

POST-POST-FORDISM IN THE ERA OF PLATFORMS

Robin Murray talks to Jeremy Gilbert and Andrew Goffey

Abstract One of the UK's leading radical economists discusses the history of post-Fordism as both a concept and a set of economic practices, with specific reference to his role as an innovative municipal policy-maker at the GLC in the 1980s and subsequently. The interview explores the ways in which post-Fordism has mutated since the 1980s, before moving on to discuss the attention economy and the death of the brand. It then looks at the future of co-operatives and ideas of co-operation in the age of social media, before investigating in more detail the politics of platforms and the democratic possibilities opened up by peer-to-peer technologies. Murray makes a convincing case that we have now entered the epoch of 'post-post-Fordism': the era of platforms. The discussion is framed with reference to Deleuze's 'control societies' hypothesis, which is the subject of the themed journal issue in which the interview appears.

Keywords GLC, technology, peer-to-peer, democracy, co-operation, post-Fordism, attention economy, innovation, collaboration, post-post-Fordism, platforms, control society

INTRODUCTION

This issue of *New Formations* is concerned with a complex of issues around the politics of networks, 'control' and 'security' societies as defined by Deleuze and Foucault respectively, and post-Fordism. In fact Maurizio Lazzarato, for one, has explicitly linked the latter two phenomena, understanding post-Fordism as more-or-less the direct consequence of new techniques of power and governance as described by Foucault being deployed in the context of processes of capitalist production.

Today the 'post-Fordist' hypothesis seems more or less irrefutable. While some of the key features of 'Fordist' capitalism - such as assembly-line production - remain central to global manufacturing (above all in China), they are no longer bundled with the other key features of 'Fordism', such as a strict gendered division of labour and a macro-economic policy committed to maintaining high aggregate demand within the same nation state in which production is concentrated. Industrial automation, market differentiation, corporate disaggregation, labour market specialisation, just-in-time production and the expansion of the retail, IT and service sectors have transformed economies beyond recognition, not just in the old industrial heartlands of Northern Europe and North America, but in differentiated

ways on a global scale. What's more, these changes have been bound up with profound cultural, social and political changes, as commentators such as David Harvey were already discerning at the end of the 1980s. It is worth bearing in mind, then, that when the hypothesis was first advanced at the end of the 1970s, the idea that such changes would have any significant results at all was widely regarded as controversial, and was much resisted.

Robin Murray has been one of the UK's leading radical economists for many years. An expert on co-operatives, social enterprise and institutional and technological innovation, he was Director of Industry for the Greater London Council during the 1980s. This was the period during which the GLC was led by Ken Livingstone, enacting one of the most radical progressive programmes of any major governmental body in British history. Directly influenced by this experience, Murray wrote two celebrated articles for the British monthly *Marxism Today* on the subject of emergent 'post-Fordism' in the second half of the 1980s. These two essays 'After Henry' and 'Benetton Britain' were key in introducing the concept of post-Fordism to the wider left in the UK.¹ New Labour would later take up the idea of post-Fordism as dictating a narrowly individualist culture and an approach to economic management and public-service reform which was wholly informed by neoliberal ideology. But this was never Murray's conclusion. Instead he has argued consistently that the new technological and organisational forms of contemporary production are adaptable to classic democratic socialist objectives, and facilitate collaborative creativity, democratic self-management and co-operative production.

In this interview Andrew Goffey and Jeremy Gilbert discuss a wide range of these issues with Murray, for whose time and co-operation we remain extremely grateful.

1. These articles are available at the *Marxism Today* section of the Aniel and Melburn Trust: http://www.anielandmelburn.org.uk/collections/mt/index_frame.htm.

POST-FORDISM IN PRACTICE

Jeremy I was hoping that initially you could say a bit about the idea of post-Fordism, and its reception history in this country, because you were one of the first people writing about it Robin, at least in a context that was widely read.

Robin Well, for me, it originated in our experience at the GLC, not from any writing. Throughout the 1970s, and right up until the drafting of Labour's London Manifesto for the 1981 municipal elections, the predominant economic paradigm was Fordism: left economic industrial strategy was based on the idea of scale and rationalisation. The critique of industrial Britain across the political spectrum was that it was backward. It had too many old family firms, who underinvested and weren't good at managing. What was needed was to modernise them, by encouraging amalgamations, increasing investment and appointing professional managers. That approach underpinned industrial policy in the 1960s, but it was then given a 'leftward flip' in the 1970s, when Tony Benn (a key figure of the Labour left in the

1970s and 1980s) took it up, with the idea of marrying these modern 'forces of production', with greater democratic control. He, and the left of the labour movement more generally, had been much influenced by the Institute of Worker's Control, which was formed in the mid-1960s and remained strong until the mid-1980s.

The GLC's manifesto in 1981 was in part drafted by Stuart Holland, who had been influential in shaping Labour's Alternative Economic Strategy in the 1970s; and the GLC Manifesto reflected this established 'Left Programme', but at the level of London. So the GLC was to have a public investment bank, it was to promote enterprise planning and co-operatives, and develop plans and strategies for the London economy as a whole. Our little unit was established with the task of setting up and running all this.

This was at a time when many companies in London were being undermined because of Thatcher's policy on the exchange rate. London had nearly half a million unemployed. All the way up the Lea Valley companies were falling like ninepins. On our very first day I remember being called into his office by the Industry and Employment chair, who told us about the owner of a furniture factory who had come in to see him and was desperate. Could we save them? This man was just the first of many others. Once our new bank (the Greater London Enterprise Board) was established, our idea was to rescue such companies from the receiver, amalgamate them, and do all the things we were expected to do under the left Fordist model.

One of the companies we rescued was a firm in East London that made work-wear, and was one of the last surviving clothing firms of any significance in the area. We took it over, installed new machinery, appointed a new and well-qualified woman to run it, and introduced public ownership and workers planning. That was the recipe.

One day, a member of our unit who was chair of the Board of this municipal company rang me and said, 'Listen, the company is a bit short of markets, and I see that there's a GLC contract out for different kinds of work-wear. I'm going to really pare the price down so we get the work. Can you speak to the Supplies Department?'. Well, there are strict laws on municipal purchasing. But generally, in this kind of situation, if you come within two or three per cent of the lowest offer a Council can accept the tender on the basis of a variety of wider social and economic reasons. So I spoke to the head of the GLC supplies department about this, and when the tenders were in he rang me back. 'We've had thirty tenders', he said. 'Yours was number 3'. 'And the difference between our bid and the lowest?' 'Let me just have a look', he said. 'The best bid is 34% cheaper'. We thought this must be based on clothes made in China just being badged, but when we investigated we found out that the winning tender wasn't from China, it was from a firm in the UK called Alexandra Workwear in Glasgow. Alexandra Workwear used computer-aided design. They could embroider a little badge saying GLC Fire Brigade, or GLC Road Sweepers, at a negligible cost. They had a warehouse

in Bristol, produced just in time, and therefore had very low stocks. It was a better product at two thirds of the cost.

