

## CHAPTER THIRTY-FOUR

Those who have some interest in the politics of populist unrest will have noticed something peculiar happening lately, with regards to where such grievances are being directed. Since socialism was established, such unrest has traditionally looked to the left of politics for meaningful change. This attitude is reflected in the names of the two major parties that have the only realistic chance of forming a UK government. On the one hand, you have the 'Conservatives', a name that suggests its major concern will be to keep things as they are; to stand against those insufferable radicals who would introduce chaos experimenting with alternatives.

If anything, the other main party has a name that's even more explicit in who it is supposed to represent. It is the 'Labour Party', the state's representation of the common, working family.

But while, throughout the 20th century, it was to the left of politics that the disenchanted looked for meaningful change, these days it seems to be the Right that has become the venue for populist anger. The most startling example of this would be the populist support for Donald Trump (b. 1943) one of the most hawkish capitalist conmen ever to have used his grubby money and influence to rise to the highest political office in the United States.

Why is this happening, and what does it have to do with the things we were discussing earlier? It may well be happening, in part, because of something that was quite a popular topic of conversation in the late sixties and early seventies, but since then went into a decline until nobody was talking about it much, anymore.

What am I talking about? Bureaucracy. One would have been hard-pressed to avoid thinking about bureaucracy and the administrative mindset in the late sixties and early seventies, because these were ubiquitous concepts in many forms of popular culture. Authors found bureaucratic meddling and red tape a prime source of inspiration, leading to the term 'Kafkaesque' to describe a genre of fiction that, like Franz Kafka's (1883-1924) 'The Trial', deals with bafflingly complex and opaque administrative structures and procedures. Film makers and playwrights found the bureaucratic mindset to be a rich source of satire. And many a serious academic was attracted to the topic, too, producing such works as "A General Theory of Bureaucracy" (that one was written by Elliot Jacques and published in 1976.) As David Graeber commented, "everyone seemed to find the foibles and absurdities of bureaucratic life and bureaucratic procedures were one of the defining features of modern existence, and as such, eminently worth discussing".

But, like I said, references to 'bureaucracy' reached a pinnacle in 1973, but after that such references went into a slow but inexorable decline. That is not to say, however, that bureaucracy and bureaucratic procedures themselves were slowly diminishing their impact. In fact, quite the opposite happened. To be a middle-class citizen of the late 20th/early 21st century is to spend increasing amounts of time wrestling with infuriating officials whose entire existence appears to be based around imposing arbitrary reasons why you cannot do this or that, or slogging through web interfaces straight out of a Kafkaesque nightmare. As for those below middle-class standards of living, for them ever more hours need to be

devoted to convincing administrative systems that they really do qualify for assistance from dwindling social services.

It is sometimes said of fish that the last thing they would notice would be the water they have swum in all their lives, because they are so accustomed to its ubiquitous presence that it no longer registers on their conscious experience. Perhaps we no longer have much interest in talking about bureaucracy because, like fish, we have become so used to its impact on our lives?

But, even if that's true, there is another reason why we don't really notice this bureaucratic ocean we are swimming in, and that is because critiques of bureaucracy now come mostly from the Right, only in a way that turns a blind eye to most forms of bureaucracy that exists in the contemporary United States.

These days, the impression one gets of those leaning to the left of politics (if they listen to objections coming from the Right) is that they positively love bureaucracy. Those of left-leaning politics, apparently, would love nothing more than to see the 'Nanny state' expand, creating ever more structures of administration that lessen the freedom to take responsibility for one's own life.

But while it is true that the social movements of the sixties tended to be left-wing in inspiration, it is not the case that they had a great love of the bureaucratic mindset. Quite the contrary in fact, for, as David Graeber pointed out, "In the face of the gray functionaries of both state-capitalist and state-socialist regimes, sixties rebels stood for individual expression and spontaneous conviviality, and against ("rules and regulations, who needs them?") every form of social control".

But then, following the collapse of the old welfare states, there was a pretty dramatic change. The Right carried on attacking bureaucracy and became increasingly aggressive in pushing the ideals of 'anti-bureaucratic individualism', which basically meant looking to 'the market' to solve every social problem. As for the Left, it pretty much gave up on critiquing bureaucracy altogether or, if it did offer up criticism, it invariably turned out to be a watered-down version of the Right's critique. Moreover, the Left have, in the late 20th/early 21st century, been the political movement that was actually at the forefront of efforts to increase the efficiency of the state, both by incorporating more and more 'market principles' and 'market incentives' into bureaucratic structures, and also through the partial privatisation of public services.

This would arguably be fine if the result was a leaner, more efficient State. But that's not what resulted. Rather, as Graeber pointed out, "what is presented as the 'moderate Left' solution to any problem...has invariably come to be some nightmare fusion of the worst elements of bureaucracy and the worst elements of Capitalism".

So, the Left went on to embrace 'bureaucracy' and 'the market' simultaneously, and this watered-down version of the Right's critique produced nightmarish results. Few people appreciate officious busybodies working their tentacles into ever more aspects of their lives, so when the Left appeared no longer to have anything original to say about the spread of

bureaucratic procedures, populism increasingly looked to the Right. After all, at least the Right was offering a critique of bureaucracy.

As for that critique itself, its origins lie in the original meaning of the word 'Liberalism'. I say "original meaning" because, in the United States, the word became adopted by Social Democrats, which meant the Right did not want to be associated with 'Liberalism' and instead adopted the term 'Libertarian' which, they claimed, meant "championing the free market". As far as Europeans were concerned, though, to call yourself a libertarian was to describe yourself as an 'anarchist'. In that part of the world, it tended to appear in such phrases as 'Libertarian Communism'. As for the term European champions of the free market used, well, that was 'Liberalism'.

According to this version of liberalism, ever since the French Revolution the middle classes had been anticipating a gradual, uneven, but ultimately inevitable transformation of how societies were organised and how they functioned. By the time these transformative effects were complete, we would no longer live under the thumb of warrior elites leading authoritarian governments. Nor would people be restricted by the dogmatic teachings of a priestly caste nor, indeed, be stuck in rigid class systems themselves. No, all that was due to come to an end. Where there was once the authoritarian state, tomorrow there would be 'the market'; where there was once religious faith, in the future there would only be scientific understanding. And the old hierarchies would be gone, too, replaced by free contracts between individuals.

Needless to say, along with expectations like these went the belief that, in this 'liberal' way of life, we would all be living under a great deal less bureaucratic meddling. All that, after all, would no longer be necessary. The trouble was, reality never really lived up to this ideal because, everywhere, even in those places that saw great progress in industrialisation, every year did not see the numbers of bureaucrats decreasing. It saw more and more of them.

At this point I want to return to the modern phenomenon of 'bullshit jobs'. According to the libertarian version of how a 'free market' ought to run, it should, by definition, be incapable of creating pointless jobs. Now, those of a liberal frame of mind have no difficulty in believing that the public sector creates nonsense employment. For example, the Right-wing columnist, Richard Littlejohn (b. 1954) made the following comment. "There are, of course, thousands upon thousands of these trebles-all-round non-jobs across the public sector". What they find impossible to believe, though, is that the private sector is also creating jobs that serve no useful purpose.

The problem is, the evidence simply does not agree with such beliefs. If what they believed was true, then only workers in the public sector would denounce their jobs as 'bullshit'. While those in private sector might regard their work as dull, dirty or dangerous, they would never denounce it as 'bullshit'.

But, no. People in the private sector do, sometimes, believe their jobs to be 'bullshit'.

Since free-market enthusiasts are committed to the idea that no bullshit jobs exist in the private sector, they have had to come up with 'reasons' why people might believe they do exist.

One approach relies on the fact that people can, at times, believe in something that just isn't true. In the case of jobs, that would mean we are all employed to perform some useful function at work, but for some of us the nature of that work makes it hard for us to understand what useful purpose it serves.

As for what it might be that prevents people from understanding how and why their job is useful, this kind of argument points the finger at the increasing complexity of the world economy.

As an opinion piece in 'The Economist' explained, "over the past century, the world economy has grown increasingly complex. The goods are more complex; the supply chains are more complex, the systems to market, sell, and distribute them are more complex... This complexity is what makes us rich. But it is an enormous pain to manage".

Now, in the 19th century industrial revolution, we discovered that 'productivity' could be greatly enhanced by having employees work on production lines where production could be broken down into a sequence of micro-tasks. The downside of this was that what was once skilful, artistic, artisan work producing carriages, clocks, furniture and stuff like that became (from the perspective of each employee) incredibly dull, monotonous and trivially easy work that only became physically hard due to the sheer pace at which one was obliged to work, and the quantity of product one was expected to turn out. But the upside of this production-line process was that it made mass-manufacturing possible, and that gave more people a lift out of poverty.

One way of explaining why some people might claim to have bullshit jobs, is to suggest that these are really employees doing the post-industrial equivalent of factory-line work. Such work is, according to the Economist, "the clerical equivalent of repeatedly affixing Tab A to Frame B: Shuffling papers, management of the minutiae of supply chains and so on. Disaggregation may make it look meaningless, since many workers end up doing things incredibly far removed from the end points of the process".

So, this argument insists that there really are no bullshit jobs in the private sector, and those who think they do have pointless jobs are really doing the very boring but still necessary white-collar work that is required if we are to manage the sheer complexity of the world economy.

However, it is by no means the case that all free-market enthusiasts claim that those who believe their private-sector job is bullshit are simply mistaken. Some do believe that, when folks say they do pointless jobs in the private sector, they are correct in their beliefs. This group of free-market advocates are also prepared to believe that useless paper-pushing jobs have grown in numbers. Since they are committed to the belief that 'the market' would never permit the proliferation of bullshit jobs in the private sector, they have had to find a reason beyond "anyone who believes they have a bullshit job is mistaken" for why, in fact, just such

a proliferation is happening. What this group did was to adopt the ideas of that great champion of liberalism, Ludwig von Mises.

In particular, they have adopted the claims he made in a book published in 1944. This book, which was called 'Bureaucracy', claimed that, when it came to running things in an efficient way, nothing could be so effective as impersonal pricing mechanisms. Certainly, government administration could not manage an economy with anything like the effectiveness of a 'free market', a belief that led to Mises taking an inherently anti-democratic position which rejected not only state solutions of any kind, but also opposed any anti-statist proposals to form democratic self-organisation outside of 'the market' that came from the Left from time to time.

But, while von Mises pretty much gave up on any democratic process other than the 'vote with your dollar' kind, 'The People' unfortunately continued to believe in the sort of democratic processes carried out via the ballot. Free markets don't just produce 'winners' but 'losers' too, in the form of people thrown out of work, or who feel like they earn too little doing their jobs. Von Mises argued that such people were unfortunately not putting their faith in the 'free market' to resolve such issues in the end, but instead turned to the State for help, with the latter responding by attempting to solve social problems via administrative means.

That, according to von Mises, was when things were poised to get really bad, because those well-meaning social programs would require administrators to run them, and those administrators would end up forming power-blocs that would become a great deal more influential than those elected to run the government. And what would these influential administrators do with their power? Why, they would use it to support ever-more radical reforms. According to von Mises, this inevitably meant that the emerging welfare states were not leading us to equality and peace, but were instead luring us into fascism.

The second group took von Mises' criticism of bureaucracy, and argued that bullshit jobs in the private sector exist, ultimately, only because government regulations keep on increasing, and this unfortunately requires the private sector to employ increasing numbers of box-tickers to deal with the BS imposed by the State.

Now, one thing that makes arguments of this type possible is the fact that the 'free market' is a utopian fantasy that has never existed, at least not if, by the 'free market', we mean a system of trade that came into being, and continues to be run, independent of (and indeed, opposed to) any government intervention. In reality, markets never emerged autonomously through the free actions of individuals, but were instead either directly created by government policy, or emerged as a side-effect of government operations, particularly military operations.

So, commercial markets are creations of the State, not born from 'freedom' as libertarians would have us believe. Also, once established, all real commercial markets have had to rely, to one degree or another, on state regulations in order to keep the game of competitive one-upmanship from spiralling off into catastrophic fraud. But that necessary government intervention provides the perfect excuse for the libertarians, because they can always claim that any positive thing coming from the market is all due to the capitalists and their

entrepreneurial flair, whereas all negative outcomes must be due to the government and its bureaucratic meddling.

So, for example, they will praise a private company like Apple for producing technological wonders like smartphones, and just brush over the fact that, before mass-produced commercial products could be made, prototypes had to be developed, and before those prototypes could be developed, basic science behind the core technologies had to be undertaken. Go back far enough in the developmental stages of something like the smartphone, and you'll find yourself considering technological possibilities too pie-in-the-sky for private investors to risk their money on. But, without this investment in core science and prototype development, there can be no mass-produced final product, so who is it that risks investing in this early-stage development process, if not the private sector?

Well, it's the State that drives innovation at this early stage. Without state funding, there would be no GPS, no microchips, and no Internet. Far from being opposed to entrepreneurialism, the State is almost certainly the most risk-taking entity there is, funding the developmental process until the risk/reward ratio has finally reached that balance whereby the private sector feels like it's time to invest its own money in a possible winner.

Since this is the case, we can see that the private sector has pulled off an amazing sleight of hand. After all, we are all led to believe that it is the bosses and executives of the private sector that do all the entrepreneurialism, with the State just interfering in their entrepreneurialism to a lesser or greater degree. It turns out, though, that the real skill of the private sector entrepreneur is one of timing; of letting others do 99% of the work in developing a product, and then stepping up with some cash to get the product to that final stage of commercial product. Put another way, it is as if there is a race where somebody runs almost the entire distance, and then somebody else takes the final one or two steps over the finishing line...and ends up being awarded with most of the recognition and reward for crossing the finishing line!

Ah, but notice how, whenever something bad happens, like there seems to be an increase in the percentage of jobs that serve no useful purpose, in those instances the libertarians are quick to point the finger at the State and claim "this is all your doing".

Despite all evidence to the contrary, free-market enthusiasts, since at least the 19th century, have firmly believed in the idea that 'the market' should be opposed to, and independent of, the government. Armed with such beliefs, they have long been trying to justify Laissez faire economic policies that are designed to lessen the role of government. Once again, history refutes such beliefs, because time and time again the results are the opposite of what was expected.

Take English liberalism, for example. Did that lead to a reduction of State bureaucracy? No, instead it resulted in a great expansion of legal clerks, inspectors, police officers and other administrative and law enforcement types who all had to exist in order to make that dream of a world of free contracts between autonomous individuals possible. As Graeber commented, 'it turned out that maintaining a free market economy required a thousand times more paperwork than a Louis XIV-style absolutist monarchy'.

This sort of outcome was first noticed, at the turn of the 20th century, by the French socialist Emile Durkheim (1858-1916). By the time we got to the middle of that century, it was so impossible to ignore that even the most ardent right-wing supporters of 'free market' admitted this is what happens. In his academic writings, von Mises admitted that there can be no such thing as a 'self-regulating' market; that, in order to keep any market system going you always need an army of administrators. When Michele Foucault (1926-1984) wrote essays on neoliberalism, he noted that what distinguishes the 'new' version from its prior incarnation, was the fact that the advocates of neoliberalism gave up on the fantasy that markets form spontaneously. They have, instead, to be nurtured and maintained by government intervention.

On the other hand, attempting to make bureaucracies more efficient through applying market forces tends to produce the opposite outcome to that which was intended. A good example of this phenomenon was what happened under 'New Labour'. They saw public bodies such as the National Health Service as being overburdened with too much bureaucracy, and decided the best remedy was a good dose of heroic individualism. The idea was to encourage entrepreneurialism within the public sector, and the way to do that, New Labour thought, was to introduce performance targets. So, for example, one performance target was intended to increase the number of wards a hospital had by a certain amount. Another target was met once a certain number of patients had been seen by a nurse.

The important thing was that the targets were being met. It did not matter how individuals actually set about achieving such goals; they were at liberty to find their own ways of meeting their performance targets.

The systems were launched, and New Labour waited for the magic of market-based principles to transform the NHS into a leaner, more efficient organisation.

The results started to come in and, on paper, it looked as though everything was going according to plan. Targets were being met, which had to mean performance was increasing and things were getting better. But then, further investigations revealed another explanation. People were finding ingenious ways to meet those targets without doing anything to improve services. Remember that target to increase the number of wards? Well, the canny target chasers figured out that they could wheel trolleys into corridors, take the wheels of those trolleys and classify them as 'beds', and then call the corridors 'wards'.

And then there was the 'hello nurse'. This was not an expert with any medical expertise, but rather an employee who, dressed like a nurse, went around greeting patients. Once greeted by the 'Hello Nurse', all such patients were reported as having been seen by a nurse, and thus, another target was met.

As reports of such activity came in, the government's first response was to dismiss these as a few bad examples. But, as more and more reports of cheating came in, it became clear that such inventive gaming of the system had become endemic throughout the public services.

Something had to be done, and that 'something', New Labour decided, was to introduce even more mathematical levels of management. These complex systems of auditing

monitored the workforce in order to ensure targets were being met in a legitimate way, but the ultimate effect was to turn what had intended to be a system of liberation that reduced administrative bloat, into a powerful system of control involving more administrative oversight than ever.

Now, what resulted from New Labour's attempt to reduce bureaucratic interference in the public sector was something David Graeber proposed we call the "Iron Law of Liberalism". This states that "any market reform, any government initiative intended to reduce red tape and promote market forces will have the ultimate effect of increasing the total number of regulations, the total amount of paperwork, and the total number of bureaucrats the government employs".

