004: 199), there is a real danger that emotions do not just buttress a brand but overwhelm it and that co-operation between consumers means working on new forms of co-operation that use commodities in ways that avoid the profit nexus. This explains much of the concern recently with building brand relationships, which, in part at least, is defensive, a desperate attempt to build long-term associations by means of symbolic integration and experiential nexus.

Similarly, 'open innovation' cannot be seen only as one of the next big management fads but also as a means of challenging current property regimes by building new kinds of creative commons through a wider culture of knowledge. In other words, some commentators argue that a democratization of innovation is occurring which enhances overall and not just corporate welfare (Von Hippel 2005; Lessig 2005).

The theoretical point follows on. It is interesting to consider the main currents of thought that are currently prevalent in social theory and appropriate to register a certain amount of discomfort. One current consists of a reconsideration and reworking of vitalism. Another is a growing interest in the intermingling of human and material and most especially the increasing power of the scaffolding provided by a legion of objects. Still another is a revival of systems thinking but flattened and made communicative.

While it would be going too far to say that social theory simply runs in lock step with what is happening in the world, neither, by definition, can it just ignore it. I would claim that much of modern social theory is, in fact, a meditation on the kind of world – and the increasingly problematic nature of human experience (in the sense of both 'human' and 'experience') of that world – that I have sketched out in this paper.

Increasingly, that world is being constructed by business, and furthermore by a business that uses theory as an instrumental *method*, as a source of *expertise* and as an *affective register* to inform an everyday life that is increasingly built from that theory. Yet, still, too few social theorists seem willing to recognize that fact or to consider what it might mean for the practice

of social theory. They prefer bracketing off business as an other which is to be deplored and then largely ignored. This must surely be dangerous when it can be argued that theory, in its attempt to be fast-moving and productive, is increasingly trying to mimic the very forces that may endanger it.

This paper argues, in contrast, that what is now going on in business is intended to populate nearly every event with content that has some commercial resonance and, understood in a broad sense, gain through a general redefinition of what counts as value. Capitalism is carpeting expectation and capturing potential. Simple condemnation of this tendency, as if from some putative outside, or, alternatively, embracing it as a part of some continuously fluid overarching vitalist order will not do. Rather, it seems to me to call for radically new imaginings of exactly how things are, but under a new aspect that we can currently only glimpse, 'a tune beyond us, yet ourselves', as Wallace Stevens (1960: 133) put it.

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Notes

1 However, this is not meant to function as a vanguardism of the kind found in, for example, some variants of Italian Marxism (Wright 2002). It is imperative to understand that the economy is a radical heterogeneity that is always diverse and cannot therefore be captured as though everything will eventually follow on.

2 However, as I will make clear, this is not just a case of opening up new 'fishing grounds', to use market research parlance. It is a change in how the commodity itself is conceived.

3 The speed of this onset is almost certainly the result of the cultural circuit of capital which is able to circulate theories at an accelerated rate, showing, once again, that theory has increasingly transmuted into method, a method of producing maximum connectivity with the minimum of material. What we see is theory becoming a second nature but that theory is of an attenuated, instrumental kind.

4 It is important to note that I am trying to provide a diagram of a new set of tendencies that are now infesting the business of innovation and which together form a functioning process. *This does not, of course, preclude all kinds of other models of innovation from continuing to exist*. Rather it points to the construction of a novel overlay. The economy is heterogeneous and there is no reason to think that there is just one model of innovation.

5 It is a profitable exaggeration at this moment in time, since it can be retailed as a problem to which consultants can find solutions.

6 The two not being exactly the same. For a long period of time writing was a limited skill in the same way that touch typing is today.

7 This is not to say that capitalism has not attempted to use the structure of forethought. One thinks just of Packard's (1960) *The Hidden Persuaders* and the general panic in the 1950s and 1960s about the subliminal powers of advertising.

8 This work often focused on various kinds of practical organizational knowledge, for example, influencing and co-operating with others.
9 The resort to neuroscience may be partly to do with management writers' need to seek out credibility by associating themselves with science but it is not just rhetorical (Hill 2003).
10 See, for example, Miller's (1998) exposition of love as a key element of shopping.
11 For example, see the various emotional instruments used by the advertising, market research and human resources industries, as in, for example, Goleman's Emotional Competence Inventory, widely retailed by the Hay Group as a means of evaluating individuals and organizations.
12 Indeed, Kellogg's has patented its cornflake crunch.
13 As in the Stefan Floridian Waters aroma used by Singapore Airlines, a scent formerly used in flight attendants' perfume that has now been extended right across the airline experience, from the hot towels before take-off to the cabin air freshener (Lindstrom 2005).
14 Of affects, concepts and percepts all built into particular environments.
15 A factor that has become much more important as the speed of production processes has increased.
16 See the comments by Callon and Muniesa (2005) concerning new forms of calculation brought into being by devices like information technology.
17 The use of the diminutive here is no doubt suspect, given that three decades of research on consumption have shown just how rich a field of cultural practice it is.
18 What is interesting is the way in which information technology has so rapidly become a pervasive feature of the design and presence of commodities as societies have become incorporated in an information culture so that increasingly information has a *feel* to it generated by the interface (Liu 2004).
19 These building forms are not restricted to the biosciences, of course. For example, the Isaac Newton Centre at Cambridge is dependent on the same idea of high interaction.
20 Notice the similarity to what is found now in a number of organizations (see Storey and Salaman 2005).
21 Though it is taken from Marx, I am not myself keen on this terminology which nowadays has too many associations with the idea of some immaterial, virtual realm conjured up by information and communications technology.
22 The analogy with the media is a good one. Not only does play-back involve media models but more and more of experience is mediatized.
23 This does not mean that all kinds of perception are not outside consciousness: perception is a wide-ranging faculty.
24 These conceptual determinations assume a variety of *capacities* which trace out what matters. In turn, they therefore assume a particular materiality which reciprocally confirms those determinations. And, in part, they bring that materiality into existence by arranging time and space so that they produce the requisite followings on (percepts) which themselves confirm that particular existence. They also assume a particular self-efficacy, a belief in the abilities of what counts as a person which depends precisely on what those abilities are supposed to be and what their supposed consequences are.
25 Ways which are closer to a musical score than an old-fashioned calculating machine. As I have pointed out elsewhere (Thrift 2005), these latter functions are now so widespread that they have simply become part of the background.
26 See Virno (2004) on opportunism as a technical virtue.
27 Hill (2003: 42). Business can do Bloch too.

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