At the same time, another member of our unit, Michael Best, was meeting similar challenges in furniture. We'd amalgamated three big furniture factories, and yet were still up against major competitive pressure from Italy. So Michael went over to find out about Italian production. If our new London factory had about 2000 workers, we thought the Italian companies must have 10,000. Michael went first to Poggibonsi, a Tuscan town that was one of the centres of Italian furniture-making. He found that the largest firm had 45 workers, not 10,000. But there were 85 other furniture firms in the town, each specialised and interconnected, so that together they more than matched the size of our three factories.

In Italy, Michael met a Harvard researcher, Chuck Sabel, who was writing a book that came out soon afterwards called *The Second Industrial Divide*. The argument of the book was that what Sabel called 'flexible specialisation' - such as was happening in Poggibonzi - was the way forward for competitive manufacturing. Michael invited Sabel to come over to the GLC, and we spent two days with him at the bank, as he outlined a completely different model of production, one that we found difficult to take in. Evidently the Communist Party in government in Emilia Romagna were the promoters of this flexible, small-firm approach - which we had at first seen as a form of Thatcherism.

Chuck Sabel's book was transformative for us. It gave numerous examples of the success of this model, from food and engineering to airlines. Instead of pushing its products or services onto a mass market, it was flexible enough to respond to increasingly differentiated demand. Sabel helped us to re-read our own experience in London's industries, and see how the model he described was driving many of the old mass-production firms into the low-margin, 'commodity', sectors of the market.

The first piece I wrote on it was in 1985. It was called 'Benetton Britain' - because of course Benetton was one of the companies that had grown suddenly out of the small local Italian milieu of the Veneto to become a big operation. At that time it was emblematic of the changes.

THE ORIGINS OF POST-FORDISM

Jeremy So what was the key driver behind the shift into this new paradigm - was it the new technology? Or new types of competition? Was it broader social changes? Is that something you've got a view on?

Robin What is fascinating is that '68 - we'll use that as a shorthand - seemed to come 'independently': the new subjectivity just 'burst up'. How do we understand that? In part I see it as a reaction, or countermovement, to Fordism, both amongst manual workers and then amongst the 'cognitive workers' of various kinds; they were finding the very same structures that they

were resisting at work in many of the other institutions they experienced. This was reflected in the institutional critiques of writers like Marcuse, Illych, and Schumacher.

But there were also other changes happening at this time. And because information technology and information more generally is central to the story, we should go back to look at what was happening in production. In manufacturing the early movers were Toyota and its chief engineer Taiichi Ohno. Ohno was really the Henry Ford of this new phase. He and his colleagues had gone to look at an American supermarket, and saw the potential of applying the same retailing principles to cars. With hindsight, we can see that it was supermarkets who were the pioneers of the new systems.

The reason for this is that retailers had to handle a great variety of goods (even in the smaller shops), many of them perishable. Their goods came from a multitude of suppliers and were sold to a multitude of customers, each with their own individualised shopping basket. Faced with such complexity, the supermarkets had a great need for information. The first commercial computer developed in this country, the LEO, was produced in 1951 by J. Lyons & Co in order to monitor its Swiss rolls. Lyons spun off the computer operation into a separate company in 1954, and finally sold it to ICL (International Computers Limited) in 1962.

In the UK retail trade, the Co-op had been easily the most dominant retailer in the later nineteenth and first half of the twentieth centuries. The first supermarket was introduced by the Co-op in London during the second world war, and that supermarket model of 'self-help' by the customer had spread. Sainsbury's had started in 1867 and Tesco in the 1920s. But their growth had been limited because they couldn't run themselves on a national level in the same way as the Coop, which was a decentralised distributed system whose parts were linked in all sorts of ways: it was actually rather modern, without the modern technology.

In the 1950s, however, the Coop was slow to adopt the emergent information systems, whereas Sainsbury's and Tesco began to gradually expand their range. And this was when what are now the two largest retailers in the world started. Walmart was established in 1962, and the French Carrefour in 1963. They rose on the back of these new systems. Once they had good information technology, they went worldwide, and today each of them has over 10,000 branches, and handles over 100,000 different products. This is an extraordinarily complex system, with all these suppliers and logistics, and its organisation is a remarkable technical feat, one that is impossible to think of without IT.

So, as you can imagine, when Ohno saw this new system he thought 'now, how can we do it for cars?'. He spent the next thirty years studying in detail how the flow of products to and through a supermarket could be applied to the flow of materials to and through a car factory. And in so doing he upended Taylorism, because he realised that you couldn't have all of the information

centralised and concentrated in management. He saw that you had to have the frontline workers analysing and adjusting the things they knew about. The moment you go into one of these Japanese factories, you can see (and not just in Toyota) real-time information displayed everywhere. It is often handwritten - for example, the number of parts done in an hour - it isn't computerised at all at the beginning, because they want to start with the human: Toyota never jumped first to technology.

For Toyota, one of the big statistics that limited the potential extent of flexible production was change-over times, particularly for presses. Ford's first changeover, in 1927, took nine months and he nearly went bust, because he had to manufacture a whole new bank of bespoke machines. For the presses that shaped the car bodies in the Ford factory, the changeover time was about 14 hours as late as the 1980s. Toyota, when I visited them in Japan in the late 1980s, had got it down to 4 minutes. That is a revolution. They did it by focused concentration by teams of workers, figuring out what the hold-ups were at different points in the process.

A fascinating footnote is this: the Formula One racing car company McLaren has set up a number of subsidiaries, and a consulting company, that take their methods to other industries. So, for example, when a toothpaste manufacturer was having trouble, McLaren consultants analysed it in exactly the same way as they would their racing car; and they found that the toothpaste could be produced at much less cost with a greater flow in production. It's all about *flow*, from single product to multiproduct flow. That's the heart of it. Why Formula One? Because it's the most intense form of competition - racing every two weeks in the season, with innovation between each race: this is where 'just in time' and 'flow' becomes the key aspect of the whole thing. McLaren is now the third largest conglomerate in the UK. It is fascinating to see the principles that the supermarkets and Ohno developed spreading into every pore of capitalist production.

Jeremy So it seems from all this that there's a kind of convergence historically, between, on the one hand, the revolt against Fordist discipline and, on the other hand, the superseding of some of the limits of Fordist production in consumer retail and industrial production; and there's also a history of a network of organisations which you've traced back through the history of the Co-ops. There's a convergence of these different processes in that they are all technologically accelerated by the IT revolution.

So, one of the things that's really striking now, for me at least, is that when I read 'Benetton Britain', probably just a few years after you wrote it, it was still very contentious across the wider left to say that this was the shape of the future, that this was how the entire capitalist economy was going to be restructured and that the culture was going to be restructured along with it. So were you conscious of this at the time, that what you were saying was controversial?