Like I said, by the middle of the 20th century, evidence of this 'Iron Law' had become so clear that even the most ardent right-wing critic of the State had to admit its truth and work under the assumption that real markets need bureaucratic procedures to prevent everything going crazy. But they noticed something else too: Making 'bureaucrats' out to be the bad guys, interfering busybodies that 'the market' would be better off without, was almost always an effective way to gain populist support.

Exploiting this tendency led to two outcomes in American populism. Firstly, it led to a general view among working-class Americans, that to be an employee of the government was to either be a 'politician' or a 'bureaucrat'. Being the former meant you were a lying crook, but something could be done about that because the public could at least occasionally vote such crooks out of office.

Far worse than the 'politicians', according to working-class populism, were the 'bureaucrats'. Being a bureaucrat meant you were a condescending elitist, a self-righteous official who (it was presumed) had formed a tacit alliance with the parasitical poor, whose lazy ways they subsidised using other people's money, with the ever-growing dependent poor voting left-wing politicians into power who, of course, would never get rid of those bureaucrats. There was not much anyone else could do about that, because these unelected bureaucrats were nigh on impossible to dismiss by anyone, save for radical free-market supporting politicians, who never got into power.

The other effect (and this is increasingly being seen in the rest of the world, not just the USA) was that American populism came to see 'the market' as the only alternative to 'bureaucracy'. Now, this assumption was interpreted in several ways. To some, it meant government should be run in more 'business-like' ways. To others, it meant freeing individuals to solve things on their own initiative, assuming getting bureaucracy out of the way would enable the magic of the marketplace to solve all existing problems.

But, whatever interpretation was applied, the effect on how the terms 'Democracy' and 'Bureaucracy' were interpreted, was the same. 'Democracy', to contemporary American populism, means 'the market', while 'Bureaucracy' means "government interference with the market".

This is not an attitude that has always existed in the American mindset. Consider the following observation from Max Weber:



“It is the peculiarity of the modern entrepreneur that he conducts himself as the ‘first official’ of his corporation, in the very same way in which the ruler of a specifically modern bureaucratic state spoke of himself as the ‘first servant’ of the state. The idea that the bureaucratic activities of the state are intrinsically different in character from the management of private economies is a continental European notion and, by way of contrast, is totally foreign to the American way”.

Foreign how, exactly? Well, in the sense that the former empire, the British Empire, acted in ways that suggested they at least took their ‘free market’ rhetoric seriously. The British empire eliminated its own protective tariffs with the anti-corn laws of 1846, and the way it operated on the world stage showed that the British Empire’s interests focused either on conquering other nations, or trading with them. As for international administration, well, they weren’t all that interested in it.

This is in stark contrast to how the USA behaved once it became a power on the world stage at the end of the century. It was a regime that showed no particular interest in ‘free trade’, but a great deal of interest in creating structures of international administration. No wonder, then, that America’s rise to predominant power coincided with a particular form of capitalism: Corporate Capitalism.

The modern corporation emerged in the late 19th century, and it was basically a result of applying modern, bureaucratic techniques to the private sector. This was why Weber made the comment he did, because, at the turn of the century, nobody in the USA needed to press for government to be run more like a business. No, the assumption was that governments and business were run the same way, or, at least, such was the case when it came to big business. It was assumed that networks of personal or informal connections became inefficient once grown beyond a certain scale, at which point bureaucratic techniques became increasingly essential. Hence, as Weber observed, it was more appropriate to regard public and private bureaucracies as two sides of the same coin.

It is true that, for much of the 19th century, the United States’ economy looked a lot like Britain’s in that it was largely an economy of small family firms and high finance. But, once the USA took over the reigns from Great Britain after World War II, it demonstrated its preference for ‘corporate’ capitalism by doing something that the British Empire had never cared to try. That ‘something’ was to create such structures of international administration as the International Monetary Fund, the World Bank and what was to become the World Trade Organisation. The British Empire hadn’t tried to set up such planetary bureaucratic institutions because, like I said, they were much more interested in free trade. The Americans never were much interested in that. Hence, their form of ‘corporate’ capitalism saw them implementing plans to administer everything, and everyone.

What this means is that, what is called ‘corporate’ capitalism could just as easily be called ‘bureaucratic’ capitalism. America’s greatest businessmen loved bureaucratic capitalism. Not that they admitted this; instead they claim to be in love with ‘free market’ capitalism. Really, though, their true love is ever-expanding profits, and the fact is that the ‘free market’ has never been the most effective way of maximising profits. What’s needed, instead, is for the reckless gambler to collude with the financier and the bureaucrat, in order to establish

systems of extraction and speculation that bleed everybody dry, and dump the negative outcomes of toxic speculation on the shoulders of the Public, while insuring its perpetrators against financial loss.

Obviously, a slogan such as 'American-style Capitalism: Screwing the majority to further enrich a minority' would hardly win much popular support. No, it's far better to claim that it has something to do with 'freedom', because nobody can really object to more 'freedom', can they? Another way of getting common people to swallow an idea is to present it, not as the outcome of choices we collectively made (thus implying we could have chosen differently) but as the inevitable result of forces beyond our control.

Both such tactics were used to get us to accept what was labelled as 'Globalisation'. The way this was promoted made it out to be a natural process, the outcome of which would be peaceful trade. We were told that, thanks to the rise of the Internet and other technologies, the world was being brought closer together, enabling increased communication that would, in turn, lead to increased trade. As more and more free-trade treaties were signed, national borders would become obsolete and we would all be living freely in a single world market.

Presented that way, what was being called 'Globalism' seemed like a benign process that nobody in their right mind would oppose. So, when opposition groups, such as the Global Justice Movement, did arise, it was easy for mainstream media to portray such people as deluded bad guys. They were out to restore protectionism, put up barriers to trade. They were crazy Lefties vainly trying to hold back the tide of history.

In actual fact, protest groups like GJM would not have opposed 'globalism' if it really was the natural process of peaceful trade, made possible by new technologies it was promoted as. They would have agreed that eliminating barriers to communication, thereby enabling freer movement of people, products and ideas, were admirable aims that should be encouraged.

No, what opposition groups were opposing to was the real agenda disguised by all that talk of 'free trade' and 'free markets', which was the creation of administrative structures on a global scale, the main purpose of which would to ensure investors could extract ever-greater profits. This would be achieved by enabling more freedom for those with money, power, and political connections. But, for those without such things, it would be the opposite of 'freedom'. As Graeber explained, "it was really about trapping increasingly large parts of the world's population behind highly militarised national borders, within which social protections could be systematically withdrawn".

Building this planetary-scale administrative bureaucratic system had begun in the 1940s. Probably the most important thing to understand is that this was neither a creature of States, nor a private venture. Instead, it involved a thorough entanglement of public and private elements, as indeed did most other bureaucratic systems being built around the same time, albeit on a smaller scale.

As for its structure, it looked something like this. At the apex there sat trade bureaucracies and treaty organisations. Just below, one could find global financial firms, while below them there were the transnational mega-corporations and non-governmental organisations.

Such a bureaucratic structure, one that blurred the lines between state and private power, had many ways of presenting goings-on that were other than what they were presented as. So for example, quite often, what was presented as 'international' trade actually consisted of not much more than materials being transferred back and forth between different branches of the same corporation.

And then there were economic and social policies that were being followed by supposedly 'democratic' governments in the global south. I say 'supposedly' because such economic and social policies had actually been developed by those aforementioned trade bureaucracies and treaty organisations- entities such as the IMF, World Bank and the EU.

The results, then, was that 'globalisation' was not synonymous with 'freedom' at all, at least, not for a majority. What it was synonymous with, was 'Bureaucratisation'.

It may seem strange to suppose that the United States should be at the forefront of efforts to create such an overly bureaucratic global system, given how anti-bureaucratic and pro-free market, the rhetoric from that country tends to be. But don't be fooled by the rhetoric. An examination of how the USA developed for well over a century will reveal the truth; that what we are talking about here is a society that is deeply bureaucratic. The reason why this is so often overlooked is because we have been brought up to have a far too narrow view of what that word- 'bureaucrat'- means. One hears that word, and what always springs to mind is 'civil servant' when, in actual fact, the term should be applied far more broadly.

I am reminded of a scene in the film 'Network', in which a businessman angrily corrects what he sees as delusional thinking by the protagonist. The protagonist believes ideologies and nations comprise human reality. Not so, asserts the businessman. Reality consists of money and business.

"What do you think the Russians talk about in their councils of state? Karl Marx? They get out their linear programming charts, statistical decision theories, minimax solutions, and compute the price/cost probabilities of their transactions and investments, just like we do. We no longer live in a world of nations and ideologies. The world is a collage of corporations, inexorably determined by the immutable bylaws of business. The world is a business, Mr Beale".

That is how the world appears through the 'globalist' perspective. But one could just as easily make an argument for the omnipresence of bureaucracy.

"What do you think middle managers in private businesses, and military officers in their war rooms are doing? Putting Sun Tsu's 'Art of War' to practical effect in order to gain victory and increase profits? They are sat at desks, shuffling papers, filling out forms, filing their reports. Did it not occur to you, when you read those novels about "the man in the grey flannel suit", and sociological papers on 'organisation man', that these were not functionaries in the Social Security Administration, but corporate middle-management? Those American habits and sensibilities- the clothing, the language, the design of forms and offices- all of which shouts 'bureaucrat'!, in your mind, it mostly emerged from the private sector. The United States is a bureaucracy, Mr Beale".

Indeed, when it comes to setting the standard for what administrative functionaries are supposed to be like, it is to the private sector that we should look, since that's where it mostly emerged. We should really talk of state bureaucrats, corporate bureaucrats, and military bureaucrats, but instead we think in terms of civil servants (who are bureaucrats) and middle managers and military officers (who are not).

Where did this impression, that only state paper-pushers should be thought of as 'bureaucratic', come from? We can trace this attitude back to the 1930s, a time when bureaucratic structures and techniques were starting to become dramatically visible in the lives of ordinary people. This was also the time when Roosevelt (1882-1945) implemented the New Deal, something that required a close coordination with lawyers, engineers and corporate bureaucrats employed by firms such as Ford. One result of this close collaboration between the state and the private sector, was that the corporate styles and sensibilities that originated in business became absorbed by Roosevelt's New Dealers. "Through these means", observed Graeber, "the word 'bureaucrat' came to attach itself almost exclusively to civil servants: even if what they do all day is sit at desks, fill out forms and file reports, neither middle managers nor military officers are ever quite considered bureaucrats".

Military officers got included, because when the United States shifted to war footing in the 40s, the US' bureaucracy absorbed the style and sensibilities of corporate bureaucrats, just as civil servants had done. And, having switched to war footing, the USA never really came off it, and the US military bureaucracy grew to a gargantuan size, further blurring the distinction between what was 'private' and what was 'public'.

Now, this blurring has had two outcomes. First of all, it has resulted in a 'revolving' door between public and private, because one moment somebody is a high-ranking military officer, and the next they are on the board of one of those corporations that operate on military contracts.

Also, more importantly, this blurring of private and military bureaucracies has proven to be a very convenient way to engage in the sort of Soviet-style industrial planning not seen since the height of the USSR, but without the United States ever having to admit this is going on. All those bureaucrats need do is claim that there is a need to build or preserve this or that domestic industry for military purposes. Whether it be maintaining a certain number of steel plants, investing in the research to one day establish the Internet, one can always justify such things on the grounds of military preparedness. Thanks to our narrow vision when it comes to 'bureaucrats', the result is, as Graeber pointed out, that "this kind of planning operates via an alliance between military bureaucrats and corporate bureaucrats (and so) it's never perceived as something bureaucratic at all".

Now, you might well accept that bureaucratic procedures occur in the military as much as anywhere else, but find it hard to believe that the armed forces would permit bullshit jobs to exist. The armed forces are, after all, famed for working with military precision.

But, in fact, the rising tide of BS jobs has not left the military untouched. A whistleblower known only as 'Frank', who works for a subcontractor for the German military, described the work he did, and how pointless it is.

“Let’s say soldier A moves to an office two rooms further down the hall. Instead of carrying his computer over there, he has to fill out a form. The IT subcontractor will get the form. People will read it and approve it, and forward it to the logistics firm. The logistics firm will then approve the moving down the hall and will require personnel from us. The office people in my company will then do whatever they do, and now I come in. I get an email: “be at barracks B at time C”. Usually these barracks are one hundred to five hundred kilometres away from my home, so I will get a rental car. I take the rental car, drive to the barracks, let dispatch know that I arrived, fill out a form, unhook the computer, load the computer into a box, seal the box, have a guy from the logistics department carry the box to the next room, where I unseal the box, fill out another form, hook up the computer, call dispatch to tell them how long I took, get a couple of signatures, take my rental car back home, send dispatch a letter with all the paperwork and then get paid.

So instead of the soldier carrying his computer for five metres, two people drive for a combined six to ten hours, fill out around fifteen pages of paperwork, and waste a good five hundred euros of taxpayers’ money”.

In the world of fiction, military red tape proliferating to a ridiculous amount has formed the basis of such satirical novels as Joseph Heller’s (1923-1999) ‘Catch 22’. Here we have testimony of such nonsense happening in a real military. And not just any military but the German military. Of all the things that the German military has been accused of, going about its duties in a time- and money-wasting manner has rarely been one of them. So when the rising tide of bullshit jobs effects even this organisation, you know something is seriously wrong with a world supposedly running the most efficient possible economic system.

Indeed, if anything, this testimony represents an even greater blow to populist conceptions of modern employment. The reason why is because, technically speaking, ‘Frank’ does not work for the German military. Instead of having its own Communications, Logistics, and Personnel department, all that has been outsourced to private contractors. So, one subcontractor (let’s call that subcontractor A) did IT work for the military. Subcontractor A, in turn, outsourced its logistics to another subcontractor (sub-subcontractor B) who, in turn, relied on yet another subcontractor (sub-sub-subcontractor C) to take care of personal management.

So, by following this trail of sub, sub-sub, and sub-sub-subcontractors, one discovers that whistleblower Frank actually works for the private sector. Not only is his testimony more proof that the lines between ‘private’ and ‘state’ are now so blurred as to be all but meaningless, it’s also evidence that bullshit jobs exist in the private sector.

Now, earlier, we saw how free market enthusiasts, committed to the idea that the private sector would never create useless jobs, offered two possible explanations for why people like ‘Frank’ insist useless jobs exist. It was suggested that ‘globalisation’ has made the world so complex that lots of tediously dull paper work has to be done in order to manage that complexity. Many a defender of free markets has argued with ‘Frank’, insisting that his job simply cannot be useless because such jobs can’t exist under ‘capitalism’. ‘Frank’, in turn, insists that he is not deluded and that his job is every bit as absurd as he believes. And who really knows what they are talking about? The man actually doing the job, or those who do not and are just talking about what should be impossible in their ideal ‘free market’?

Alternatively, it is supposed that what really increased was government regulation, something that then required the private sector to employ more box-tickers to deal with the rising tide of state-created bureaucratic meddling.

It turns out, though, that one handy example refutes both these claims. In 2006, NCS published a paper in 'Digest' that calculated the growth of administration in public and private universities, from 1975 to 2005. During that time, overall the number of teachers per student remained constant, more or less, and in fact the period ended with slightly fewer teachers. But, the same period saw a massive expansion of administrators, and, expanding most of all, were the numbers of administrative staff.

In order for this expansion of administration to fit the free market enthusiasts' narrative, we would have to presume that, over the thirty years in question, 'production' in higher education (in other words, teaching, writing, and research) had become three times as complex, the result of which was that it ended up requiring a whole lot more administration.

Not so. For, as Graeber pointed out, "for the most part, teachers continue to do what they have always done: give lectures, lead seminars, meet students during office hours, and grade papers and exams. Most of the changes that did directly affect teaching, such as, say, class chat rooms, were managed by the (proportionally declining numbers of) teachers themselves".

So, we cannot blame this growth in administration on the complexity inherent to running modern universities.

But, the greatest blow to the free-market enthusiasts' excuses can be found in how that expansion occurred in private universities, compared to public ones. If you recall what right-wing columnist Richard Littlejohn wrote, about how the public sector loves to create "trebles-all-round-non-jobs", you would expect that all that unnecessary expansion of administration occurs in publicly-run universities, while those that were privately run would operate efficiently, never permitting a growth in needless administration.

Well, let's look at the numbers. During the thirty years in question, the number of administrative staff and managers employed by public institutions increased by 66%. But what about administrators and managers of private colleges? Here there was an increase of 135%, which is more than twice the rate at which administrative staff working for public colleges had grown.

It would be absurd to claim that increases in government regulation resulted in twice the number of private administrative jobs as occurred within the government-run services, while also subscribing to the narrative that the state is more than happy to allow bureaucracies to grow to obese proportions, while the private sector is lean and mean and against such nonsense.

But one can explain these numbers if one interprets things the other way around. What does it mean to say something is 'public'? It means that, ultimately, whatever actions it takes, it will be answerable to 'the People'. In the case of colleges and universities, being answerable to

the public can, sometimes, lead to priorities we might well question. For example, who is the highest-paid servant at a state university in the United States? Nobel-prize-winning professors of medicine? No, it's the football or basketball coach. But, that aside, we find that, being answerable to the public, state-run universities find themselves under the sort of political pressure that keeps a lid on wasteful expenditure. As Graeber pointed out, this "does tend to limit the degree to which a newly appointed dean can simply decide that, since he is obviously a very important person, it is only natural that he should have five or six additional administrative staff working under him- and only then figure out what said staff are actually going to do".

Now, what about private universities? Who are they answerable to? They do not answer to the public; only to their board of trustees. Typically, two things are true of trustees: That they are very, very rich and that they either have a corporate background, or the environment they came from was heavily influenced by the corporate world. To over-privileged creatures of corporatism/bureaucracies such as these, any 'important' person who feels he or she should be attended to by an ever-expanding army of flunkies is acting in an entirely reasonable way.

Still, one might see this as, at best, a partial explanation for the rise of bullshit jobs, not only because it does not really explain how, during the period in question, administrators were able to grab so much power and expand so much, but also because it does not do much to explain why the number of useless paper pushers was happening outside of academia at the same time.

One person who has attempted to provide such missing information is Benjamin Ginsberg (b. 1947) author of "the Fall of the Faculty". His argument is that there has been a dramatic shift in assumptions regarding the prime purpose of universities, and it was this profound shift that allowed university administration to pull off what was effectively a coup.

Universities have been a part of Western culture since at least the Middle Ages, and for most of their history they basically functioned as craft guilds. The purpose of these craft guilds was to produce scholarship, and to ensure that new generations of scholars would be trained. Given that universities were run for, and by, scholars, such priorities are hardly surprising.

By the nineteenth century, an additional purpose had been added to universities' purpose. They were still primarily scholarship-producing craft guilds, but by this time a sort of gentlemen's agreement had formed, whereby universities would, in addition to producing scholarship, also train the public sector's civil servants. In exchange for providing this service, universities were largely left alone.

Later, training corporate bureaucrats became included among the list of duties expected of universities, and for a while that gentleman's agreement remained in place. But Ginsberg's argument is that, ever since the 1980s, university administrators managed to gain control of universities and set about altering the purpose these institutions serve.

It's interesting to note that this transformative period in universities' history more or less coincides with the rise to prominence of two academics who share certain things in common.

They were our old friends Max Weber and Michele Foucault. What unites them? Well, first of all, the fact that both of them gained a prominence in the United States, far beyond that which they achieved in their native countries (Weber was German, Foucault was French). As to why they gained popularity in the United States, well, that has to do with the other thing they have in common. It is possible to take the writings of both men and (provided one is happy to drastically simplify their academic output) put something of an anti-Marxist spin on their theories.

This was possible because, whereas Marx's material-dialectical approach reduced power to a matter of which class had monopolised control over the forces of production, Weber and Foucault's theories could be interpreted, at least in a crude, simplified form, as saying power is not so simple and reducible as Marx had imagined; that it was a far more pervasive, multi-faceted feature of human existence. Moreover, this simplistic reading of Weber and Foucault made power seem like an unavoidable aspect of any social life, which was a handy thing to promote if you were at all interested in quashing dreams of a proletariat revolution that would end class distinctions once and for all.

But the appeal in the United States of these two foreign academics lay not only in the apparent anti-Marxist quality of their academic work. It may also have had something to do with their attitude toward bureaucracy.

For the most part, it seems, bureaucratic ways of doing things have been portrayed as somehow simultaneously very powerful and pervasive, yet also extraordinarily inept. Many a satire has relied on this trope of the paper-pusher who is immune to reason, born of a system promoted as operating with clock-work efficiency but which anyone unfortunate enough to have to deal with finds themselves trapped in a maze of complexity and confusion.

But both Weber and Foucault argued- and they may have been the only 20th century academics who honestly believed this- that the reason why bureaucracies became so powerful was because they are really, really effective. Weber's writings on the subject give one the impression that he saw bureaucracy as so obviously a superior way of doing things that all other ways would inevitably come to conform to the bureaucratic way. The outcome of this would not be all positive by any means, for it would ultimately lock "humanity in a joyless 'iron cage' bereft of spirit and charisma" (as Graeber put it) but it would really work.

Now, roughly when Weber, and then Foucault, rose to prominence in US social sciences, universities were undergoing that transformation from craft-guilds that produced scholarship, to institutions that produced civil servants and corporate bureaucrats, those two functionaries of what would become the first effective, global, administrative apparatus.

That stripped-down version of Weber began to be formed after World War II by sociologists like Talcott Parsons (1902-1979) and Edward Shills (1910-1956). By the time the Cold War was underway, these two became deeply embedded at Harvard and, once the stripped-down version of Weber they had worked with became stripped down further still, a form of Weber that was palatable to state department functionaries and the World Bank was created. It was known as 'Development Theory' and, prior to the Vietnam War, it was promoted to the global south as an alternative to Marxist historical materialism.



Why “prior to the Vietnam War”? Well, the populist reaction to that war had a dramatic negative effect on the esteem Weber was held in among the university fraternity. Hitherto, both sociologists and anthropologists had been quite willing to form close cooperation with not only the administrative apparatus of government, but also military-intelligence, too. However, once United States university campuses mobilised against the war, complicity of this kind came under the harshest spotlight, and under this perspective Weber had to be dethroned, because his beliefs seemed to be an expression of everything radicals sought to reject.

With the throne now empty, who should take Weber’s place? Perhaps another German? For a while, German Marxists like T.W Adorno (1903-1969) Walter Benjamin (1892-1940) and Herbert Marcuse (1898-1970) became subjects of interest. These academics, whose disciplines ranged from philosophy to sociology to musicology to literary criticism, were all associated, directly or indirectly, with the ‘Frankfurt School’. This ‘School’ had arisen as a result of pretty irrefutable evidence that Marx’s revolution had gone anything but according to plan. Where was the communist paradise he had promised would follow the proletarian uprising? There were no signs of it. But there were much darker aspects of society, in the form of cults of personality (Stalinism, Maoism) and American hegemony. How could the apparent acquiescence of the masses with these corruptions of, or even outright rejections of, Marxist principles be explained?

Instead of reducing everything to factors of production driven by material conditions, the Frankfurt School academics included such things as Freudian concepts of psychoanalysis and the ‘Authoritarian Personality’ in the mass media and other industries that shaped culture, to explain how a moral, cultural and physical debasement of society could happen as the result of manipulation by the Capitalist-owned and driven mass media. In his work, “One-Dimensional Man’, Marcuse wrote, “The means of...communication...the irresistible output of the entertainment and information industry carry with them prescribed attitudes and habits...The products indoctrinate and manipulate; they promote a false consciousness which is immune against its falsehoods...Thus emerges a pattern for one-dimensional thought and behaviour”.

It is not at all difficult to see how such theories of mass manipulation could be combined with the establishment of a global administrative apparatus, to keep society from breaking free of hegemonic powers.

But, it turned out, attention was diverted away from German Marxists by goings-on in France. In the late 60s a form of theory was emerging in France that became known as ‘68 Thought’, after the year it was established. ‘68 Thought’ managed to be both radical while it simultaneously rejected Leftist politics, its advocates seeing little point in union organisations or planning for insurrection.

Now, Foucault was French as well, of course, and so as ‘68 Thought’ caused radical interest to focus its gaze on goings-on in that country, Foucault’s analysis of bureaucracy became an area of interest as well.

What we find in Foucault's work is an appraisal of bureaucracy that is more subversive than Weber's, but what that results in are systems of bureaucracy that are even more effective than anything Weber had imagined. As Graeber explained, "In [Foucault's] work on asylum, clinics, prisons and the rest, every aspect of human life...became nothing in and of themselves, but merely products of one or another form of professional administrative discourse...For Foucault, all forms of knowledge became forms of power, shaping our minds and bodies through largely administrative means".

It would be incorrect, however, to say that there was a complete exchange of thought based on Weber's theories, for those of Foucault. What happened instead was a division of academic labour within American higher education. Bureaucracy, whether of the civil servant or corporate bureaucrat kind, are trained under something known as 'Rational Choice Theory', the roots of which lie in Weber's theories. Again, those theories had to be simplified in order to work in the way 'Rational Choice' needed them to work, and this meant the pessimistic aspects of Weber's work was stripped away.

But, actually, it was not so much 'stripped away' as relegated to other theorists. Which theorists were they? Why, the Foucauldians. According to Graeber, "Foucault's ascendancy in turn was precisely within those fields of academic endeavour that absorbed former campus radicals, or those who identified with them. These disciplines were almost completely divorced from any access to political power, or increasingly, any influence on social movements as well".

Now, this diminishing of Foucauldian influence on social and political issues was going on, more or less at the same time that the power of money was growing ever stronger. What happened to New York City, roughly when '68 Thought' became a thing in France, and a few years after that, paints as good a picture as any of what happened.

When I think of New York City today, what springs to mind is an extraordinarily rich place. New York is where Wall Street is. It's where glittering monuments to corporate power climb ever higher into the skies; where Broadway stages shows almost as dazzling as the smiles of the stars topping the bill. Along with Paris and Rome, New York is the place that the top fashion houses wish to be associated with.

Back in 1975, though, New York City was facing ruin. This potential calamity had been building up over the past thirty years. What happened during that time was that the city's services and welfare had been growing, and the politicians in charge of running the city had been borrowing more and more money in order to pay for it.

As well as borrowing money, the political class of New York relied on tax revenues from the middle classes to fund that growing services and welfare. But, in the early 70s, there was an exodus of the middle classes, and as they fled the city the taxes they had been paying disappeared with them.

For a while the banks lent the city even more money. But the size of the welfare state was not the only thing growing larger. So too were the banks' concerns that the city would be unable to repay its debts.

1975 was when things changed, because that was when the banks stopped lending New York City money. Prior to this time, the city's financial controller had overseen regular meetings, during which the 'city' (meaning the politicians who ran it) issued bonds in return for loans. On this particular day, at 11AM, the banks were supposed to turn up so that the weird ceremony of creating money by swapping IOUs could commence. But hours passed and there was no sign of the bankers.

The meeting was rescheduled for 2pm, and the banks promised that, this time, they would be present. But, once again, none of the banks attended the meeting. They were not going to extend credit to New York City any longer.

Or rather, they would not unless a radical shift in power was allowed to happen. In order to protect their loans, the banks insisted, they should be allowed to take control of the city. The city was not in a position to say "no" (appeals to the president were made, but help was refused) and so a new committee was formed. The purpose of this committee was to run the city's finances, and out of nine members, eight of them were bankers.

What this group of bankers did was to begin an extraordinary experiment that became a new kind of politics. In the prior way of doing things, politicians had believed that negotiations and deals were the way to resolve crises, which left room for debate, protest and other forms of collective action to influence the way these reforms shaped society.

The financiers that now ran the city subscribed to a wholly different ideology. As far as they were concerned, they were simply representatives of 'The Market', and 'The Market' could not be negotiated with, or interfered with in any way. It had to be left alone to run society as it saw fit.

And what 'the Market' saw fit for New York City was something called 'austerity', which basically means drastically cutting back on public services and social support. Thousands of teachers, policemen and firefighters lost their jobs.

What was surprising about this was not so much that the banks ended up exerting so much control over the city. From the 70s onwards, changes would be made that would make it ever more easy to convert financial power into political power, further blurring the line between state and corporate bureaucracies. Under conditions like that, of course more and more control would fall into the hands of the banks.

No, the real surprise was how little opposition these changes encountered. Ten years prior to this, New York City had been home to radicals and left-wingers who had dreamed of changing America through revolution. But now, a mood of disillusion had come over them.

The singer, Patti Smith (b. 1946) described the mood that led to radicals turning away from collective action. "I could not identify with the political movements any longer, all the manic activity in the streets. I felt overwhelmed by yet another form of bureaucracy".

What Smith and many others represented was 'radicalism' of a new kind. What was different about it was that it entailed a powerful form of individualism. In the past, left-wing

revolutionary action had emphasised collective action. People organised into pressure groups such as unions. But this new form of individual radicalism was incompatible with collective political action.

We saw earlier how there had been an exodus of the middle classes. There hadn't really been an exodus of radicals, at least not in the sense of them quitting New York City altogether. They were still there, occupying abandoned buildings in Manhattan.

No, this form of individualistic radicalism was more of a spiritual form of quitting rather than a physical departure. These radicals didn't do anything to try and change what was happening to society, but instead watched events unfold with a cool, ironic detachment. This was all a spectacle to be experienced, not the catalyst to bring about social change.

Centuries earlier, Marx had seen the purpose of the active mind in an entirely different light, advising his followers, "philosophers have previously tried to explain the world; our task is to change it". But this form of individual radicalism rejected the notion that the outside world could be changed through collective action. Instead, they held the belief that, through self-expression employing art, music and other performative means to convey social criticism, what went on inside people's heads could be changed, and then these new individuals would change society. It was, in other words, another version of the 'New Thought' philosophy that said by changing yourself you can affect positive changes on the world.

As one commentator wrote of this time, "it was the mood of the era and the revolution was deferred indefinitely. And while we were dozing, the money crept in".

Now, what these events have to do with the takeover of universities by administration depends to a certain extent on one's political leanings. For those who tend to lean towards the right, those radicals using artistic means to awaken social awareness in individuals found a way for Marxism to succeed. For while it may not have led to any superior economic system (quite the opposite, in fact) Marxism had succeeded in taking over the arts and the schools. The end result of this was that future generations would almost certainly be indoctrinated with Left-wing political views as they made their way through the schooling and higher-education system. Nor would their spare time be free from the Marxist influence, for the TV shows and movies they watched would spread the same anti-Capitalist message. No wonder, then, that each successive generation would consider itself more 'Woke', more conscious of imagined injustices compared to previous generations.

As for Left-wing anarchists such as Graeber, what resulted from this 'coup' were "strategic vision" documents that may talk a lot about "research excellence" and "the student experience", but none of that should be interpreted as saying that universities have much interest in producing scholarship, left-wing or otherwise. No, instead the effective coup that university administration managed to pull off turned universities into institutions in deep collaboration with corporatism, turning out students that are deeply indebted, and thus fodder for the rapacious financial system.

Still, not everything is cleared up. Above all, there is, as yet, little explanation as to why this coup should have been successful in the 1980s. After all, as Graeber pointed out, “one would have to assume that even in the 1880s, there were university administrators who would have been delighted to seize power in this way and each hire themselves a retinue of minions. What happened in the intervening century that put them in a position to do so?”.

What indeed? And, also, what about the increase of useless/ harmful forms of employment outside of academia? Why was this phenomenon of bullshit jobs getting larger?

## CHAPTER THIRTY-FIVE

In the last chapter, we began to investigate reasons why there are so many jobs that serve no useful purpose. Firstly, it was supposed that this is enabled in part by the fact that it simply should not happen under the dominant economic system, which most of us assume remains Capitalism. While we are comfortable with accusing socialist-led societies of creating bogus jobs, and have little problem suspecting social democracies of letting the public sphere get away with overstaffing (when they are not actively implementing make-work programs such as the ‘Works Progress Administration’), market economies, in the popular imagination, are just not supposed to work in a way that would allow nonsense jobs to exist. Therefore, when people find that their job has little to no good reason to exist, reconciling this fact with what they have been brought up to believe about ‘the market’ entails writing off their experience as somehow anomalous.

Secondly, we saw how the right-wing critique of bureaucracy had lured us into a false impression of what a ‘bureaucrat’ (useful or otherwise) is, and how this, in turn, leads us to misunderstand the kind of capitalism the USA has been running since it rose to dominant power. In the popular imagination, ‘bureaucrat’ is synonymous with ‘civil servant’ or an employee of the government, and they are to be seen as opposed to ‘the free market’. In actual fact, the sort of Capitalism the USA encouraged has little to do with any ‘free trade’ that classical political economists such as Adam Smith would have recognised. Instead, US-style capitalism is ‘corporate capitalism’, something that requires such a thorough entanglement of state, military and private bureaucracies as to make distinguishing between them an exercise in futility. We saw how one ‘advantage’ of this entanglement, coupled with the popular misunderstanding of what ‘bureaucracy’ means, is that the USA can get away with Soviet-era levels of planning while denying this is, in fact, what is going on.

As well as these explanations, we can identify a third reason why bullshit jobs have been able to proliferate without most of us being aware of this. When we see old films and photographs of factories, what is perhaps most remarkable is the sheer number of people such businesses employed. We see a great mass of humanity, countless numbers pouring through the gates of a factory to begin their working day, as indeed did their mothers and fathers before them. Such families may well have lived in industrial towns, where almost every resident worked in the factory at the heart of the community.

What a difference compared to today. Now, when we see footage of factories, there is a relative handful of human labourers- just a few technicians monitoring automated systems to ensure all is running as it should, plus a few more humans working on those aspects of production we still have not figured out how to automate efficiently enough. Other than that,

these places of manufacturing have seen a huge decline in the number of people they employ.

Much the same could be said of farming. No longer do great armies of seasonal workers descend on the countryside when it's time to bring in the harvest. Now all that is required is one or two contract workers operating combine harvesters and other such machinery.

It is generally acknowledged, either that there has been a steady decline in the number of jobs in farming and manufacturing, or that what looked like a decline of such jobs was really a relocation of such work, from richer countries to poorer ones (though, as Graeber pointed out, "this is obviously true to an extent, but...the same overall trends in the composition of employment can be observed even in the countries to which the factory jobs were exported").

Whether they moved elsewhere or disappeared altogether, in most first-world countries there has been a decline in the number of people employed in manufacturing and farming. However, there has not been a decline in the number of people who have employment of some kind, for as those sectors saw a steady decline, another sector saw an increase in the number of jobs it could offer.