Robin Well what was interesting about the GLC was that our unit, which expanded because of its role as a kind of 'wedge' within traditional bureaucracy, did contain just about every group there was on the left, many of whom had strong political identities. But one of the things that working in the unit brought home to me was that, whereas if you're an intellectual, you distinguish yourself by difference - by developing a position in argument that forms your intellectual identity - the moment you get into production, you've got to cooperate. You can discuss strategy and what you're going to produce but the demands of practice means you have to collaborate. In the unit everyone had their own tasks, but on the whole the Communist Party people and the members of a whole range of Trotskyist groups lived and let live. Everyone was focused on their projects and trying to understand the nature of territory we found ourselves working in. My writing was merely a contribution towards this process of reflection, and by and large was received as such.

One thing that became clear from that period was that you cannot mix Fordism with democracy. It seems so obvious now, but it wasn't to us then. There were so many attempts on the left to democratise Fordist institutions. It was the project of the Institute for Workers Control, and of many in the co-operative movement. But in a large Taylorised factory how can you have substantive democracy, when the whole project depends on stripping workers of any autonomy? Democracy in a Ford factory was about resisting on the shop floor the management's attempt to treat manual workers as cogs in a machine. It was not about developing enterprise plans while the front-line war of production was raging. Similarly with co-ops. Once you've got a big co-op which has become Fordist in its structure and its production processes, the attempt to have democracy within it is delusory. Democracy has to start with the labour process, whether that is an assembly line or the running of a shop.

So, in terms of attacks, I was aware that people were producing critiques, but for me it felt as if we were trying to create something new in the space that was opened up by these systemic and technological changes.

Jeremy So to what extent were you influenced by the wider movement for workers' self-management and the experience of self-management in Yugoslavia - was that one of your reference points?

Robin Oh yes. One of the unit's original members was Mike Cooley, formerly a designer and chair of the technical union TASS at Lucas Aerospace. Mike had led the celebrated campaign to resist closures and instead convert Lucas's military plants to the production of 'socially useful products'. After a long struggle, the Lucas management managed to dismiss him for spending too much time on union business and 'concerns of society as a whole', but the Lucas Plan produced at the time by the workers, and the campaign around it, had great influence. Hilary Wainwright, another of the original unit members, had worked with the Lucas stewards on the Lucas plan, and later

with the Vickers shop stewards on Tyneside to produce a similar plan. I had written about the Yugoslav experience for the Institute for Workers Control as part of the campaign around the occupation of Upper Clyde Shipbuilders, in the early 1970s. This wider movement underpinned the GLC Manifesto commitment for workers' self-management and enterprise plans. Hilary's section in the GLC was called the Popular Planning Unit, and many of its eventual 35 members had been shop stewards and involved in various kinds of struggles for economic democracy.

You will notice that the industries at the centre of the workers control movement - such as the shipyards and military factories - were not Fordist. Indeed, the problems at Upper Clyde were the result of Japan having applied Fordist principles to shipbuilding while the UK industry remained centred around bespoke ships produced by highly skilled workers. Workers' self-management was a quite different matter in these industries. Conditions there differed vastly from those in the mass production factories that had been the basis for the growth in London since the 1930s.

Jeremy How did the changes you were experiencing get reflected in your strategy?

Robin The GLC Manifesto proposed that the new unit should first produce an Industrial Strategy, and then put it into practice. Our suggestion, once we started up, was that we would first engage with the crisis facing London's economy, and then develop a set of reflective papers as we went along, gathering them together as a strategy informed by experience and not just by data and documents. As a result, the London Industrial Strategy we produced in 1985 covered not only some of the productive changes in manufacturing I have mentioned, but also industries that we could see were to play a major role in the next phase of London's economic growth, such as the information and knowledge sector, health, and many branches of what have come to be known as the cultural industries. These emerging sectors reflected many of the features of post-Fordist production.

A number of issues in these sectors provoked significant internal debate within the unit - for example whether to focus on pressurising the BBC to pay more attention to black music and musicians, or instead on supporting the multiple initiatives of small producers. Or whether to save NHS hospitals under threat from Thatcher, as against supporting numerous community health initiatives that addressed particular conditions. When I now re-read the 1985 London Industrial Strategy, what is most striking is the central role that labour had in our thinking. We called the whole model 'Restructuring for Labour'. It was reflective of the 1970s, and the influence of the strong economic productionism of that period.

One interesting case that signalled the turn that took place after 1985 was in the food industry. Our initial focus had largely been on saving food-

producing factories. When we interviewed for a new unit member in this sector, one of the applicants clearly came from the countryside. He didn't quite have corn in his hair, but that was the impression he gave. He turned out to have been a farmer who had been living in Spain. His name was Robin Jenkins and he had written a book on his struggles there over land. He started the interview by saying 'I think you've got it all wrong. It's not 'labour', it's consumers who will force change'. And he outlined a Ricardian position about the way the earth was being exhausted ... This was not at all in tune with the approach we had been taking, but his commitment and vitality meant that we immediately appointed him. As soon as he joined the unit he began to organise, around school meals, and the grassroots food initiatives that were emerging. And, thanks to him, we managed to set up the London Food Commission in 1985, before the guillotine came down (when the GLC was abolished by Thatcher's government in 1986). Robin appointed Tim Lang, a former hill farmer, to run it. Within three or four years the Commission's work had led to at least four major food scares and the resignation of a cabinet minister, and had changed the tempo of the whole food movement. Sainsbury's and other supermarkets were some of the first to respond to this, and Tim became something of a food celebrity.

I give you this as an example of a change from a focus on labour as the only subject of social processes, and as the only set of interests the left wanted to defend, towards a realisation that radical politics had to have a wider compass - and a recognition as legitimate and important of the various social movements in a whole number of fields which were not worker-based.

At the same time, things like the IWC were losing ground, as Thatcher's economic policies were decimating the unions. Some people characterise the change as a re-orientation from production to consumption, but I think this is too narrow and reflects only one side of the change. In production what we were seeing was a shift from 'Fordist push-through' to 'post-Fordist pull-through' centred around the user. And the more you could disaggregate the user, identify them, first by forecasting their behaviours and then in real-time (and all of the technological innovations were helping with this), the closer you could get to genuine mass-customisation. That was only the first change, but it underlay what in those days we called 'post-Fordism'.