Which sector? Well, not really the sector most of us think of. In the popular conception, the decline in manufacturing and farming was compensated for by an increase in what we call 'services', until we found ourselves mostly working in what was called a 'service economy'.

But, do we really almost all work in a 'service economy' these days? If that was indeed the case, then the majority of people would be earning a living through serving drinks, preparing and delivering meals, tidying homes, mowing lawns, and stuff like that. The problem is, the majority do not engage in work of this kind.

Economists have identified a fourth sector of the economy, which goes by the name of FIRE. That is an acronym of 'Finance' 'Insurance' and 'Real Estate'. In 1992, a library scientist by the name of Robert Taylor, suggested it would be more appropriate to define all such work as 'Information Work'.

Whether it's called 'FIRE' or 'Information Work', all such employees tend to get included in 'Services'. If we remove them, though, the folks left who are waiters, gardeners, salesclerks and such, amount to around twenty percent of the workforce (this percentage is remarkably steady- it's been around twenty percent for more than a century).

What this means, is that eighty percent of workers believed to be employed in 'services' are really administrators, consultants, clerical and accounting staff. In other words, the sort of pen-pushers and paper shufflers who work in those areas where bullshit jobs have mostly proliferated.

Having said that, we should be careful not to over-generalise. It would be wrong to suppose that, if you are an 'information worker', you therefore feel your job is bullshit. This category does, after all, include scientists, librarians and teachers, and no doubt many such professionals feel their work generally benefits society. Nor is it the case that those not

working in the 'information sector', but rather elsewhere, all believe that their jobs have a legitimate reason to exist or that there are no bullshit elements to their job.

But, those caveats aside, we can tell, from various sources such as those aforementioned surveys, that the majority of those working in the FIRE/information sector, do feel as if the work they do has no good reason to exist.

Anyway, we have been led to believe that, along with the decline in manufacturing and agriculture, there was a rise in 'services', and this is another reason why we find it so hard to see how much bullshit jobs have proliferated. After all, if you are providing 'services' for people, you must be doing something useful. Right?

In actual fact, the rise in information-oriented jobs went along with the rise in finance capital, and if there is one sector of the economy that can be accused of being a sort of scam, it is the financial sector. Why? Because of the way it likes to present itself, which is in contrast to how it (mostly) operates. We are led to believe that the financial sector's primary concern is to provide viable ventures in commerce and industry with the investments needed to get such dreams up and running. But, while this is obviously a part of what the financial sector does, it really should not be thought of as the bulk of the work going on.

What, then, does the bulk of financial-sector work consist of? Well, for the most part, this sector makes profits by colluding with government to create debt; debt that is then manipulated and traded in ways so as to create the sort of 'on-paper' wealth that always vanishes the moment a speculative bubble pops.

Of course, the existence of those many speculative bubbles that have inflated and popped over the history of this sector shows that, often, it's not scams of a sort to be found here, but the real thing. Take the last great crash, the subprime mortgage scandal. What the financiers did was to convince the public that the same theoretical physicists who had unlocked the 'mysteries of the cosmos' had also achieved something akin to the alchemists' dream of creating value out of 'nothing'. Only, whereas the alchemists had dreamed of turning base metals into gold, what these financiers did was to take lots and lots of low-quality debt, the sort that more cautious lenders would not touch with a ten-foot barge pole and, with some mathematical manipulation so complex only the best theoretical physicists could handle it, those low-quality debts were transformed into high-quality securities. Those securities went by such names as 'collatorised debt obligations', and they were traded in unfathomable ways by high-speed trading algorithms that conjoured up so much wealth, the bonus culture for upper-management and executives in the financial sector soared to astronomical levels.

Then, as with all speculative bubbles, this one burst. As we woke up from the heady dream of house prices that can only go one way (up) we realised that most of those complex financial instruments that supposedly turned junk loans into high-value securities, were just scams. Though, as usual, advocates of the 'free market' were quick to conclude that, since the government had been involved in various ways, the crash of 2008 therefore had to be all their fault, and of course this sort of thing would never have happened under a true laissez faire capitalist system.

Of course, anyone can claim that, in a utopian fantasy, such-and-such a bad outcome could never happen. As we have seen, 'the free market', if we take that to mean a market that came into existence independent of, and which remains antagonistic towards, government intervention, has never existed. Commercial markets have always been creations of the state and, with the rise of the financial sector, that entanglement of public and private bureaucratic procedures has increased ever more dramatically. And, as ever, those operating in corporate capitalism who would prefer we think of the dominant economic system as a 'free market', rely on our misunderstanding of bureaucracies and administrative structures, to blind us as to what is really going on.

If there is one situation that shows this most clearly, it is those times when you need a bank to do something, but actually getting it done is complicated by infuriating bureaucratic procedures. Many a frustrated customer has complained about red tape making some process more difficult than it ought to be, and when such frustrations are expressed, the same response tends to be given.

And that is that, yes, all this red tape is indeed infuriating. But you really should not blame the banks. The reason why is because, if you are being given a bureaucratic runaround, that is an effect of an arcane maze of government-imposed regulations.

One finds the same reasoning in banks' internal communications, where once again regulations are spoken of as something that has been imposed on them by the state. Such communications will say things like "the Chancellor has decided to increase ISA allowances".

Reasoning of this kind sits comfortably with that right-wing critique of bureaucracy that we've been brought up with. It just seems to make sense that of course banks would run their operations in a more efficient, streamlined manner if only government busybodies would stop interfering, but the trouble is they won't, and so here we are.

But while this excuse may seem to make sense, because we have been raised to wrongly equate 'bureaucracy' exclusively with 'government meddling into private business practices', in actual fact explanations of this kind do nothing to really shed light on what is really going on; how such bureaucratic procedures really came about.

Because, the truth is, such procedures are not imposed on banks who would rather not have to deal with all that red tape. Quite the opposite, in fact, for such regulations were almost certainly composed jointly by aides to legislators on some banking committee and lobbyists and attorneys employed by the banks themselves.

Ignoring the fact that such regulations exist because the banks colluded in creating them and then lobbied with large contributions to those same legislators' reelection campaigns reaches heights of doublethink when it comes to those aforementioned internal communications. While senior executives may act surprised and dismayed when some new law or regulation comes into effect, like more red tape was the last thing they wanted, in actual fact those laws and regulations exist largely because those very bank executives had repeated dinners and meetings with the chancellor, during which time they lobbied hard, and



contributed much in the way of campaign funding, all so those very regulations would be brought into effect.

So, really, all those infuriating regulations happen, not as a result of governments imposing them on the banking sector, but as a result of that blurring between private- and state-bureaucracies. For, as Graeber pointed out, “the vast majority of paperwork that we do exists in just this sort of in-between zone- ostensibly private, but in fact shaped entirely by a government that provides the legal framework, underpins the rules with its courts and all of the elaborate mechanisms of enforcement that come with them, but, crucially, works closely with the private concerns to ensure that the results will guarantee a certain rate of private profit”.

Now, bringing all this about, without many of us being aware of what is really going on, relies not just on the fact that we tend not to understand how far-spread bureaucratic procedures have become, but also because we misunderstand what the term ‘deregulation’ actually means in practice.

It may seem odd that such a term could ever be misunderstood, because it would appear to be plain old common sense. Surely, to ‘deregulate’ is to ensure we have fewer rules and regulations. It means we have to put up with less bureaucratic interference than we once did. No wonder, then, that ‘deregulation’ has joined words like ‘democracy’, ‘freedom’, ‘equality’ and ‘reform’, that are almost always treated as positives that we ought to pursue. This can be seen most clearly by considering how we would most likely react to anyone who claimed to oppose ‘deregulation’. “What, you want more bureaucrats telling us what we can and cannot do? You want to increase that tangle of red tape and make the maze of administrative procedures even more complex? Are you crazy?”.

But, let’s just stop for a bit and think about what the common-sense definition of ‘deregulation’ would mean for something like banking. If it is the case that the fewer regulations there are, the better, then it would have to follow that the greatest ideal would be to have no regulations at all.

Could there be such a thing as an unregulated bank? No there could not, because banks have been granted the privilege of printing money. Well, actually, what rights banks actually have is the right to issue IOUs. So do we all, of course, but what is different about the IOUs banks issue is that the government recognises the banks’ IOUs as legal tender. Once recognised as such, these IOUs become acceptable as payment for taxes and to discharge other debts that may arise within that state’s own national territory.

However you care to describe what banks do, whether you call it “printing money” or “the right to issue IOUs the state recognises as legal tender”, the fact is that the most insane thing to do would be to allow a profit-seeking firm to exercise such powers without restraint. Rather, as David Graeber explained, “the power to create money is one that, by definition, government can only grant under carefully circumscribed (read: regulated) conditions”.

As we have seen, banks actually collude with the government to increase the amount of regulations. But why would they do that if “deregulation” is always the preferable course of

action? The reason is because “deregulation” in this context does not necessarily mean fewer regulations. Instead, it means “changing the regulatory structure in a way that I like”.

Let’s suppose you are a big financial firm. More bureaucratic procedures impose more costs because of the extra pen-pushers you must employ in order to deal with it all. But, since you are a big financial firm, you can meet this extra expense. Your smaller rivals, however, find it so much harder to meet the expense of dealing with all those regulations. As a result, they become vulnerable and can be swallowed by the larger financial firms. That means that the large financial firms become larger still, until the financial/banking sector is completely dominated by a handful of financial conglomerates that are so very large they have come to have systemic importance for the entire market system.

What does that mean? It means that, should these financial firms ever be threatened with collapse, say, because they allowed fraudulent speculation to completely destroy our faith in money, the consequences of that collapse would be so dire (as if money itself had ‘disappeared’) the government simply cannot allow this to happen. Such conglomerates are therefore deemed to be “too big to fail”. We saw what that meant in the aftermath of the last big crisis in financial markets: the governments scrambled to rescue the banks by turning all that toxic private debt into a public liability that manifested as austerity measures that have blighted the lives of ordinary folk ever since.

No wonder that the banking/financial sector loves this form of ‘deregulation’ that increases the amount of red tape and number of administrators one must employ, since it not only brought about Socialism for the super-rich, but did so in a way that most of us are blind to, simply because we think the common-sense definition of ‘deregulation’ applies in all cases. As Graeber pointed out, “simply by labelling a new regulatory measure ‘deregulation’, you can frame it in the public mind as a way to reduce bureaucracy and set initiative free, even if the result is a five-fold increase in the actual number of forms to be filled in and officious people in offices whose entire job seems to be to provide convoluted explanations for why you are not allowed to do things”.

We can see, from such a comment, another reason why bureaucratic procedures should tend to increase. It’s because, when that happens, there is an increase in the number of jobs available. Those on the left of the political spectrum don’t tend to agree much with those on the right, but there is one thing that is met with universal agreement.

Most of us have heard that Martin Luther King Jr (1925-1968) gave a famous speech in 1963, which has since become known as his ‘I have a dream’ speech. Today it is remembered as a speech calling for inclusivity and equality; that people should be judged, not by the colour of their skin, but the content of their character. But the official title of the march that included this famous speech was the ‘March on Washington For Jobs and Freedom’. Notice the order of priorities there. Notice, also, that whenever an election campaign is run, regardless of whether it is a Leftist candidate or a right-winger, ‘more jobs’ will always be among their pledges.

One thing is for sure; no political party would ever promise to reduce employment and get rid of jobs, as a positive outcome for society. When in power, they may well cut jobs out of some unfortunate necessity (usually put down to the incompetence of the last incumbent) but there

will never be an election campaign based on the promise to reduce the number of jobs available because, by universal agreement across the political spectrum, “more jobs” is always a good thing.

While political parties of all persuasions do agree there should always be more jobs, there is disagreement as to how such an outcome is best achieved. As far as the Left is concerned, the State should intervene, offering assistance to help the unemployed get back into the labour market. As well as this, unions are seen by the Left as protectors of the jobs that already exist.

Notice, though, that these calls for state-funded assistance to find work never also specify that those newly-created jobs should serve some useful purpose. Instead, it’s just assumed that they will be purposeful. Similarly, calls for union protection of jobs never consider the possibility that some jobs just aren’t worth protecting. This is because, in the ideology that dominates the modern employment landscape, there is no such thing as useless employment.

As for the Right, they tend to call for tax cuts, figuring doing so will put more money in the hands of ‘job creators’ in the private sector. But, again, never is it specified that the jobs being created actually serve some useful purpose. Instead it’s just assumed that, if ‘the market’ brought those jobs into being, of course they are useful.

At this point it might be worth thinking about what happened in the Soviet Union. While many find it hard to believe that a Capitalist economy would ever permit a proliferation of bullshit employment, the idea that a Socialist regime would do so is a lot easier to accept. We hear about how an aim to achieve full employment led to such crazy outcomes as having several people assist in doing a job, when only one employee was really necessary. We readily accept that this ridiculous situation actually did happen.

But why did it happen? This did not come about because those at the top sent out directives that stated, “the Soviet Party wants everybody of working age to be employed, so create as many useless jobs as is required to bring this about”. Nor did they say, “full employment should be the thing to aim for, but those jobs should conform to certain standards, standards that we will be sure to monitor, so you’d better stick to them”. No, they just left it up to local officials to meet their targets in whatever way they could. And, as ever, bringing about an ideal on paper turned out to be eminently achievable if you fiddled the numbers and adopted dubious definitions of what ‘job creation’ really means.

Now let’s return to the situation in so-called ‘Capitalist’ economies. Given what was said, about how both the Left and the Right deem ‘more jobs’ as the ideal to aim for, what such political pressure does is to incentivise those who manage the economy to behave much like those who created bogus jobs, due to the directives coming from the Kremlin. It’s just that, as Graeber noted, “the source is more diffuse, and much of it falls on the private sector”.

Of course, in anything that could genuinely be called an ‘economy’, the proliferation and persistence of bullshit jobs would not happen, as that would violate the basic need to increase efficiency and reduce waste. But, should the attitude that more jobs is always better

than fewer jobs become dominant, we may well end up behaving in ways that turn an economy into an anti-economy.

Let's go through a scenario to see how such an outcome might manifest itself. Let's suppose that there is a problem that is having a detrimental effect on people's quality of life. Somebody decides to do something about this, figuring that they can profit from such a course of action as well as do good.

Now, the most economical thing to do would be to eradicate the problem once and for all. However, our would-be entrepreneur realises that, while this is indeed the ideal, actually achieving it lies beyond what is technically possible for the foreseeable future.

Still, while the problem cannot be completely eradicated, our would-be entrepreneur figures there must be a way to service the problem, thereby reducing its negative impact. After some time, he is in a position to offer that service.

The service soon attracts customers who are willing to part with their money because it just makes sense to pay for a service that reduces the negative impact the problem has imposed on their lives. And the customers are not the only ones to benefit from this service. So too do the employees hired to perform the service, for they have wages along with the dignity of knowing they earned their pay doing something beneficial for society.

Since the service is proving commercially successful, competitors are naturally drawn to the problem, hoping to offer an improved or alternate service that goes further in reducing its negative impact. So now, servicing the problem has spawned a whole sector, in which thousands of employees, and maybe more, are employed in some way that services the problem. Some methods don't do as good a job, lose custom and are eliminated through market competition. The viable businesses survive and are incentivised by their competitors to become more viable by being better still at servicing the problem.

At some point in this process, academic types start analysing statistics and drawing up graphs, and they use what has happened so far to imagine what might be in the future. "Look", such speculative reports say, "in the past the problem was really bad. Then, that entrepreneur came on the scene, offering a service that reduced the problem's negative impact. Thanks to that service, a problem that used to be really bad became not quite so bad. Since then, competitors have vied to improve on this pioneering service, and the very best have succeeded in doing so, meaning the problem's negative impact can be seen to lessen more and more as we advance our ability to service it.

"Well, if we extrapolate this trend out into the future, we can predict that a time will come when our ability to tackle the problem will have become so effective, it will be completely eradicated. Won't that be wonderful? Imagine it: a world in which the problem no longer exists!"

But some are imagining this outcome and, to them, the complete eradication of the problem is not an outcome to be hoped for and pursued, but something best avoided. Why? Because there is, by now, a very large sector of the economy devoted to servicing the problem. So many businesses earning profit, and they will do so for as long as the problem exists to be

serviced. If it was eradicated completely, though, the profit-earning potential would also be eradicated, and all those jobs would disappear. After all, there would no longer be any need for them to exist.

“Let’s put it this way”, these thinkers say, “imagine there was a leaking roof. What should be done about it? Repair the damage so that it leaks no longer? OK, but if you did that, you’ll no longer be able to extract any more profit from the situation, nor provide ongoing employment. What if, instead, you just service the problem? You place a bucket to catch the drips, and you get paid to periodically empty the bucket. That’s no one-off payment, but being paid again, and again, and again. Not only that, the ‘bucket emptier’ is never out of a job. Maybe, we should even let the roof spring more leaks, thereby requiring more buckets and thus more jobs for people to do? After all, more jobs is always preferable to fewer jobs, right?”.

“Now, the repair/bucket scenario is for illustrative purposes only. Obviously, too few people are such suckers as to fall for such a scam. What we need to do is to find more subtle ways to convince the public that the problem remains an ongoing issue that we can only service, not eradicate altogether. We have to ensure that, on some level, the problem persists, or at least convince enough people that there is a problem that needs servicing, whether or not there actually is a problem or ways to eliminate it once and for all. We have to do this, because millions of jobs depend on it”.

So whereas, so long as there was no chance of ever eradicating the problem entirely, there was no issue with improving the service so that it really looked as if, in the future, the problem would be eradicated, now that its complete eradication is technically possible, the entrepreneurial emphasis has to change. The services have to be made deliberately inefficient, not as effective as they technically could be, and customers need to be persuaded that the problem exists and that they really need to service it. Whereas, in the past, entrepreneurs were doing the economical thing of servicing a real problem to the best of their ability, now they have turned to the anti-economic practice of tricking people into believing they are plagued with a problem that doesn’t (or shouldn’t) exist, and true technical efficiency is being deliberately avoided, just so the problem never really goes away, taking the ‘need’ to service it and all the profit and employment that is generated in the process.

But, given that Capitalism is all about doing things in the most efficient, economic way possible, and the most economic and efficient way to deal with a problem is to eradicate it entirely, surely my scenario was purely hypothetical and nothing like this ever really happens?

One way to counter that objection might be to consider the work led by John Carney, who is the manager of something called ‘Continuous Assisted Performance’. This is a research program whose purpose is to turn soldiers into supersoldiers by eliminating certain aspects of biological existence that impact negatively on our ability to operate in a combat scenario.

So, for example, CAP is researching ways for soldiers to remain active for a whole week without feeling the grim effects of sleep deprivation. Another problem afflicting military performance is pathogens that cause sickness. Another program of Carney’s, the ‘Unconventional Pathogen Countermeasures’ program, hoped to find a way to make people totally resistant to pathogen-based illnesses. As Carney explained, the goal was to develop

a drug that can counter “anything that infects you. It’s not going to cure Alzheimer’s disease or arthritis. But anything that came from the living world that can cause disease in you”.

Not only did Carney hope to find such a miracle drug, he actually did. What brought this about was something called ‘Genomic Glue’. Once it has recognised the genome of a pathogen, it sticks so tightly to it, there is no way for the genome to be read, translated, and replicated. When pathogens are attacked with those ‘anti-genomic’ drugs (as they are known) they are unable to develop resistance against them, no matter how hard researchers try to induce it. One such anti-genomic drug reached the last stage of testing in mice- mice that never got sick, whether they were exposed to malaria, smallpox, flu, or even the plague.

One has to wonder: what ever became of these wonder drugs? How come some convenient pill or injection or something that stops all pathogens in their tracks is not commercially available? How come we still catch the common cold and have to rely on measures that merely dampen down its effects on us, but never make us invulnerable to the sniffles?

Well, any medical treatment has to meet incredibly stringent safety protocols before it can be deemed safe for human use. Maybe, for some reason, ant-genomic drugs can’t be made safe enough?

But I would suggest another reason why such a miracle drug never became a commercial product. Although it is referred to as the ‘healthcare sector’, if you think about it, it is really a ‘sickness and disability care sector’. After all, how many of us go see a doctor, or ask to be checked into a hospital, when we feel fit and healthy? Just about the only fit and healthy people who seek the assistance of medical professionals are women in labour. The rest of us only need the services of such experts if there is something biologically wrong with us.

In other words, the so-called ‘healthcare sector’ exists only because we can become sick and disabled. It is a sector that employs millions of people, and which manufactures countless aids and remedies that lessen the impact of illness and disability in all its forms. So long as illness and disability exist, so do all the jobs and profit-making opportunity that comes with servicing their negative effects.

But, if somebody were to mass-produce some wonder drug that could make us all resistant to pathogen-based ailments, that would wipe out so many jobs, and so many ways of profiting off of the misery caused by illness. If your business model depends on people being sick and disabled, you want people to remain sick and disabled. As in my scenario, if it is never a good idea to have fewer jobs, then it makes no sense to pursue an idea that could lead to such an outcome, even if that is the most economic thing to do. Better to do the anti-economic thing of maintaining what are, technically speaking, useless jobs offering inferior products and services. Needing people to remain sick and disabled certainly does not necessitate doctors deliberately making people sick just so they can sell them remedies. This is not necessary, because the negative externalities coming from other sectors cause more than enough pollution, social ills etc for medical experts to treat. But, since the primary driving force of the medical industry is to seek perpetual, growing profit, and, generally speaking, ‘more jobs not fewer jobs’ is regarded as how things ought to be, the sickness and disability care sector will not pursue any idea that would close down lots of profit- and job-making opportunity to its logical conclusion.

Still, some readers may continue to suspect that my scenarios and suspicions have nothing to do with reality. So, let's now consider an acknowledgement that a part of the United States' healthcare system really does contain a great many useless jobs; an acknowledgement that came from the nation's highest authority.

I am referring to Barack Obama (b.1961) who, during his presidency, felt he had to address concerns over how wasteful and inefficient the private, for-profit health insurance system is, compared to the social healthcare models adopted by other countries.

"Everybody who supports single-payer healthcare says, 'look at all this money we would be saving from insurance and paperwork'. That represents one million, two million, three million jobs [filled by] people who are working at Blue Cross, Blue Shield or Kaiser or other places. What are we doing with them? Where are we employing them?"

What's most interesting about this statement are the things not said. For one thing, it makes no reference to the sheer political power the private healthcare industry has. No doubt had such reasoning been applied, then it would have been presented in much the same way the bailouts following the last great financial crisis were justified. They were necessary, we were told, because otherwise millions of employees in the financial sector could have lost their jobs.

If such reasoning had been applied, a good response would have been to ask why it is only those businesses that have immense political power, who have most blurred the line between state- and corporate bureaucracies, that have jobs worth protecting no matter what the cost. Let's face it, when layoffs are imminent in other jobs, no such support is offered, even though such jobs might actually be good for society, rather than useless or harmful.

Which brings me to another, more important, thing that was not said, You will recall that Obama was responding to calls to junk the private, for-profit health insurance system in favour of a socialised healthcare system. Basically, the argument is that socialised systems run more efficiently than the market-based system currently operating in the USA, because all those competing private firms lead to lots of unnecessary paperwork and re duplication of effort. We don't see anything like this level of wasteful resources in socialised healthcare.

You can see how, in Obama's statement, he does not even try to refute the claim that socialised healthcare would work more efficiently. He could have said, "everybody who supports single-payer healthcare says, 'look at all the money we would be saving'. Nonsense! Nothing could possibly beat the private, for-profit model because..." and then go on to explain how and why it beats all alternatives.

But no, he doesn't do that. Instead, he basically says that yes, we would indeed save a great deal of money if the USA's market-based system was scrapped in favour of socialised healthcare, but along with those cost savings would be millions of job losses.

In other words, although he does not say so outright, we can infer that President Obama was claiming that the sheer inefficiency and waste generated by the current system, was actually a good thing. Replacing it with a more efficient system would be bad, because then millions

of useless office jobs would be eliminated and we'd have the trouble of trying to find something else for those useless paper-pushers to do.

Really, we should not find such conclusions in any way shocking. This is just the sort of thing to expect from a culture that always places 'job creation' among the highest priorities. Nevertheless, people do find it shocking. Indeed, more than that, they find it impossible to believe, since it's an outcome contrary to the way Capitalism is supposed to operate. And yet, there it is, confirmation, from the highest authority, that a major sector of the American (anti)economy is rife with bullshit jobs.

Even if you agree with Obama that at least one sector of the US economy has produced millions of useless jobs, that still leaves open the question of how such a situation ever came about.

To begin to answer that question, we should return to an observation we made just now, about how the State always seems most keen to protect jobs whose businesses have gone furthest in blurring the line between state- and corporate bureaucracies.

Such businesses could be said to be part of a trend, a trend that consists of a gradual fusion of public and private power into a single entity. We can make an educated guess as to what purpose such an entity will serve once it emerges fully. Its main purpose will be to create a world rife with rules and regulations, not really to simplify life and bring clarity to our daily dealings, but rather to extract wealth in the form of profits. Such an educated guess is based on the effects this emerging entity has already had on our lives- the way that pages and pages of legalistic fine-print now accompany the most ordinary documents and how, more and more, our days are spent dealing with paperwork. By the time this entity has fully matured and the fusion of public and private corporate power is complete, we will find ourselves in what Graeber has called the 'Age of Total Bureaucratization'.

When did this trend towards an age of total bureaucratization begin? Well, it all happened as a result of a shift in class allegiances in corporate America. As a result of this shift, the managerial staff in major corporations went from seeing themselves in a de facto alliance with their own workers (albeit an uneasy kind of alliance) to becoming more aligned with investors. The beginnings of this trend can be traced back to the late seventies, more or less coinciding with the point where public discussion of bureaucracy went into decline.

During the War, the USA achieved full employment for the first time since the 1920s. When the war was over, there was a lot of concern about the possibility of a postwar recession, which the government sought to avoid through various acts and initiatives. The acts included the Employment Act of 1946, which "committed the federal government to maintain maximum employment and with it a high level of aggregate demand". The initiatives included the GI bill, an education initiative that helped upgrade the workforce, thereby providing a large pool of white-collar workers for the administrative and management-type roles that corporations increasingly depended on.

As well as anxieties about recession prompting the State to push for high employment, conditions enabled by the war played a part in other ways. For one thing, industry in America was still largely intact, unlike that of Europe's. The government invested heavily in the



business sector, particularly through highway construction and defence-related expenditures. Also, wartime research had helped launch an era of technological innovation, such as IBM's development of the first general-purpose computer. Finally, wage freezes had been in place during the war and this had required employers to use fringe benefits with which to attract employees. This favoured the largest corporations, who could afford to offer greater benefits than their smaller rivals.

But those corporate benefits were still costly, even forty or fifty years ago. This might have discouraged their mass adoption, had it not been for militant unions during the post-war period. It made sense to the larger corporations that if they treated their employees well, that would improve emotional attachment to the company, and the threat of socialism would be avoided.

And so it came to pass that the early postwar decades enjoyed economic growth and price stability. The large corporations delivered on their promise of long-term prospects, meaning that anyone fortunate to land a job there felt secure, and expected that their own prosperity would rise along with the company's fortunes.

You can see, then, what employment in a large, bureaucratic mega-firm meant, up until the late seventies. It not only meant a promise of employment throughout the whole of one's working life, but also that all those involved in the day-to-day concerns of actually running the business (workers and managers alike) saw themselves as united in a common front against the investor class, those meddling owners and investors, who were viewed, at least to some extent, as outsiders.

But, what the upper echelons of the US bureaucracy did, from the seventies onwards, was to strategically pivot away from an uneasy de-facto alliance with their workers, and align with shareholders and, eventually, the financial structure as a whole.

The 1970s ended in recession, and during this period two of America's largest companies- Chrysler and Lockheed- survived only because of government bailouts. The new decade began with inflation approaching fifteen percent, and employment over eight percent. Gold prices were soaring, a trend that is often associated with investor pessimism. Indeed, there was a general mood of unease regarding the United States' economic prospects, as the stock market went into the worst slump since the 1930s.

Amidst all this financial trouble, people began looking at those large corporations with their many benefits packages and saw, not businesses to be inspired by, but rather dinosaurs to be blamed for worsening conditions. Increasingly, people saw large corporations as bloated and inefficient, handicapped by too much bureaucracy, and a workforce with an over-inflated sense of entitlement. It seemed as though America was increasingly unable to compete against more nimble competitors, most notably from Japan and West Germany.

But what really helped the rise of the lean-and-mean model of the 80s and 90s was certain federal and state regulatory changes, coupled with innovations from Wall Street. The Federal and State regulatory changes brought about an environment in which corporate takeovers and mergers could flourish. For example, there had been laws protecting local companies from out-of-state suitors, but these were declared unconstitutional by the Supreme Court.

Also, President Reagan appointed an attorney who had previously defended large corporations against antitrust suits to be the head of the Department of Justice's antitrust division. This all but guaranteed that there would be no interference with the growing acquisitions and mergers movement, from the federal government.

Meanwhile, Micheal Milken (b. 1946) of the investment house Drexel Burnham, created high-yield debt instruments that critics denounced as 'junk bonds'. These allowed for much riskier and aggressive corporate raids. These, along with the state and federal regulatory changes mentioned earlier, triggered an era of hostile takeovers, leveraged buyouts and corporate bustups.

So what these changes did, was to transform the corporation from its traditional image of a task-based entity engaged in some collective activity defined not just in terms of profit but in its overall contribution to society, to one in which shareholder value was the be all and end all. Everything else, including pride in the product in some cases (consider, for example, the internal email sent by an S&P employee which read, "let's hope we are all wealthy and retired by the time this house of cards falters") was to be disregarded. All the focus was on the short-term raising of stock prices.

This marked change in attitudes was reflected in comments made by the Business Roundtable in the 1990s. At the start of the decade, Business Roundtable said of corporate responsibility that they "are chartered to serve both their shareholders and society as a whole". But, within seven years, the message had changed to "the notion that the board must somehow balance the interests of other stakeholders fundamentally misconstrues the role of directors". Instead, the role of directors, and the point of the corporation, was to look after the shareholders, and all other stakeholders like employees and customers, were there only to serve to boost the value of their stocks and shares.

Certainly, the employee of 80s and 90s corporate America would have recognised their lack of importance in what was an increasingly insecure environment. Finance Capitalism, by that time, had transformed the corporation, from a paternal entity rewarding loyal workers with security and regular wages, to aggregates of financial assets that existed only to be merged, broken up or destroyed, according to the whims of executives chasing short-term shareholder profit.

Now, what happened during this period of merges and acquisitions, corporate raiding and asset stripping, is best described as a kind of double movement, because not only did the financial structure of the American economy become more corporatised, but also, corporate management became more financialised. Not surprisingly, then, it became nigh on impossible to distinguish between the investor class and the executive class. A term such as 'Financial Management' is a good case in point, since it simultaneously refers to how executives in corporate bureaucracy run their firms, and also to how investors manage their portfolios.

Not that individual investors played much of a significant role by the 90s, since by that time they had largely been replaced by investment banks and hedge funds. Something else that was replaced by then was the way to win the loyalty of one's workforce. Increasingly, such allegiance was brought by paying employees in stock options.

Some observers, among them Noam Chomsky (b. 1928) and Jacques Fresco (1916-2017), have noted how corporations tend to have the same organisational structure as fascist dictatorships. In other words, there is a strict hierarchy that demands tight control at the top and obedience at every level. Granted, there may be a measure of give-and-take, but the line of authority is usually clear. Others, perhaps most notably Micheal Foucault, have argued that prisons and factories came in at more or less the same time, and their operators consciously borrowed each other's control techniques.

For example, in the late 18th century the social theorist Jeremy Bentham (1748-1832) designed the 'Panopticon'. This was a prison built in such a way as to keep all inmates under the gaze of a single watchman. True, it was impossible for a single observer to keep an eye on all inmates at once, but the panopticon was designed in such a way as to make it impossible for any individual to know if they were currently being watched or not. Bentham believed that, once placed under such conditions, inmates would effectively mind their own behaviour.

Whatever became of the panopticon? They are everywhere, only we now tend to refer to them as 'offices'. Many a white-collar employee (those below the executive level, at least) spend their in-office hours in a cubicle, most likely of a one-size-fits all, institutional-gray design that can be set up, reconfigured and moved at the whim of those higher up the line of authority; a constant reminder of the employee's own lack of security and importance to the corporation. Moreover, cubicles are (in the words of one employee) "mechanisms of constant surveillance", in that they lack doors and are usually arranged so that managers can spy on whoever they wish to spy on, at any time. The employees are usually made to work facing a wall, so they cannot know they are being watched unless they look over their shoulder (thereby risking an admonishment along the lines of "you're here to work, not look over your shoulder!"). The message such an environment sends is clear: We can see what you are- and are not- doing, so work harder or we'll replace you".

As conditions for the average employee diminished and prosperity for those at the executive level soared to dizzying heights, America in the 80s and 90s had pretty much returned to the highly polarised conditions of the 1920s. David Leonhart (b. 1973) of the New York Times reckoned, "it's as if every household in that bottom eighty percent is writing a check for \$7000 every year and sending it to the top one percent".

But whereas, before the Great Depression, there had been campaigns speaking out against the excesses of the wealthy and the oppression imposed on the poor, the prosperity gospel that had begun in the 19th century and been amplified through 20th century consumption culture, delivered a markedly different message. There was nothing amiss with a deeply unequal society. Anyone at all stood to become as wealthy as the top one percent. Just remain resolutely optimistic and all will be well.

Within this highly unstable corporate culture, the positive-thinking ideology that had begun with New Thought found an environment to which it was well suited. All kinds of life coaches and motivational gurus emerged, spreading the prosperity gospel and applying management speak to disguise what were worsening conditions. For example, following a merger, Chase-Chemical employees who lost their jobs were not laid off, or at least, not referred to

as employees who had been laid off; they were instead referred to as 'saves'. Other corporations going through mass layoffs in pursuit of increasing shareholder value in the short term, referred to those made redundant as 'non selected employees'.

Over time, the message that life coaches and motivational gurus delivered became one in which everyone was supposed to consider the deterioration of work and its rewards in corporate America as a good thing overall. Corporations paid substantial sums of money to the motivational industry, whose members told employees that to be laid off was an opportunity for self-development, and that the volatile state of the jobs market was a welcome breeding ground producing 'winners'.

The books and seminars these motivational 'experts' brought to corporations were often mandatory for any employee who wanted to keep his or her job. Workers were required to read books like 'The Ultimate Secret to Getting Everything You Want' by Mike Hernacki, or 'The Secrets of the Millionaire Mind' by T. Harv Ecker (b. 1954). The latter encouraged participants of positive thinking to place their hands on their heart and say out loud, "I love rich people! And I'm going to be one of those rich people too!".