POST-FORDIST PESSIMISM AND NEO-FORDIST HOPES

Jeremy That's really useful, because I think that speaks to the next thing I wanted to ask you about, which is the shift from optimism to pessimism in the understanding of the implications of these changes. The very early literature on post-Fordism seems to be from a left perspective that is very optimistic about what this all might mean for workers insofar as it might seem to resonate with the objectives of worker self-management etc. On the other hand, the situation more recently, since the 1990s, has been one in which a

much more pessimistic account prevails of what this means for the workforce. The consequences are often seen as quite negative, ultimately resulting in precarisation. In fact those two different aspects seem to be connected in some way insofar as the shift towards the empowerment of people as consumers matches up with a situation in which there is a difficulty in workers being able to exercise any degree of agency *qua* workers.

Robin Well, I'm not sure if this entirely answers the question, but one of the things that was being enabled by this new technology was the unbundling of the corporation with the growth of subcontracting. The state's version was privatisation, but, as we know, it had also been happening in firms. I'd become aware of this when I was working at the Institute of Development Studies at Sussex University, because in the post-colonial period the big multinationals had begun to do this in primary production. It was their way of somehow finding a new mode of control: moving from the disciplinary period in which populations were directly governed to establishing control through contracts and their domination of technology and markets. Maureen Mackintosh, one of our colleagues at the GLC, had undertaken detailed studies in Senegal of this movement to nominally independent smallholders in the late 1960s early 1970s. For the firms it was a way of resisting the danger of unionisation in the period after colonial independence.

From the 1980s there was a similar pressure for corporations to 'slim down', and for the Fordist operations to move to the periphery. There had always been 'peripheral Fordism' - the kind of 'fag-ends' of Fordism that had marked much of the import substitution industrialisation of post-war Latin America and parts of Asia. But these formerly peripheral locations then became, contrary to our expectations, the great centres of global Fordism. In the 1980s and 1990s, once production processes could be codified, they could be moved East and South - both in manufacturing and then services, leaving stripped-down corporations with their strategic, research, design and financial functions in the core countries.

So it wasn't that Fordism had disappeared, but it had been removed as the dominant paradigm in the North. It was exported under various headings as 'development prospects' for the South, creating a new proletariat, with all that that implies.

I don't know if you can really talk about 'optimism' in these circumstances, but we can say that there's no way the Chinese will be able resist the rise of a labour movement, when they have as many as 40,000 workers in a single factory.

THE ATTENTION ECONOMY AND THE DEATH OF THE BRAND

What does this mean for the workers who remain in the old 'centre'? Well, when you have the proliferation of products and the transformation of processes that results from the IT revolution, there is intense pressure to innovate. That's

why all management schools (and national industrial strategies) put so much emphasis on innovation. You can no longer freeze products and processes as Henry Ford had to do after producing the Model T in 1908.

What we have to ask is: 'what kind of innovation?' Some of that innovation is in processes and products; but a great deal is in the cultural sphere, and in what we might call the 'attention economy'. In many consumer industries, marketing in its widest sense has become the majority of company spending.

It was always significant in the Fordist era, but at that time it was 'mass' culture, a kind of battle for mass attention in which the brand was central. Now I am not so sure. I wonder whether the brand is not a mark of Fordism, and whether we're moving beyond the traditional brand, which is after all merely a summary form of information. It's very condensed. It's information-thin and association-heavy. Now the internet is blowing open the mass brand and putting it on the defensive. A fault in a Toyota, or a food poisoning from a Master Chef, becomes news worldwide. MacDonaldis takes the offensive and sues, but MacLibel becomes the costliest marketing mistake in mass brand history.

The proliferation of products, together with the internet, means that there is so much more granular information that consumers can take in and choose from. It can be discussed and ranked. As with physical products, the consumer becomes part of the production process of marketing. They are canvassed, asked for feedback, and for ideas. Firms target opinion makers, and 'lead' consumers. They pursue strategies of 'viral marketing'. The company brands start to fragment. Rather than disappear, we see each product becoming its own brand, above all new products promoted and targeted through the internet. Of the estimated \$600 billion global spend on advertising in 2015 (itself only a part of total marketing expenditure), one third will shortly be digital, and one quarter will be focused on mobile phones alone. This is a new world of post-Fordist consumer culture.

The result is an uninterrupted growth in the numbers of people working as cultural producers - market researchers, designers, writers, film makers, ethnographers, advertisers, musicians and webmakers. Alongside them are the systems managers - such as financiers, accountants, and lawyers - and the researchers and developers. Some of this growing workforce of immaterial labour is employed directly by the large corporations. But many are independent and become brands in themselves. As one web designer put it, every font, every statement, every CV, a freelancer puts on their website has to be seen as part of an integrated personal brand.

Guy Standing sees these freelancers as an important part of a growing 'precariat'. I take the same approach as André Gorz. Cognitive labour is now central to all of these immaterial processes; and the fact that one condition of effective production is now cognitive labour produces various openings and paradoxes. The year I spent at the Design Council, working with designers, suggested a tension at the heart of this form of work. In one sense the means

of production have been internalised within labour and cannot be entirely appropriated *from* labour. Capital is always trying to codify this knowledge, but there are things that cannot be codified. In an era of continuous innovation, there are limits to automating the immaterial in order to deskill cognitive labour. Capital has to readjust to this and find a new accommodation with its cognitive labour.

Young designers will look at a project or company and say to themselves, 'I'd like to go and work with them. They're an interesting group. I will learn there and make interesting contacts. I will accumulate knowledge and experience within myself which I can then use in various ways and return to the market'. Employers have to take this on board. They can't just offer the Taylorist deal of higher pay for less skilled work. So you get firms like Innocent who make a work-life pitch. When I passed the Innocent head office the other day, you can see the workers there playing table tennis and sitting on sofas - a kind of Google lifestyle - and this is Innocent's attempt to create a place that is more like home than a workplace. I think that is a decisive shift.

Jeremy I think that formulation you offered there is very useful, about the problem posed for capital by the fact that some of what it needs remains, as you say, 'inside' labour. For me the implication is partly that what has to be developed under these conditions of cognitive and communicative capitalism is a set of potentialities which capitalism requires labour to develop, but which can't be fully expropriated to the extent that they could under the industrial model. But capital is always looking for ways to expropriate it fully.

Andrew I think that's one of the issues about languages. Language is a really big area for people developing computer software - how to extract patterns of information from natural language: you see it in healthcare for example. I think that chimes very much with what you're saying, about these forms of tacit knowledge that workers possess, which are something that is shared through language. I wonder if there aren't processes of codification and extraction potentially within software that are really trying to address that problem.

Jeremy This is the argument about automation isn't it? - that we're about to see this massive wave of automation of various tasks, like accountancy, low level legal work etc.

Andrew Well a lot of that stuff is already outsourced.

Robin I think this whole area is one of the key practices for capital now. It is a central part of the infrastructure of business: the means of control. Information systems are central here. If these can be codified and privatised, it is possible to set parameters for labour throughout the system. You can see their importance in the developments in education, with the growth of

private chains that are taking over school after school. The school becomes merely a branch office for those controlling the back-office systems. The same is happening in social care. The progressive alternatives have focused on the 'front office' part of these systems, not on the back office and systemic control elements.