Along with being made to conform to the rules and worksheets of the self-help literature, employees in corporate America found themselves having to attend Native American healing circles, Buddhist seminars, fire walking and other ritualistic practices, all in the name of maintaining a feverish pitch of optimism among worsening conditions. Such was the level of religious-like devotion to the prosperity gospel and positive thinking, that a 1996 business self-help book reckoned, "if you want to find a genuine mystic, you are more likely to find one in a boardroom than a monastery or cathedral".

By the time the 70s gave way to the next decade, news reports on television started to display the latest stock quotes. Such data crawled along the bottom of the viewer's screen throughout the news' broadcast. They were put there for a reason, which was to encourage a universal attitude that one should look at the world through the eyes of an investor. Once awoken to this kind of conscious awareness, anyone could come to own a piece of capitalism, if only they were willing to put in the work involved in participating in retirement and investment funds. The promise being made here was all too similar to the response the president of OCP made, in the film 'Robocop 2', when it is pointed out that a whole city under the control of a single, private mega-corporation is anti-democratic. "Anyone can buy shares in OCP and own a part of the city. What could be more democratic than that?". Similarly, it was being claimed that everybody could benefit from financialisation in the age of total bureaucratisation.

The problem was, this was a lie because, in actual fact the magic circle only really widened enough to include higher-paid professionals, along with the corporate bureaucrats themselves. The middle classes (let alone the working classes) would never really have that much of a stake in finance-driven capitalism. It was, however, important to convince such classes that they did have a stake (regardless of the reality) for the simple reason that no political revolution or cultural transformation can succeed without allies.

It was the more liberal members of the professional-managerial elite who did most of the work in convincing the middle classes that they, too, stood to benefit from finance-driven

Capitalism. Not surprisingly, such people tended to be those who came from thoroughly bureaucratised environments. They became the social base for left-wing political parties, or rather, what passed as such. This was a major reason why so many actual working-class people either dropped out of politics altogether or, if they did participate, they cast protest votes for the radical Right. The left of politics had been taken over by the kind of characters working-class folk have traditionally loathed.

As David Graeber commented, “this was not just a political realignment. It was a cultural transformation. And it set the stage for the process whereby the bureaucratic techniques (performance reviews, focus groups, time allocation surveys...) developed in finance and corporate circles came...eventually to pervade almost every aspect of everyday life”.

Since the financial sector obviously played a major role in bringing about this transformation, and given also that bullshit jobs are generated mostly (but not exclusively) in the FIRE sector, this is a part of the economy that deserves most scrutiny if we are to understand why bullshit jobs are proliferating.

We should also familiarise ourselves with the main categories of bullshit jobs. One such category should sound familiar, as we’ve talked about it already. This is the ‘Box Ticker’. In many contemporary jobs, one is required to fill in paperwork attesting to the fact that certain actions have been taken. This necessity is not, in and of itself, bullshit. There may very well be good reasons, in some situations, to keep records of what actions have been taken. However, such box ticking becomes bullshit when it is seen as far more important than the actions themselves, or when engaging in such box ticking rituals is used as a way to make it seem as if something is being done when, in fact, it is not.

So, for example, workers employed to entertain residents in care homes have, at times, complained that so much time has to be devoted to getting the residents to fill out surveys determining how entertained they have been, that there’s precious little time left for any real entertainment. As one worker who had to do nonsense of this sort commented, “completion of the forms was by far the most important part of my job in the eyes of my boss [but it] just annoyed the residents, as they knew it was just bullshit paperwork and no-one was going to care about their individual preferences”.

Another major category of bullshit job is that of ‘Duct-Taper’, which refers to any job that exists to deal with ongoing problems that really should be fixed, thereby rendering the ‘duct-taper’ superfluous to requirements. But, for whatever reason, the company finds dealing with its consequences less hassle than fixing the actual problem.

The software industry has created a situation in which duct-taping has become necessary. Software developers tend to engage in the most creative aspects of their profession in their spare time, outside of the workplace. For obvious reasons, profit-chasing businesses, always eager to save money in certain situations, encourage this practice since such employees are doing their work for free.

However, since each employee is doing such creative work on an individual basis, what results are component pieces that don’t really fit together. If, instead, such workers had been allowed to collaborate in-work on an integrated project, no doubt that would have resulted in

systems that work a great deal more harmoniously. But, because they are expected to work for free, alone, on the more enjoyable aspects of their job, what each software developer produces has incompatibility issues with the work undertaken by other developers. So, guess what they are paid to do, when actually in work? They are paid to eradicate all the bugs, glitches and other software issues that prevent the various parts of the system working as one.

Now let's move onto another major category, which is the 'Goon'. In popular culture, such a term usually refers to gangsters and other members of the criminal underworld. But, since 'Gangster' is more of an act than a profession, we shouldn't say that 'goons' of this classic type have bullshit jobs at all. Instead, 'Goon' in this context refers to any job with these two characteristics: That there is an aggressive element to the work and, more importantly, that the only reason such people are employed is because other businesses/ organisations employ them.

Take national armed forces, for example. Why do we need such professionals? We are told that professional military personnel are required for the nation's defence. But just about the only thing that can seriously threaten the existence of a State, is another state with sufficient military muscle. If no state had armed forces, armed forces would not be necessary. Or rather, this is true of armed forces equipped with such high-tech gear as fighter jets, destroyers and nuclear submarines. Occasionally, civil unrest might become widespread enough to be deemed a threat in need of suppression by the nation's leaders, but dealing with such uprisings does not require the most powerful military technologies.

This is why Mexico has never wasted money on the sort of 'defence' other countries think they need. Given its geographical location, there are really only two countries that could enter into hostilities with Mexico, namely the United States and Guatemala. Mexico wouldn't need fighter jets to gain victory over Guatemala, and the United States can bring such overwhelming military might, a conflict with it would lead to defeat no matter what defences Mexico could muster. So the Mexican state doesn't waste money on such expensive toys, but only what force is adequate to deal with domestic unrest.

Now, it seems to me that calling armed forces 'goons' in the BS job sense is a controversial thing to do. Yes, having such a high-tech military force at your beck and call when no other country does and, hence, could not possibly threaten you, would be a ludicrous waste of resources. But, on the other hand, being one of the few countries not to have armed forces, while all other nations do and, furthermore, their economic model is one of aggressive, competitive, acquisitive growth, well, that just seems ill-advised to say the least. Given the world we have created, other such 'Goon' type jobs- corporate lawyer, PR specialist, lobbyist, telemarketer, professions like that, are also sadly 'necessary'. But, ultimately, all such 'goon' type jobs exist only as a consequence of dynamic one-upmanship. "Other firms employ them, so we had better employ them as well". They have no other justification for existing.

If the sort of jobs that come under the category of 'Goon' leads to some doubt over whether these are really bullshit jobs, the sort of role filled by the next category should leave no room for doubt. This is the 'Taskmaster'. This refers to any person with an official superior position who, in theory, is there to allocate duties and supervise underlings, but in practice has no

reason to do so, since those underlings know perfectly well what to do and how to do it. One such person who did such a job had the official title of 'Assistant Localisation Manager', and this is how he described his duties. "My job is to oversee and coordinate a team of five translators. The problem is that the team is perfectly capable of managing itself: they are trained in all the tools they need to use and they can, of course, manage their time and tasks".

So what did this 'Assistant Localisation Manager' actually do? By his own admission, he mostly fiddled paperwork so that it would appear to the central office (based in Japan) that his team (based in Ireland) were very busy, and so nobody should be laid off. If that does not define 'bullshit job', I don't know what does.

The final major category of 'bullshit job' is that of 'Flunky'. This may be the oldest kind of bullshit job, as something very much like it has been around since feudal times. A lord's estate relied on people with certain practical skills. Stonemasons and carpenters carried out necessary maintenance and repairs to the castle. Gardeners grew vegetables in the kitchen garden, which cooks added to meals. Guards were on standby, just in case a rival lord or peasants' revolt should threaten the safety of the estate. All such people had real work to do, since abandoning such duties would have led to the estate falling apart.

But, along with people doing necessary work like that, you also had plenty of people doing something else. You see this kind of person all the time in dramas set in this period. They are always in the background, just standing to attention.

These people are not guards, they are 'flunkies'. The only purpose they serve is to massage somebody's ego. Their role is to merely stand around looking regal while the lord holds court, or to stride gravely in front of him as he went from one place to another. The point, we can safely say, is that other folk would see a lord accompanied by this impressive looking entourage wearing flashy uniforms and think "well, obviously he is a very important fellow".

You might think the 'flunky' role disappeared from the face of the earth when feudalism ended, because surely a ruthlessly lean and mean economic system like Capitalism would not waste money on hiring minions and sycophants who are only there so some authority figure can play at being more important than he really is.

But no, such roles still exist. For example, in some places you have to deal with plenty of customer inquiries and so, in such businesses, it makes good practical sense to hire a receptionist to sit at a front desk and handle calls. There are also businesses where the phone hardly ever rings. As one whistleblower testified, "I worked as a receptionist at a Dutch publishing company. The phone rang maybe once a day".

Well, if the phone rang only once a day, if indeed it rang at all, why pay somebody to be a full-time receptionist? Why not just have any employee who is near the telephone and not too busy, pick up on that rare occasion when a call needs answering? Because, this 'receptionist' was not really a receptionist at all, but a flunky. They were hired merely to sit at a desk and make some higher-up look important. "Oo they need a receptionist to help handle all their work, just like a big-shot in the world of business!".

On the other hand, sometimes a flunky does have real work, but only because some higher-up keeps offloading their own work onto them. As one such person commented, “I was there only because the HR specialist was lazy and didn’t want to leave his desk. I was an HR assistant. My job took, I shit you not, one hour a day...the other seven or so hours were spent playing 2048 or watching YouTube”.

This testimony is ‘shocking’ for two reasons. Firstly, given the sheer efficiency at which Capitalist firms are supposed to operate, it seems incredible that any business would waste money hiring a full-time staff member who spends seven out of those eight hours watching YouTube and playing videogames.

The second reason it is shocking, is because of that person’s attitude to her own ‘job’. When we generalise about people’s attitude to work, and particularly when we think about the ‘unemployed’, we tend to assume that people are lazy so-and-sos who will shirk their duties at every given opportunity. Right-wing news outlets are always campaigning to reduce social support and increase draconian measures to force the ‘workshy’ off their backsides and back into employment.

If people really were the lazy, workshy types populism characterises them as, then you would have thought that anyone who has a job where you only have enough work to fill one hour, and for the other seven hours you play games and watch videos, would consider themselves to be very lucky indeed. But, when you hear the testimonies of those who have landed a flunky-type job, the impression that they have the cushiest, best job imaginable hardly ever comes across. Instead, you get the impression that they are confused, resentful and bitter, like they wanted to do something useful in their job, and detest the reality, which is that they are paid good money for no practical purpose whatsoever.

The fact that nonsense jobs like this often pay well answers one question that naturally arises, which is: why would somebody continue to do such a job if it rankles so? As we shall see later, there is an inverse correlation in modern employment, between the social utility of work and levels of pay. The more your job benefits society, the less you are paid. The more pointless or harmful your job is, the more you are paid. So, quitting a bullshit job and doing something more useful instead often means taking a serious reduction in income. Many people feel as if this sacrifice is too costly, so they carry on being paid to do not much of anything.

We also have to wonder, given the reputation capitalism has for being ‘lean and mean’, how come around thirty seven percent (perhaps as much as fifty percent) of employees feel their job has no good reason to exist?

The main reason this is happening is because, sometimes, the market brings about conditions in which this sort of thing can happen. In 2006, a scandal broke out in the UK over something known as Payment Protection Insurance or PPI. What happened was that a great many banks had suckered their clients into signing up for insurance policies they could never have wanted, because they were so disadvantageous. Certainly, the British courts thought so, because they ordered much of the money made from miss-selling PPI returned.



The result of this ruling was that a whole new industry was brought into being, the purpose of which was to resolve PPI claims. This bureaucracy, set up to locate claimants, process claims and pay out appropriate sums of money, employed thousands of people and handled a very large sum of money, since hundreds of millions had been set aside to compensate all those who had been scammed.

But, once this bureaucracy was set up, another scandal became apparent, which was that at least some hired to process claims were doing their job in a deliberately inefficient way. Why would they be dragging their feet? Because, as David Graeber explained, “since the money that pays their salaries ultimately comes from the same pot, they have no particular interest to distribute the spoils effectively...when a profit-seeking enterprise is in the business of distributing a very large sum of money, the most profitable thing to do is to be as inefficient as possible”.

OK, well, think about that description of “a profit-seeking enterprise in the business of distributing a very large sum of money”. How interesting it is to note that the one sector of the economy that best fits that description is the FIRE sector, and that this also happens to be where most bullshit jobs are found.

Remember, that what the FIRE sector does, simply put, is to create money by making loans. Once that money is ‘made’, it is then moved around, often in ways said to be too complex for us average folk to really understand, and every time a transaction is made, another cut is extracted out of that debt/money. The more complex this system is, the more regulations and bureaucratic procedures there are, then the more opportunities for wealth extraction there will be. After all, “when a profit-seeking enterprise is in the business of distributing a very large sum of money, the most profitable thing to do is for it to be as inefficient as possible”.

It’s a rather depressing thought, this understanding that a major sector of what is called ‘the economy’ should be operating like one big scam, wasting resources and human potential, just so this ongoing fraud can be obscured under a tangle of bureaucratic procedures. Another depressing thought is that, as we progress towards an age of total bureaucratisation, the more the administrative mindset invades and complicates our lives.

This is most clearly seen in education. There was a time when it was assumed that hands-on, practical experience was the best way to acquire the competence required of many professions, and having to first go through higher education was simply unnecessary. The situation is quite different now, because one is required to gain a formal qualification such as a degree before one can be considered for just about any job.

As is typically the case with any bureaucratic imposition, this requirement is supposedly a way to dispense with those cases where insider knowledge and “who you know, not what you know” gets you ahead, replacing all that with mechanisms that are fair and impersonal. And, just as typically, the actual result amounts to the exact opposite, because the maze of paperwork that results is something only the professional-managerial class really know to negotiate. So, if you’re the son or daughter of a doctor or lawyer, it’s likely your parents will be able to access all the grants, fellowships and student funding there is to be had.

But, what if your parents are not of the professional-managerial class and, therefore, given their family resources, actually in need of such assistance? In that case, you’ll likely be

unable to navigate the maze of paperwork between you and the support you need, and so you'll go through higher education with minimal to no support, working multiple jobs in an attempt to pay your way through college, and when you do graduate, you leave with a huge burden of debt. Henceforth, a large chunk of whatever income you do earn in your professional life will be siphoned off, each month, by the financial sector.

There may have been a time when corporate profits in the USA came mostly from commerce or industry. However, that's no longer really the case. Increasingly, such profits come from finance and that means, ultimately, that they are derived from other people's debts.

Rather than people falling into debt by accident or carelessness, this situation is engineered by a combination of public and private power. As a result, not only are debtors compelled to manage their own lives as if they were themselves a corporation (all that struggling to try and balance one's accounts) but, also, the government itself has become the main mechanism for extracting the profits the financial sector expects. As Graeber pointed out, 'if one tries to default on one's loans, the entire legal apparatus leaps into action, threatening to seize assets, garnish wages, and apply thousands of dollars in additional penalties'.

As well as corporate profits being increasingly derived from 'finance' (read: "debt") the profits from banks and credit-card companies come increasingly from issuing fines, fees and penalties. Now, in what situation are people most likely to make some error which necessitates the issuing of such penalties? One where the bureaucratic structure works in a clear, simple and precise way? Or, one in which a growing tangle of rules and regulations results in multiple pages of legalistic fine-print and a maze of bureaucratic procedures that is difficult to negotiate? The more a country's legal system moves towards the latter kind of bureaucracy, the more it should be seen as a system of arbitrary extraction, rather than something concerned with the rule of law. This is because any genuine legal system treats everybody with fairness, impartiality, and equality. But this system of extraction, even though it comes dressed in a language of rules and regulations, simply does not.

Consider what happens when a major bank has been caught engaging in financial fraud. United States' prosecutors don't want to have to go to trial and so, instead, they'll usually negotiate a settlement. As a result of this settlement, the financial institute that committed the fraud will have to pay a fine, which they are happy to do. Why? Because, as one expert insider explained, "their lawyers simply say they are not going to contest the charge, but if they pay, they haven't technically been found guilty of anything".

How large is this fine that the fraudulent bank has to pay? One would naturally assume that it would be greater than the amount of money made by committing fraud, because only that would teach them not to commit fraud again. It certainly cannot be substantially less than the money made out of fraud, because that would not be any kind of disincentive, but more like a bribe paid to the government when it catches banks committing fraud.

So, is it more? Not according to that expert insider. "Usually it's substantially less. I'd say more like 20 to 30 percent on average".

In other words, if a bank steals hundreds of millions of dollars running a scam of some kind or other, the US legal system will likely as not negotiate a deal that lets the bank keep seventy to eighty percent of that dirty money.

But, what happens when you are just an ordinary American, living paycheck to paycheck, and circumstances mean you end up going overdraft by five dollars? No fraud, no malicious intent, just the sort of bad luck anyone at or near the poverty level often has? Well, in that case, the penalty you'll be issued with will be substantially more than your overdraft, like an \$80 fine or something like that.

Whereas the legal system in the USA has gone from a fair and impartial judge of wrongdoing to a mechanism of arbitrary extraction, the corporate world has gone from being run rationally to...something else.

One upon a time, the CEO of a large corporation would have been the epitome of the cool, rational planner. He or she would have been trained in 'management science' and probably worked his or her way up within the ranks of the organisation so that, by the time they reached the top, the CEO had mastered every aspect of the business. Once there at the apex of the corporate pyramid this highly trained, rational specialist would have carried out the central belief of the college-educated middle class, with its mandate of progress for all and not just the few.

But as the corporate world became more volatile toward the end of the 20th century, questions began to arise over whether such rationality and level-headedness was best for delivering the new goal of short-term boosts to shareholder value. In 1999, Businessweek captured the changing mood when it asked, "who has time for decision trees and five year plans any more? Unlike the marketplace of twenty years ago, today's information and services-dominated industry is all about instantaneous decision making".

These changes brought about a transformation in leadership. With the business world now seen as so tumultuous and complex as to "defy predictability and even rationality" (as one article in 'Fast Company' put it) a new kind of CEO emerged, one driven more by intuition and gut feeling. The new CEO was less of a manager with great experience obtained from working his way up the company hierarchy, and more of a flamboyant leader who had achieved celebrity status in the business world and was hired on the basis of his showmanship, whether his prior role had anything to do with the new position or not.

A 2002 article in Human Relations described the celebrity CEO as being someone with "a monomaniacal conviction that there is one right way of doing things, and believe they possess an almost divine insight into reality".

In other words, as these developments played out, the corporate executive became increasingly indistinguishable from a cult leader. This transformation was no doubt helped by the replacement of old-style management consultants with motivational gurus. Pastorpreneurs (more on these later) celebrity motivational gurus and flamboyant CEOs socialised together, advised one another, and in so doing created a business environment mixed with irrationality. According to Barbara Ehrenreich, "forsaking the 'science' of

management, corporate leaders began a wild thrashing around in search of new ways to explain an increasingly uncertain world- everything from chaos theory...to eastern religions”.

It was certainly a time of increasing uncertainty. With the likes of Tom Peters (b. 1942) (described by the LA Times as “the uberguru of management”) offering advice like “destroy your corporation before a competitor does!”, everybody’s position in 90s corporate America was precarious. But whereas the white-collar precariat lived with the prospect of being made redundant at any time while shouldering the burden of increasing debt, the focus of boosting shares and rewarding celebrity CEOs had seen executive pay soar to over three hundred times that of the typical worker, and golden parachutes handed out to even the boss whose reckless behaviour crossed the line into outright criminality.

For example, in 2006 the chief executive of UnitedHealth was pursued by the US Securities and Exchange Commission for illegal backdating of stock options, actions that got him fired and made to repay \$465 million in partial settlement. But he also received the largest ‘golden handshake’ in corporate history, amounting to nearly a billion dollars. As Ehrenreich said, “the combination of great danger and potentially dazzling rewards (led) to a wave of giddiness that swept through America”.

Celebrity CEOs, going from their Gulfstream jets to their limousines to their luxury homes lived (in the words of Washington ‘crisis manager’ Eric Dezenhall) “in an artificial bubble of constant, uncritical reinforcement...a consumer of reassuring cliches”. They had come to believe in the teachings of the motivational books and speakers they had recommended (maybe with a degree of cynicism) to their subordinates. Positive-thinking preachers who claimed that great wealth would come to anyone who visualised success, worked hard and never raised any complaints. The average American took that latter condition to heart, since by now the incessant New Thought message had convinced the masses that, through the power of positive thinking, anyone stood a chance of lifting themselves into a world of riches and luxury. According to researchers at the Brookings Institute, “the strong belief in opportunity and upward mobility is the explanation that is often given for Americans’ high tolerance for inequality. The majority of Americans surveyed believe they will be above mean average income in the future (even though that is a mathematical impossibility)”.

But perhaps a more accurate way to put it would be to say that the average American could not complain, at least not if they wanted to keep their job. Remember, that positive thinking ideology considers any negativity to be a sin, and some of the movement’s gurus recommended one remove such negative people from one’s life. In the world of corporate America where, other than in clear-cut cases of racial, age, or gender-based discrimination, anyone can be fired for no reason at all, that was easy to do: just terminate the negative person’s employment. Joel Ofsteen (b. 1963) of Houston Lakewood Church, who was described by Church Magazine as ‘America’s most influential Christian’, told his followers, “employers prefer employees who are excited about working at their companies...God wants you to give it everything you’ve got. Be enthusiastic. Set an example”. And if you did not set the right example by radiating unbridled optimism every second of the working day, you were made an example of. As banking expert Steve Eisman (b. 1962) explained, “anybody who voiced negativity was thrown out”.

Such was the fate of Mike Gelband, who was in charge of Lehman Brothers' real estate division. At the end of 2006 he grew increasingly anxious over the growing subprime mortgage bubble and advised "we have to rethink our business model". For this unforgivable lapse into negativity, the CEO of Lehman, Richard Fuld (b. 1946) had him fired.

But, actually, sacking was not the worst fate that could befall in 21st century America. With every white-collar employee under pressure to work on their attitudes, the pressure on that group who most require permanent smiles and positivity- the sales team- reached ludicrous heights. Underperforming salespeople were subjected to such humiliating rituals as having eggs broken on their faces, and being made to bend over and receive a spanking with the metal yard signs of competing companies. In one case, employees were even subjected to the torture of water-boarding. "You saw how hard Chad fought for air right there. I want you to go back inside and fight that hard for sales!", was how the Prosper Management Supervisor justified this extreme example of motivational guidance.

So this was what corporate America looked like in the 21st century. A world in which CEOs became like the leaders of cults who, according to Steve Eisman, were infected with 'Hedge-fund Disease' ("the symptoms are megalomania, plus narcissism, plus solipsism...How could you be wrong about anything? To think something is to make it happen. You're God") who were surrounded by sycophants and 'yes-men' who dared not raise any concerns for fear of being fired; a world in which to 'underperform' in sales could lead to humiliating rituals like being forced to wear a nappy.

Now, a puzzling thought may have occurred to some readers: How does all this reconcile with the idea that we are seeing a proliferation of nonsense jobs? After all, the impression one gets from situations like this is that corporate America remains ruthlessly lean and mean, bringing the axe down on any workers who miss their targets or cause too much trouble, and subjecting the employed to neverending cutbacks, merges and acquisitions that make their working life worryingly precarious. How can it be, then, that this same system also permits the existence of jobs where there is nothing to be done for most of the working day, and the employee fills that time playing videogames?

The answer is that both of these things are true at the same time. Corporations still engage in ruthless downsizing, but when the axe comes down, it invariably falls on that class of people who have real work to do. You know, those whose job it is to make, move, fix and maintain things. But then what happens is that the savings made from firing all those useful people is used to expand the number of salaried paper-pushers, whose job never seems to be deemed no longer useful, no matter what advances we make.

That, at least, aligns with the findings of somebody known as 'Simon' who was employed as a 'Risk Manager' by a series of international banks. His job was to analyse the internal processes of banks in order to identify any problems. Any system as complex as banking will have a great many moving parts and, obviously, they are all supposed to function as one, integrated whole. 'Simon's' job was to check that this was indeed the case, and hunt down any incoherencies, vulnerabilities or redundancies that may have arisen for whatever reason. This is what he discovered:

“In my conservative estimation, eighty percent of the bank’s sixty thousand staff were not needed. Their jobs could either be completely performed by a program, or were not needed at all because the programs were designed to enable or replicate some bullshit process to begin with”.

So, out of a total of sixty thousand employees, forty-eight thousand filled roles that had no good reason to exist, either because such work was easily automatable, or because there was no need for it to be done at all, either by humans or machines, because it was pure bullshit. Simon continues:

“In one instance I created a program that solved a critical security problem. I went to present it to an executive, who included all his consultants in the meeting. The hostility I faced during and after the meeting was severe, as I slowly realised that my program automated everything they were currently doing by hand...I found many similar problems and came up with solutions, but in all my time, not one of my recommendations was ever actioned. Because, in every case, fixing these problems would have resulted in people losing their jobs, as those jobs served no purpose other than to give the executives they reported to a sense of power”.

There’s a lot of discussion, currently, about what the latest and forthcoming technologies, particularly artificial intelligence and robotics, means for society. Above all, the question is posed: Given what these technologies can do, or may soon be capable of, is your job under threat? It’s usually put that way. Not, “soon you may be liberated from your job and then you’ll be free to pursue higher values”, but “robots are going to steal your job!”.

Certainly, technology has had an impact on banking. Physical banks are disappearing from the high street as, more and more, we are encouraged to use Internet banking. When we call up the bank in order to query something, we are likely to have to converse with a chatbot before we get to connect with an actual person- if, indeed, we ever do. From this perspective, it looks very much like banks will close down workplaces and terminate employment the moment technological change makes this a remotely viable proposition.

But, in such cases, we’re actually talking about the kind of financial services run by, and for, ordinary people, the sort who have long had to live with the threat of technological obsolescence and the redundancies that follow private equity and the enormous debts that get loaded onto firms, all in the name of “downsizing and efficiency”.

‘Simon’, though, wasn’t dealing with the lowly world of average Joe, but the rarefied world of the financial executive. One of the most curious things about those forecasts of job loss due to automation, is that the role of ‘Capitalist’ is never considered as one that could be done by an AI.

Is this because what a capitalist does is just too tricky to automate? Hardly. After all, what does a capitalist do? By and large, such a role entails calculating the optimal way in which resources are invested so as to meet whatever consumer demand there currently is, or will likely arise in the future. That hardly sounds like the sort of task beyond the prodigious calculating and data-handling capabilities of today’s computers. Indeed, it would probably be a good deal easier to automate than to replace a domestic cleaner with a robot, since the job

of washing and folding sheets, picking detritus off of floors, tidying things away, etc etc, imposes all kinds of situations that do not lend themselves to precise calculation. One can tell this is so by observing just how long it has taken us to design robots that come anywhere close to the average capabilities of toddlers, let alone highly competent adult manual labourers.

But, no, you never hear any suggestion that the CEO, CTO or any executive position is under any kind of threat from artificial intelligence. Given 'Simon's' testimony, we can make an educated guess as to why that might be.

It is because, while such executives are keen to see the axe come down on jobs below their level, because cutting jobs results in a boost in shareholder value hence making them richer still, they are not at all keen to see any reduction of their own bloated staff, let alone have their own very powerful positions rendered superfluous by technological change. Not only do they have no desire to see such an outcome, they have more than enough corporate and political power to ensure it does not happen.

As Graeber pointed out, "Those...executives prided themselves on their own bloated staff...They did so [because of] what a large bank really was. It was made up of a series of feudal retinues, each answerable to some lordly executive".

What that means is, bullshit jobs such as 'flunky' proliferate in the financial/banking sector, in defiance of Capitalist drives, largely because those at the apex of this system are no longer driven by capitalist concerns, at least not when it comes to their own power and visible manifestations of it. No, they are operating according to principles that look more like feudalism.

'Simon' was undoubtedly a rare sort of fellow, not only because he recognised that a great many jobs in the financial sector have no good reason to exist, but more so because he was willing to express such thoughts out loud. By and large, most people learn that it's better to keep mum about such things.

But, what lesson is it that those who keep their mouth shut have learned? Well, basically, they have learned what it takes to get ahead in a bureaucracy. It could be argued that there is something utopian about any bureaucracy. After all, what makes something 'utopian'? Firstly, that it supposedly achieves some great abstract ideal. Secondly, that it remains more of an abstract ideal than a realised achievement, because people just cannot seem to adequately meet that ideal.

In the case of bureaucracies, the abstract ideal they supposedly represent is that of meritocracy. In a bureaucracy, we are supposed to believe, one follows impartial rules, regulations and mechanisms, and can advance within the system by doing so. The rules apply to everyone equally, so nobody can get ahead just because they happen to have good family connections, or money with which to buy their way in or up.

In theory that is. In reality there are a great many ways in which the pure impartiality of a true meritocracy is compromised. Take, as one example, one of the USA's top journals. This

particular publication which, by the way, leans towards the Left of the political spectrum (at least in so far as anything leans Left in the USA) has a billionaire as its editor-in-chief.

How did she land such a position? The truth is, she simply bought herself that position. But, what's really important to understand is that anyone working for that journal who wants to see their career advance rather than go nowhere or be terminated, knows they had better pretend that there is some reason, other than money, for this woman to have the position of 'editor-in-chief'.

Complicity of this kind is always the first criterion of loyalty in a bureaucracy, and the way to advance within it. Yes, the system may also be compromised in other ways, such as some folk rising more quickly because they are closely related to someone who can pull the right strings. But career advancement is not necessarily based on who your mother or uncle is, and nor is it based solely on merit. Above all, it's based on one's willingness to play along with the pretence that it's based on merit.

As Graeber said, "such institutions always create a culture of complicity. It's not just that some people get to break the rules- it's that loyalty to the organisation is to some degree measured by our willingness to pretend this isn't happening".

Such a "culture of complicity" has been how bureaucracies have tended to work throughout history. But, of course, for most of that history, this was a fact that was only really important for whoever worked within such administrative systems. Most folk did not, and only had dealings with bureaucracy every few years when it came time to register their fields and cattle for tax authorities.

But think back to what has been happening over the last forty years or so, which is that bureaucratic principles have been extended to more and more aspects of our lives as we 'progress' towards the Age of Total Bureaucratisation. Not only has bureaucracy worked its way more and more into our lives, that culture of complicity has spread as well. As it has spread, it has created one of the greatest mythstakes of modern times, which is the belief (or, perhaps we should say, the pretence) that we live in societies that operate as credentialised meritocracies, when anyone with open eyes should be able to see it for what it is: a system of arbitrary extraction.

Most, though, keep their eyes as closed as their mouths because, after all, a culture of complicity says you curry favour by pretending to believe bureaucratic systems are the models of impartiality they present themselves as.

## CHAPTER THIRTY SIX

In the last chapter, we looked into reasons why as much as fifty percent of all jobs being done have no legitimate reason to exist, when one would assume, given the core drives of Capitalism, that the percentage should be close to zero.

This investigation led us to 'Deregulation' or, rather, how the banking/financial sector really thinks about that term. That is to say, unlike the common-sense understanding, it does not mean "fewer regulations" but rather "a regulatory structure suited to our purposes". Under



this definition, 'Deregulation' can actually entail an increase in the amount of rules and regulations imposed on us, if that should suit the purposes of those powerful enough to matter.

In the case of the banking/financial sector, we're talking about a sector of the (anti)economy that makes money by colluding with governments to create, then trade and manipulate, debt, and which derives most of its profits from issuing fines, fees and penalties. Since people are more likely to make mistakes that warrant the issuing of fines, fees and penalties when rules and regulations are anything but streamlined, clear, and straightforward, and since an opaque and complex bureaucratic structure provides more opportunities to skim off from that pool of debt/money one is tasked with redistributing, the reason why there should be so many unnecessary paper-pushers, particularly in this sector, becomes clearer.

We also saw how, as more and more aspects of our lives are governed by paperwork as we 'progress' towards an age of Total Bureaucratisation, so do we increasingly have to subscribe to the culture of complicity that is a feature of any bureaucracy. That is to say, we play along with the pretence that bureaucracies function as meritocracies (even though there's ample evidence to the contrary) because turning a blind eye to the truth is required of anyone who wishes to see their career advance, rather than stall or be terminated. This 'culture of complicity' aids in the spread of bullshit jobs, because those of us who are not simply baffled to find ourselves doing unnecessary or even pernicious work (when that should never be the case under Capitalism) and are not simply writing off our personal experience as anomalous, learn to keep mum about the situation.

But those whistleblowers who have spoken up about the amount of pointless jobs that exist (though not exclusively) in the FIRE sector have highlighted yet another reason why bullshit jobs are proliferating, apparently contrarily to core Capitalist principles. It is because those at the very top of the banking/financial sector are not really working under Capitalist principles, but rather principles that more resemble feudalism.

We'll have more to say regarding what that means later. What I want to do now, though, is return to the topic of 'value' and the question of how it is generated. Previously, we saw how neo-classical economics identified a flaw in classical economics, in that its prediction of diminishing returns failed to take into account the effect that technological change might have. Having identified a flaw, the neo-classicists felt justified in junking classical economic theory in favour of a different model. Perhaps the most important thing to know about this neo-classical theory is that it turns the relationship between 'value' and 'price' on its head. In other words, whereas classical economists worked under the assumption that value determined price, the neo-classical assumption was that price determined value. This assumption turned value into something a great deal more subjective than it had seemed under classical economics, because it discouraged thinking about value in terms of the objective conditions of production and power relationships, and encouraged the view that value is in the eye of the beholder.

Since that was the assumption, whereas the classical economic stance was that if one did work of great value, therefore one would receive higher pay compared to those whose work is of lesser value, the neo-classical assumption was the exact opposite: One is highly paid and therefore the work one does simply must be highly valuable. No other inquiry, other than

the size of one's earnings, is required to determine the extent to which one is adding value to society.

The flaw in this logic was highlighted in the film 'The Big Short', which told the real-life story of a group of traders who realised before anyone else that the US subprime mortgage sector was rotten through and through, and ended up making huge amounts of money betting the system would collapse when everybody else considered that to be an impossibility.