Having said that, not all can be codified. In many industries there is a constant interplay between creativity and codification. I recently read a study of a Danish firm called Unimerco. It was a machine tools company, the kind that has been undercut by China and the Far East, since producers there can now copy any machine tool automatically and make it more cheaply. Faced with this challenge, Unimerco converted themselves from machine production to servicing. They found that their advantage was that they were close to their manufacturing customers, they know them, they know the kind of equipment that they want, they are on hand to sort out glitches, they can anticipate along with the customer what the next move in the industry will be. Unimerco's role became that of being on top of the global development in machine tools. This is an informational function. They went to the world trade fairs, brought back the intelligence and said to customers: 'This is where it's happening; we could develop it like this; we needn't do it ourselves, we could actually get the Chinese version and then customize it for you'. What they recognised explicitly is that they were, at their core, a firm of cognitive labour, in which there is a constant process of development. They always looked to see if knowledge could be codified, yet knew that you had to have tacit knowledge to apply and customise the codification. That tacit knowledge might itself be codified. but that too needs further tacit knowledge. and so on. It was a constant movement of codification plus the tacit, never the eradication of the tacit. The moment you lose the tacit, living labour, the codification atrophies.

Jeremy So are there implications of that for forms of social and political organisation?

Robin Yes. Unimerco issued shares to workers in the firm. I visited a similar company, an Italian workers co-op, in ceramic machinery. They too had become a service organisation - the Chinese couldn't do it because they couldn't speak or relate to the customer. We were taken into the 'boardroom' where the members of the co-op would go, every month, to hear from the management whom the workers had appointed, how it was going. I asked them 'How many members are in the co-op?'. They replied 'we've got 175 members out of about 1,200 in the workforce'. The members have to be between 25 and 40 years old. They buy their way in, and then can cash in when they leave. When I asked 'Are these skilled workers?' the reply was that they were. And this made me realise that the co-operative structure was a way of locking the skilled worker and their knowledge into the firm. It allowed

the co-op to develop a sustained body of skilled and experienced workers, which had made it the leading ceramic machine maker in Europe. 'What about management, are they members?' I asked. They answered without pausing: 'Oh no, our current managing director's 45 and so he can't be a member, and anyway sometimes we like to sack our MDs - we sacked the last one.'

I found a similar thing during a time with the Welsh Co-operative Commission last year. In Wales one of the places where there had been an expansion of co-ops was in instrument companies, high tech ones, which mostly employed cognitive labour. We met with four of these new co-ops. Each had been started as a private venture, but when it had come to the founder's retirement the children hadn't wanted to take over, and had said 'let the workers buy you out and we'll take the money'. These firms then turned into worker co-ops. The people running them were peers. They sounded more like people in university departments in the old days, except the professors would have been elected. That, I think, is one way in which this shift towards immaterial labour will be reflected.

Jeremy Do you mean a generic rise in co-ops, or in different forms of management?

Robin Not necessarily strict co-ops. It can be different forms of mutuality. Workers like this want some engagement, some involvement, some stake in the thing, which is reflected in start-up companies, when people are given an equity stake. So it needn't be a cooperative stake, but it is a sense of stake.

THE ERA OF THE PLATFORMS: POST-POST-FORDISM

Jeremy And in terms of periodisation, are we still in the post-Fordist moment?

Robin No, we've gone to post-post-Fordism.

Jeremy And what's the difference between post-Fordism and post-post-Fordism?

Robin Well post-Fordism was about the production process, and its transformation: the sudden switch in gravity and magnetism, from the push to the pull; and the various subjective changes that went with that. The new subjectivity and the new post-Fordist production started dancing together, each finding interesting aspects of the other and sometimes crossing over.

So we saw the emergence of the consumer as producer as a developing feature of post-Fordism. There has been a growth in the DIY economy. With some products the parts are assembled by the consumer according to the design of the manufacturer (as with flat pack furniture or with standard

Lego); or they are assembled by the manufacturer according to the choice of the consumer (as with Dell computers;) or assembled by the 'producer' according to the design of the producer (as with advanced versions of Lego). Toyota even applied these self-design principles to housing.

What has now grown out of this is the era of platforms. The decisive date was 2003. That was the year when Silicon Valley realised that they had to move from content to platforms. Just as traditional money has no concern with the content of the commodities whose exchange it enables, so platforms present themselves as innocent of content. They enable others to share content (Google) or exchange content (EBay and Amazon), or simply communicate (Facebook and Linked In).

As it has turned out the new platforms are far from innocent of content, but they relate to content in a different way. They may not have to produce content. That can be delegated to others, like a modern version of the putting out system. But they have great interest in the substance of the content and the identity of those who are using the platform. Because it is that kind of information which for many of them is their main source of revenue. EBay and Amazon may take a cut from the exchanges they enable. But Google and Facebook make their money as intermediaries for the advertising industry. They have become core suppliers and hosts to the attention economy.

In this they are similar to many modern forms of money. Credit cards act not only as mediums of exchange and sources of credit, but also as sources of laser information: about who is exchanging and what is exchanged. It is as if all our coins no longer simply carry the queen's head on them: they also have a microchip within them, one that can watch our every transaction.

That is the capacity of a platform, and, just as the informational role of money has led to the proliferation of currencies (in such forms as storecards, loyalty cards and air-miles), each of which is an enclosure of information for the use of competition in the attention economy, so platforms too are specialised, but they hold within them the hunger to extend. It is no accident that Amazon has moved into banking functions offering national and international payments systems, and in 2013 introduced its own currency, Amazon Coins.

For post-post Fordist capital, it is less the control of bounded systems that is important, but the control of platforms and their information in distributed populations.

What are the implications of this new phase? What has it done to social relations, to forms of exploitation and the accumulation of capital, and to the possibilities of resistance to and autonomy from capital? Michel Bauwens, an inspiring lead theorist and promotor of the new commons movement, frames the issue in terms of value. He sees users of the platforms as creators of value, part of which is appropriated by the owners of the platforms. For this reason he refers to Google and Facebook as 'netarchical capital'.

My feeling, however, is that it is not about value in a Marxist sense, nor

about the exploitation of labour. Platforms are a new kind of economy, in which you can talk about labour, but it isn't labour in the sense that we once conceived it, nor is the relationship between user and platform that of capital and labour. The time I spend in looking something up on Google is not creating value from which Google takes a cut. Google makes its money, like a bank or a merchant, from taking a slice out of the value embodied in the commodities or services which I might buy as a result of seeing the sales pitches from companies in the 'real economy'.

Michel Bauwens proposes another category of appropriating capital, which he calls 'anarcho-capitalists', as exemplified in a currency like Bitcoin or a platform like Kickstarter. The latter kind of platforms are based on a quasi 'dating agency' model - matching one person to another, or one bit of information or bit of finance to another. Uber works on the basis that it tells the mobile user 'I've got a cab - You're there - I'll pick you up'. Sites such as Airbnb and Couchsurfing allow people to operate and synchronise with each other. They encourage civil collaboration. And these different types of relationship are both being enabled and at the same time being used for profit by those controlling the platforms.

If it is not direct exploitation, what then is going on? One lens through which we could view this is that of the socialisation of labour, a concept that was central to Marx's account of capitalist development, and in particular that to his theories of technology, and the concentration and centralisation of capital. He traces the expansion of this direct socialisation from simple co-operation to manufacture through to machinofacture; and we could add systemofacture.

Contemporary capitalism has in many ways tried to reverse the movement to direct socialisation by fragmenting labour. Capital may not have read Marx but it recognises his point only too well. So it has changed strategy, through sub-contracting, automation, partnerships, or moving production to places where it will take time for the direct socialisation of labour to lead to industrial and political resistance.

Jeremy Isn't that the key thing? It seems to me that on one level the socialisation hasn't stopped, it's even intensified, but the key problem for them is to find modes of allowing that socialisation to continue and intensify without it actually having political ramifications.

Robin It may help if we recast Marx's discussion in terms of the socialisation of information. Labour no longer has to be in a single factory or firm. It can talk together and organise across spatial and organisational boundaries. The internet has greatly extended the space and capacity for labour's responses to capital

It also opens up the potential for collaboration. The key word is open: open source, open knowledge, open learning, open data, open innovation, open production. The internet has enabled a platform like Wikipedia, or

joint project like Linux, at the same time as it has given birth to Google.

This leads straight into the issue of the 'commons', because the socialisation of information, and its sharing, creates the potential for an autonomous collective intelligence on a planetary scale. In this new economy of the commons, the form of license becomes a key area of contest, about who owns what, who has access to the collectively produced knowledge and so on.

This in turn leads to a third form of socialisation, which we might call 'civil socialization'. I would like to distinguish it from the socialisation of information, for it is about the capacity of us as civil beings to socialise directly, to act directly, to discuss directly, to produce directly: to produce not only ideas but also, say, an open-sourced car, by collaborating. Bauwens has established a core platform for this new collaboration, the P2P Foundation. The extent of peer to peer collaboration is already remarkable. It is bursting through the bounds of the old form of socialised civility - which tended to be bound by space - yet is still able to link this new 'collaboration without boundaries' back to specific places.

We talk about optimism, but it's not a question of pessimism and optimism. It is a question of where are the possibilities, and, through understanding the contours and modes of operation of the new economy, whether or not we can collectively organise ourselves as so many communities of interest, including labour, in other words as directly socialised citizens.

I'd like to draw a key distinction between the current phase and what has gone before. As Marx pointed out, time economy was at the core of capital. Saving time has been the driver of technological innovation and capital accumulation. Speed has now reached the point that US stockbrokers site their offices near servers rather than Wall Street in order to gain a second or two advantage over their trader competitors. Time is measured in femtoseconds or billionths of a second.

Platforms are about space rather than time. Geographically they reduce space, but their aim is to expand in the social space of those using their platforms. They act as socialisers of this social space, and although netarchical capital then connects this economy of social space back into the conventional commodity economy of time, the possibilities of an alternative 'social space' centred round platforms on the global scale is quite new. Given the many gathering material planetary constraints on the ungoverned growth of capital, I think we can see emerging a new economy of space that potentially challenges the prevailing current industrial economy of time.

Jeremy Can I ask you both - where do Snowden's revelations relate to this, or what do they tell us about the state's response to this? I will start off with a suggestion which you can respond to.

Partly I've been thinking about the Deleuze control essay - and it's so minimal and suggestive that everyone has their own version of it - but the

version of it I use when I teach is that there are several key aspects. The argument is that, compared to disciplinary society, which we could say matches up almost identically to Fordism, system management is inherently less concerned with content, less concerned with the ideas in people's heads, less concerned with norms. It's more concerned with mapping and managing relationships and with anticipating behaviours, and so the Snowden thing always seems to me to be a really interesting illustration of this, in that, compared to the way the state was operating throughout the Cold War, they don't really care that much about the content of what people are saying. They're not trying to map that too much, and they're not trying to force what people think into particular patterns. What they're trying to do is make sure they know absolutely everything about who's talking to whom. Rather than knowing about the content of the messages, they're bothered about the metadata, and they're bothered about trying to anticipate patterns of behaviour. So I think that seems to say something about the way the state, or institutions of government - whether that's corporate government or state government - are increasingly concerned with this question of relationships, and mapping, understanding and pre-empting relationships. I was thinking when you were talking about that 'dating' model, that, essentially, the function of the system or platform is to generate links, to generate connections, to generate relationships, to anticipate likely relationships between different units of information ... So there's something there, and I suppose the thing I'm wondering about is the extent to which - just as the disciplinary state at one point in its history becomes the mechanism by which capital is itself disciplined, arguably, during the high years of Fordist social democracy - it might be necessary to think, to some extent, about institutions of government in the twenty-first century, even progressive ones: that they are going to have to operate according to similar mechanisms; that they're also going to have to be about the facilitation and anticipation of relationships.

Andrew I wonder whether mapping is really the right term. It seems to me it's more about modelling relationships - that would provide the conceptual bridge between something like the Snowden revelations and other areas in which IT is a big deal, such as the whole 'big data' thing. The excitement about 'big data' is really an excitement about this possibility of perpetually generating models for how relationships are taking place and then using that information: in recommending things, etc, etc. So it's not really about mapping, it's more about modelling. And that would tie in with all this stuff you get around behavioural economics, nudging people, pushing people in certain directions: and, yes, the precise details, or the precise content, are unimportant really.

Jeremy I'm really struck by the idea that it's not about content, it's about the platform ... I mean that arguably sums up the nature of the shift from

'disciplinary' to 'control' society, doesn't it?

Andrew Isn't there an argument that if you can control the infrastructure, if you can bring people into a platform, then you can shape the platform around them once they're in, which is what tends to happen. For example, you get somebody into Facebook, then you start changing the platform around them, and so you shape what they can do, you run little experiments on how you think people should be relating to each other and so on. So controlling the infrastructure is the key thing there.

Jeremy And also, crucially, you have to allow them a latitude, because what you really want them to do is to generate data for you, that is useful, that represents value or potential in some way.

Andrew And I think also the thing about platforms is that you move from a situation where people are buying a phone, to one where it isn't actually a phone: it's a very powerful computer. But you don't programme it: you buy applications and then you're tied in to Apple's infrastructure, and then there's a closing down of possibility there I think, at the same time as the infrastructure affords all sorts of possibilities. That's a Jonathan Zittrain argument about 'generativity', and the way in which tech corporations are responding to the possibilities that people are exploiting with file sharing and so on, which is to make it difficult by bringing them into enclosed technological spaces. So I suppose there's an issue there around the interest in infrastructure and the interest in the platform: that the platform is easier to control in some respects.

Robin I think the idea of enclosure is a useful one here: the battle for enclosure - that's where I think the commons discussion has taken us. I'd like to answer your Snowden question by distinguishing the private economy from the state, and the state's concern for some kind of discipline/control.

As regards the private sphere: my starting point is the one I mentioned earlier about the significance of the economy, at a time when we have so many things, too many things, and so much on offer. When there is such a ridiculous amount of choice, and a *huge* quantity of information about those choices, quite apart from all the other aspects of daily life, the question for any particular corporation is, how do I get people to pay attention to my product.

To return to Google. Google is about producing not intermediate goods but intermediate information for those who are engaged in trying to get attention. It is not itself concerned with trying to get attention, nor with the objects it is dealing with. It is concerned with its clients and the data it gathers. The image I have of it is of the farmer harvesting her or his crop - they are concerned with fertility and the generation of more and more

granular information, so that they have more to sell in the form of charging for advertising.

I don't know if you've seen Shoshana Zuboff's work: her current work is on what she calls 'surveillance capitalism'. She thinks we are at a new stage, because firms like Google and Facebook are in the business of creating a twenty-first century version of the panopticon. She gives the example of Google's electric car project. When I first read about this I thought 'well, they've got so much money, they're putting it into green projects, that seems like a good idea'. Her reading of it is that what they want to do is to track all our movements, where we go, with how many people, how fast we drive, and so on. Their over-riding interest is to get into every aspect of our lives - it could be via Google glasses, or wearable clothes, or the beds we sleep in, it could be ... anything. They want to generate data about *individuals* - it's more than just relationships. For them the data needs to be at the cellular level - because it can then be assembled and sold and resold in different ways and packages. In this sense they have an interest in individual content to the extent that it can be 'commoditisable' or valorised. On the other hand, I think you're right to say that their interest in content is in other senses neutral, and that what they are concerned with is patterns, and the sale of wide ranges of data to those who wish to use it to shape behaviour.

It is an extraordinary project, and it means that we are entering into a further form of alienation. For Marx, in a market society, social relations appear in the form of commodities, which represent so much alienated labour. In this new era, the knowledge we have about ourselves, how we live our daily lives, where we go, what we read and write, even what we say, is appropriated by corporations like Google and returns to us in the form of commodity promotion.

On the question of who will take over, in the great battle of the Titans, my sense is that it will be Google rather than Apple who wins out. The key cards are possibly in their hand.

I think you're also both right to say that the state has an interest in patterns, and the shaping of behaviour, in this case for the sake of social steering and control rather than the promotion of particular commodities. One of the features of the neoliberal era is a shift from direct regulation to the use of market signals as policy instruments (in relation to the environment for example). But, as Andy suggests, the nudging can take other forms, such as the state's own entry into the attention economy, through publicity campaigns and what is often called 'public education'. What this approach shares with the market version is the idea of the individual as the free agent, responsible for their own decisions and actions.

On the other hand the state does in some fields have a direct interest in content - for example, whoever uses a particular word or visits a particular place or website can then be identified and brought within the traditional physical forms of state control. Snowden's revelations showed the extent

to which the major internet companies have been drawn into the state's interest in control. The most celebrated is the PRISM programme, which required top internet companies to hand over information about suspected external threats. Further disclosures have revealed how the overlap of interests between the US state and the companies goes much wider, with formal co-operation agreements having been made between the NSA and the internet corporations, including one with Google in 2010. The extent of the imbrication between the corporations and the state is the basis of Shoshana Zuboff's argument about the new phase of 'surveillance capitalism'.

I recently saw a piece in the Guardian about 'Smart Cities' - and I would previously have thought this was a positive idea. But in the light of Shoshana Zuboff's work, I could see that its implications went far beyond the positives. By assembling together data not just from platforms, but the growing internet of things, a 'Smart City' could match Google and Facebook in creating a modern panopticon. The article discussed the ways in which such a system could be controlled in more democratic ways, for example through a kind of social contract, but the effectiveness of that control could all be down to the way it is developed and who controls the information.

Jeremy Can you say something more about the arguments in your 2010 paper 'Cooperation in the age of Google'?²

2. <http://www.uk.coop/resources/co-operation-age-google>.

Robin I was asked to offer some perspectives for the co-operative movement in the coming decade. The co-operative economy in this country had been inspired by the 1844 Rochdale Pioneers, and the working-class co-operative network that grew from it, to become by the 1880s one of the largest set of enterprises in the world. Many of the co-ops from the early period had had difficulty in keeping pace with scale-based Fordism, but over the past twenty years there has been a new wave of co-ops that have some of the features of the Italian industrial districts like the one in Poggibonsi. The question I looked at was what the future holds for the new and older strands of the UK's co-operative economy.

My starting point was the potential for more lateral and democratic forms of production and circulation as the result of the internet and growing civil socialization. The potential for co-operation is startling. If anyone says to me, 'co-ops are over', the response has to be 'What about Linux?'. Open source is a contemporary form of cooperation. With open source projects you don't need to set up a coop, because there's nothing bought or sold. But if you think that the majority of software in the world is now dependent on open source, co-operation has now reached a scale that William Morris could scarcely have dreamt of.

How does this translate into the material world of food and energy or expanding services like education, or health and social care? All these have the potential to develop as distributed post-post Fordist systems. Already

Germany's remarkable growth in renewable energy has been driven by local energy co-operatives (as was Denmark's wind industry). Similar patterns have emerged in social care (in Italy over 14,000 social co-ops involving families, care workers and volunteers have been established in the last twenty-five years). In Japan, food co-ops, based on box schemes, now involve 12 million households, organised around local cells of 6-12 households. These food co-ops have now diversified into health, social care and a myriad of worker co-ops.

In all these systems, and in similar ones in the wider social economy, platforms, grids and common services are crucial to the effectiveness and economy of the constituent parts. What marks them out is that the infrastructure and support services are directly controlled by the productive 'cells' they are there to service. So the first recommendation of my study was to move away from the pyramidal structures that marked many of the larger twentieth-century co-ops, and towards developing such platforms and common services for distributed co-operative systems.

Secondly, if co-ops are driven by wider social and environmental goals, what holds everyone together and ensures that democratic structures remain inclusive and constructive? This has been a problem for the co-op movement. As co-ops grow in size, you can see a common tendency: after initial enthusiasm and expansion, pyramids based on knowledge often develop, with power moving to technicians and managers. In Fordist co-operatives, the managers tend to be sucked in to the methods and ideologies of their corporate competition. The economies of system clash with the economies of cooperation. How to marry the two?

The distributed systems of German energy or Japanese food are one answer. Another is ideological. The Mondragon network of 220 worker co-ops (with 85,000 workers) has a Lego-like structure, with the individual co-ops encouraged to remain small and specialise, and spin off operations as they grow. But their distinguishing feature is their emphasis on education, or 'formacion' as they put it. Launched in 1956 from a training course, Mondragon now has a university serving its members, whose purpose is both technical and ideological, so that the values of co-operation are embodied in all its parts. Its founder, the priest Jose Arizmendierra, when asked why they place such importance on education in an economic project, replied 'No, no - this is an educational project with an economic component'.

Another post-post Fordist feature of the co-operative landscape is the appearance of co-operative platforms as a way of marrying autonomy and scale. The One-Click platform allows you to set up a co-op or other social venture in ten minutes, and then enables members to come in and out of discussions normally reserved for a Board according to each person's time and interest. What is fascinating about how it works in practice is that there's rarely a non-consensus decision. If there are differences those involved are encouraged to sort it out offline and return online to take formal decisions. Charles Armstrong, who developed One Click, describes it as 'emergent democracy'.

One way of looking at these developments is to focus on how knowledge and information are generated and shared. One of my arguments in 'Co-operation in the Age of Google' was that co-ops with social and environmental goals have an incentive to share their knowledge with other social organisations with similar goals. We can think of it as a potential co-operative commons of information. This is one element of the economics of co-operation, and it gives co-ops, like others in the social economy, a decisive advantage over private corporations,

I suggested a number of ways in which the movement as a whole could establish systems for the collection and sharing of their information and knowledge, as one part of a wider strategy for the British co-operative movement to embrace the emerging features of post-post Fordist production - distributed systems, platforms, formation, and open information.

I also raised the issue of developing a cooperative currency. As Amazon and Google have both recognised, currency is a great tool for socialisation. As with 'open source' collaboration and its socialisation of information and knowledge, so a co-operative currency is a way of directly connecting (that is 'socialising'), the different parts of a co-operative system.

Jeremy Is cryptocurrency a harbinger of this?

Robin I've been to Bitcoin meetings, and I know some progressive people who are involved. Almost all of them regard Bitcoin as prototype. For them, it's not the Bitcoin, it's the encryption and the block chain that are the important technologies. Already there are about fifty block-chain-based crypto currencies in circulation. There is a confidence in those meetings that these new forms of currency will undermine the key operational systems on which the major banks have based their monopoly. Again, there is the possibility of a progressive inflection of this monetary technology.

Jeremy Are these things that you think the government could play a positive role in facilitating?

Robin No, these directions in co-operative self-organisation have nothing to do with government.

Jeremy Is there anything you think government can do in this context to facilitate social progress, or democratisation?

Robin Well, a lot of what we are talking about can be applied to government itself, to make it more open, distributed and democratic. This would enable closer relations between the growing civil economy, including co-ops and the state. We might say that this would widen the scope of democracy from discursive to productive forms.

Jeremy I suppose what I'm wondering, just to conclude, is: are political orientations still important in how people are approaching this? One of the obvious challenges from any kind of progressive perspective is that many of the mechanisms you're describing are primarily being used to maximize the rate of exploitation in various contexts, and I would like to ask if you think it's important to retain anything like a class perspective on these issues?

Robin How do we define class? How do we define the battle lines, and its key points? I return first to the Gorzian propositions on immaterial labour. My experience of working with those in the 'post post Fordist' culture involved in social innovation, and with those involved in the commons movement, is that there is an emergent cognitive class (of which we are members). Their material basis is the knowledge and information which is now at the heart of the new economy. The talk is not yet about class but about control, power, where the key sites of power lie, and how they can be democratised. Among those I have worked with there is a widely shared view that successful innovation has got to be socially embedded. There's a kind of hostility to big capital but not small enterprise.

There is a gulf between the left and its analyses in class terms, and that of this widening post-post Fordist strata. I think they would be fascinated to hear a talk by you on class. They are quite eclectic, and there are things which I am sure would resonate. They wouldn't want to enclose themselves.

Jeremy There's actually been very little work done, I think, on the basic notion that there is a global historic hegemonic block, and it is based on venture capital and Silicon Valley: they are the people who are occupying, in classic Gramscian terms, the position of hegemony, in that they are the people determining the direction of travel. It seems to me that the key mechanism by which they're doing it is through the implementation of platforms. And, again, the status of content is really interesting here. One of the phenomena observed in recent years by critics who are interested in cultural content has been this sense of stasis, the sense that fashion and music haven't really changed in noticeable ways in the past twenty years, except very superficially, and my argument would be that it's the same twenty years during which you can say actually *this* particular group have consolidated themselves as a global hegemonic faction. And the fact that they are uninterested in content is kind of paradigmatic in some way.

For example you can consider the role of Apple with the music industry. The old music industry cared to some extent about content, it had an interest in homogenising tastes, but that itself also gave people something to kick against. Whereas Apple, you know they can make the same amount of profit per unit sale from someone who sells a hundred of their files, as from someone who sells a million, so they're completely indifferent to content. But their indifference to content somehow becomes culturally lucrative; and so musical

innovation just sort of stops. If you think about the whole era of the iPod: today music just sounds the same as it did when it started ...

But hardly anyone talks about this. There are lots of Marxist denunciations of Apple, but they don't get to considerations of culture.

Robin I don't know if you've read the earlier book by Shoshana Zuboff and James Maxmin, *The Support Economy?* Their central thesis is that the individual now has become the centrepiece of the economy. Like any producer, each person requires all sorts of systems, tools, knowledge, advice, etc, suited to their specific needs. They refer to this as a support economy to manage the complexity of information that exists.

This is a powerful idea ... and again you can illustrate it by thinking of Lego. The way I think of Lego, as opposed to Ford, is that Ford had purpose-made machinery, with standardised outputs, whereas Lego has standardised inputs, namely the bricks, to produce customised, outputs - and the central thing is you've got to trust the adviser. If you don't have the trust ... well, it's no good. So in health, for example, you can't just have an NHS adviser with a script, who is low down on the hierarchy, you have to have someone who is, as it were, your partner - who then scours the world and helps you make your decisions.

Jeremy Like a personal shopper.

Robin If you like, but more like a personal producer, who knows exactly the kind of thing that's necessary in order to do whatever it is. And as relational services become an ever greater part of the core economies - in education, health and social care - then the idea of a support economy, resting on democratically controlled platforms and collaborative relations, becomes a powerful alternative to that of post-post-Fordist capital. It provides a contrasting possibility to what you've said about Silicon Valley and all of these people being hegemonic. The 'social innovations' movement could be seen as seeking to use new technology to foster a socially oriented economy, even if it hasn't fully worked out the wider implications.

How do we see such a citizen oriented economy in terms of class, save as a contradiction between such an economy and the netarchical capital of Google and Facebook?

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