As one of the characters in this story is investigating the extent of the corruption that has spread through the financial sector, he encounters a particularly unethical character who is making an absolute fortune by selling something known as 'synthetic consolidated debt obligations'.

Now, a consolidated debt obligation basically consisted of many thousands of mortgages and other loans all bundled together and sold to investors. But the synthetic CDO was a sort of virtual, imitation CDO in that it was backed by no actual loans or debts, but was rather essentially a collection of side bets on other securities. The synthetic CDO came about when unscrupulous types realised that investment managers would buy mortgage securities even when it was understood that the interest payments they would receive would not come from real mortgages, but rather from people betting their securities would collapse.

Thanks to the introduction of the synthetic CDO, investment banks were able to prolong the expansion of the financial bubble, even though the flow of real mortgages had dried up and the housing bubble had come to an end. They did nothing to create value, because they were gambling instruments, and that's never a way to create value but rather of redistributing money 'suckers' have lost to 'winners'. In this case, the 'suckers' were those who bet their securities were secure, and the winners those betting they would collapse. We can tell, then, from the sharp rise in synthetic CDOs, that Wall Street not only knew there was a financial bubble but that it was soon to pop.

Now, in the movie, you can see the look of horror become ever more evident on our anti-hero's face as he realises that the seller of synthetic CDOs is basically running a scam that is bound to wipe out trillions, decimate people's pension funds and other financial securities, and may even destroy the banking sector itself, unless the state rushes in to bail it out. But, as for the seller of synthetic CDOs, well, he simply invites our character to write down his earnings and compare that to the amount Mr Synthetic CDO is making. In other words, it's the neo-classical stance of "I am highly paid, so what I do must be of great value".

The way neo-classical economics views the relationship between 'value' and 'price' might explain how such characters as 'mr Synthetic' sleep at night, but it doesn't quite explain the monumental shift in popular consciousness that went along with the shift from 'classical' to 'neo-classical' economics.

As you may recall, under classical economics and the labour theory of value, it was assumed that value was created by workers, and what capitalists do is appropriate surplus value. But, ever since neo-classical economics, the default assumption has been that 'wealth producer' refers to the capitalists rather than those they employ. That's a pretty profound change in popular consciousness, so what made it possible?

For the most part, what made this possible was another flaw in the original labour theory of value, a flaw connected to the way we commonly differentiate between those whose work is value-generating, and those whose work is not. We say of the former kind that their work is 'productive'.

Not only do we commonly assume that those doing worthwhile jobs are being 'productive', we also assume that work itself should properly be thought of as 'productive' - which is a pretty peculiar assumption, given that the vast majority of work we do can't really be said to produce anything.

Previously, we saw how the common assumption that work is (or should be) 'productive' has less to do with how useful a description of work it is, and more to do with the roots of the discipline of economics itself. You will recall how, before we conceived of this field of study known as 'economics', a field with its own principles and laws that could be studied in isolation to ethics and politics, we had the study of 'political economy', which made no such distinction. As for political economy, well, this was a field of study that branched off from Theology.

So: Economics as a field of study has its origins in Theology, and 'production' is itself a basically theological concept, one tied to the most famous creation myth in Western culture. This, you will recall, is the story of Man's fall, ejected from the garden of Eden by a God who, even as far back as the Middle Ages, was seen as a craftsman and artisan who simultaneously cursed mankind with labour, but also blessed Man, since through his labours Man could crudely re-enact the divine act of creation.

As noted earlier, the word 'Produce' comes from the Latin 'Producere' ("to bring forth") which seems rather more apt for the paradigmatic example of a woman in labour. After all, that very phrase - "woman in labour" - does not bring to mind an image of a female worker building, maintaining or growing anything, but rather of a pregnant woman giving birth. From the perspective of most ordinary people, babies are "brought forth", fully formed, from women's bodies, since pretty much all the chemical and cellular processes that go into building a human being happens out of sight, in the womb. Famously, the Biblical story of the Fall likewise sees woman's labour as primarily and emblematically a matter of producing babies, most probably because in the deeply patriarchal societies that developed the Old Testament tales, most real women's labour was never part of any conversation of 'work'.

If the paradigmatic example of a woman in labour is a female giving birth, when it comes to labouring men, the image that most readily springs to mind is one of factory work, rank upon rank of men wearing overalls, toiling away on production lines. It's worth asking why this image should be the one that comes foremost to mind when we think of the 'working classes'. Partly, it's because revolutionaries like Marx identified the factory worker as a class who were particularly well disciplined and organised, and whose physical abilities were most obviously augmented by machines that could, if developed far and appropriately enough, take over much if not all of the work involved in keeping an economy running.

The industrial revolution did of course massively increase our ability to make stuff, such that we could reasonably speak of 'mass production'. This, in turn, led to arguments over what was really important when it came to the production of goods those factories were turning out. Were the workers themselves the most important aspect of production? Or were they mere human cogs among all the machinery that the Capitalists commanded? Since, from most ordinary people's perspective, products emerged, fully formed, from factories (with most of the human labour going on, out of sight, within these private places of business) it was not too difficult to believe that the wealth producers really were the capitalists, rather than those employed to manage and run their means of production.

Given the less than inspiring nature of production-line work, a question arises: Why is it that we typically think of men doing such work? If you think back to the link between storytelling and work, it would not be at all obvious that male workers would be the first choice for employment in a Victorian factory.

To recap, in patriarchal societies it's typically the case that men monopolise the sort of work that will later form the basis of inspirational stories. These would include such tales as the general who commanded an army to some great victory; the pioneer who succeeds in turning an impossible dream into commercial reality, or the scientist who discovers a hitherto unobtainable cure.

But, in order to achieve accomplishments like this, lots of other work has to be done that is not at all glamorous but really quite dull. Those relegated to such jobs tell stories to one another while working, or find some other way to alleviate the tedium of their chores, but their work rarely becomes the basis for inspirational stories, because, after all, it's just not interesting. While men in patriarchal societies prefer to monopolise the glamorous jobs, the dull and dirty jobs are delegated to the womenfolk.

If that were the case, though, then while we would expect men to own factories and make themselves real-life characters in an aspirational story about great captains of industry, we really shouldn't expect males to be selected to actually do the dull and routine work involved in operating a production line, simply because women had long been assigned society's dull tasks.

But, in actual fact, it was only in the later periods of the Industrial Revolution that bosses primarily employed men to run their factories. As for the pioneers of industry, they opted for the more obvious option of employing women. After all, they had long been used to doing work as monotonous and repetitive as that being offered by the fledgling factory systems.

It turned out, though, that employing women in the early factories had a devastating effect on those men who did not command factories, but instead made a living in more traditional, artisan ways. Such ways could not compete with the quantity of products factories could turn out, and so those men lost their means of income. Not only that, but since their position as head of the household was primarily based on them bringing in money, they lost their familial title of breadwinner, too, while their wives and daughters, once used to working under the direction of the father, gained the title of breadwinner.

As you can imagine, such men were not at all happy with this situation, and it was during this time that we see the first instances of industrial sabotage that was to become known as 'Luddism'. We also see Capitalism's ability to adapt itself to situations that might otherwise threaten it, which, in the case of the first Luddite protests against factory work, amounted to a tacit compromise whereby, in the future, men would be primarily employed in factory work rather than women, thereby handing the title of 'breadwinner' back to the males.

So, at first womenfolk did factory work but then, following great protests at loss of dignity, men took over such roles. Then, as the factory system further developed and rapacious Capitalist bosses adapted the system to force ever more work out of workers whose wages were relentlessly squeezed, labour movements emerged to counter this trend, and since factory workers were, by their very occupation, the easiest to organise, union movements focused on those sort of employees for the next century or so.

All of which led to the situation we have now, where the term 'working class' inevitably brings to mind men in overalls working on production lines in factories. Indeed, so tight is the link in our minds between 'factory work' and 'working class', many an intellectual has commented that there no longer is much in the way of a working class in Britain and the USA since factory work went into decline. One has to wonder how such commentators figure other kinds of work is being done. Do they think it's androids collective garbage, stacking shelves, fixing the plumbing, caring for the sick and elderly, etc etc?

The fact is, the working class still exists, only it's a class that mostly isn't employed to do factory work. Nor were the working classes ever mostly employed in factories. If we were to go back to Dickensian times and walk around a working-class neighbourhood, we would invariably find that the number of folk employed as factory workers would be far outnumbered by those doing other sorts of work. As Graeber pointed out, "working-class neighbourhoods housed far more maids, bootblacks, dustmen, prostitutes, caretakers and costermongers than employees in coal mines, textile mills and iron foundries".

Why has this great variety of work that the working classes do been largely ignored out of existence? It's not just that factory work was the easiest to organise and hence the natural focus for unions and such. It's also because most working-class jobs don't really fit our concept of work as something 'productive'.

It's easy to see how workers toiling away on a production line are producing something, but what about the professions on Graeber's list? Take 'Dustmen' for example: can we really say that such an employee 'produces' anything as he goes about emptying dustbins? If so, what is it that he 'produces' and for whom is it 'produced'? I suppose one might say "dustmen produce nice, clean, litter-free environments for townsfolk to enjoy", but to do so would be to stretch the definition of 'productivity' too far, and really we all know such work has more to do with tidying or maintainance than producing anything.

We would find just this sort of ambiguity ("how productive is this, really?") had we considered what is actually done in any other job on Graeber's list or, indeed, most of the work that working-class folk actually do. Since we typically equate proper work with 'productivity', we tend to ignore all those jobs that don't really fit the 'productive' category, when thinking about what value is and how it is generated.

In making this simplifying move, we have blinded ourselves to what would otherwise be an obvious fact: Most working-class labour remains 'woman's work'. Not in the sense that it's mostly performed by women, but in the sense that it is more aligned with archetypal 'woman's work' rather than 'male' work. After all, traditionally, tasks involving tidying things, maintaining things; caring for and looking after people; reassuring them and seeing to their wants and needs- all that has been 'women's work'. So, the bulk of the jobs we actually do is archetypal woman's work which really doesn't fit the 'productive' category at all.

Would it be possible to come up with a category that could be applied to all jobs? This is indeed possible, and to find such a category we should turn to the most quintessentially feminine role of all.

What am I talking about, 'Motherhood'? Well, yes, that is the most quintessential of feminine roles, but I'm really thinking about what mums traditionally do, their occupation in the household. They are the 'carers'. Can we take any job and meaningfully apply the 'caring labour' to it? As we shall see shortly, the answer is 'yes', but before justifying that claim, we should note that an outcome we mentioned earlier is more far-reaching than we supposed.

Which outcome? The one where, having adopted the attitude that work equals jobs (i.e, paid employment) we disregard all non-compensated work as 'not working'. Occasionally, a woman might say "I'm a full-time mum" but mostly people who quit work to raise kids say they have "given up work". Indeed, anyone who has no paid job and has taken on the role of a carer is typically seen as having dropped out of the labour pool altogether. This attitude is more far-reaching than we supposed, for reasons outlined by Graeber: "In the same way as women's unpaid caring labour is made to disappear from our accounts of 'the economy', so, too, are caring aspects of other working-class jobs made to disappear as well".

We affect this disappearing trick whenever we generalise work as being 'productive' when, in actual fact, it is most aptly generalised as 'caring labour'. This brings us back to the point that every kind of job we do, even something as abstract as 'finance', can legitimately be considered 'caring labour'.

The reason why this is so is because, no matter what job you are doing, you are doing it for other people. Yes, some of us may have set ourselves entirely selfish goals, but if such goals are to be achieved in 'the market', then at some point such folk have to engage in 'caring labour'.

Why? Because of what 'caring labour' entails, namely a certain amount of interpretation, empathy and understanding. In order to sell anybody anything, you need to put yourself in their shoes, so to speak, and imagine who they are, what they are like, what they might need. Anyone who imaginatively models another person in their mind invariably ends up caring about them, at least a little bit.

However, this is not quite 'caring labour' since, in the form presented here, it has not been commodified. Rather, what we have here is nothing less than human life. We are, after all, social, empathetic, communicative creatures, and we've always imaginatively cast ourselves in others' shoes.

The key to turning caring labour into a commodity is to make the crucial roles of interpretation, empathy and understanding something done almost exclusively by one side. Actually, this is a typical outcome, not just of the boss/employee relationship but any relation of structural inequality.

So, for example, a popular exercise in American schools has students imagining they have suddenly become a member of the opposite sex. How do they suppose that experience would play out? What you tend to get from female students are long and detailed essays that clearly show “what it must be like to be male” is a subject they have spent a good deal of time thinking about. You typically get no good essays from the boys, who either submit essays that show they have hardly any concept of what being female means, or they submit nothing, decrying the exercise as a total waste of time and an outrage that they should ever have to see the world through a woman’s eyes.

Now, what the boys are really expressing here is the privilege of being male in a patriarchal society. The reason why females are so much better at this exercise is because, all through their lives, girls and women have had to imagine what this or that situation would look like from a male point of view. But there is hardly ever a scenario in which males have to consider a feminine perspective.

If such a perspective is ever considered, then it’s typically a weird combination of being illogical and inexplicable (it’s a staple joke in 50s American sitcoms that “you just can’t understand women”) and, at the same time, of having access to some sort of mystical wisdom (as in references to ‘woman’s intuition’).

Now, numerous studies have shown how, the lower down the economic ladder you are, the more able you are at performing the ‘caring labour’ of interpretation, empathy and understanding. That is to say, the middle classes tend to be better at such social skills than the upper classes, and the working classes, by and large, are the most adept of all.

To ask why that is the case would be a bit like wondering how come the guy who runs around carrying bricks on a building site all day long has a fitter, more muscular body compared to the guy who sits behind a desk. If you have been hired to do a job, then your role, whatever job you actually do, will invariably involve having to take into consideration what the boss wants; what the boss is thinking, and what mood the boss is in. You’ll likely spend the whole working day constantly monitoring what your superiors are thinking and feeling, so as to respond appropriately.

But, when you are in a position to hire someone to do a job, not only do you not have to do the practical work yourself, you also need not care what psychological state an employee is in. As Graeber pointed out, “the skill at reading other people’s emotions is just an effect of what working-class work really consists of: rich people don’t have to learn how to do interpretive labour nearly so well because they can hire other people to do it for them”.

Equipped with the understanding that work of any and all kinds will always entail a degree of interpretation, empathy and understanding, we can appreciate how ‘caring labour’ is a term that encompasses all forms of employment, and not just the obvious kinds like ‘nurse’ or

'babysitter'. Even banking and finance ultimately fall under 'caring labour' by this 'feminist economics' point of view, because what are money, markets and finance for, if not a means of communicating what we care about so that caring labour in all its forms may be directed at the appropriate things in the appropriate way? (Evidently, much of contemporary banking aims resources at the wrong things, but from the feminist economics point of view, that's just a sign that it is a bad form of caring labour).

But, although all work of any kind must entail at least some interpretation, empathy and understanding, and is therefore best generalised as 'caring' or 'interpretive' labour, we have instead decided that describing work as 'productive' is the most fitting generalisation, and see the factory worker as the paradigmatic example of a labourer. Thanks to this way of seeing things, products seem to be 'brought forth' from factories by a mysterious labour that is not all that different from the way babies seem to be brought forth, fully formed, from the bellies of women. In both cases, what's really going on is hidden from view, although in the case of 'productive' labour it is the language we use and the concepts we adopt, tied to 'production' rather than relations of caring, that succeed both in making much of what is really going on disappear, and to make it so much easier to dismiss the contribution of the working classes, on the grounds that they are merely part of the machinery capitalists command.

That is not to say so much of what human work really consists of is made to disappear, merely through the mass adoption of 'productivity' as the most suitable label for what work properly is. If we return to the triumph of 'consumerism' over 'producerism', we find that its success was due to something called the 'Managerial Revolution' which, above all, began as an attack on how popular culture viewed work. Prior to this revolution, workers had thought of themselves as artisans working in guilds, each with its secret knowledge and proud traditions that the next generation of coopers, wainwrights, weavers etc would inherit. All that secret knowledge, all that proud tradition, was undermined by the managerial revolution, which applied 'scientific management' to reduce artisan workers to mere cogs within bureaucratically organised corporations. The goal of the managerial revolution, and the task that scientific management was set, was to turn the workforce into an extension of the very machines they operated, and thus under the command of the capitalists who were the true producers of wealth.

Without this managerial revolution and the growth of scientific management leading us to a 'consumerist' point of view, it would have been a great deal more difficult to affect that mass assumption that work is, properly speaking, 'productive' and that workers are no different to the machines they're hired to operate. But that mass assumption would not have been possible at all, had the paradigmatic example of 'the worker' in the popular imagination been anything other than 'factory worker'.

As we have seen, Karl Marx also focused mostly on factory work, in his case because such workers were, by their very profession, the easiest to organise into a proletarian army. As we have also seen, he, as with all classical economic theorists, adopted the labour theory of value.

Is this really the most appropriate way of thinking about value, though? Such a question really depends on what one is primarily interested in. Assuming one's interest is to gain an



understanding of the patterns of price formation, then one will find better tools developed by post-classical value theories.

But to suppose that 'patterns of price formation' was the main concern of Marx or workers' movements, would be to mistake 'Das Kapital' for a work of 'economics'. It's actually much more appropriate to think of Marx as a philosopher, with a philosophical point of view to get across.

And what point is that? One that sees the world as something made by the human race; an idea that brings us back to the lesson of the cave that opened this work. The world we inhabit is our collective creation. Now, obviously, nobody created the stars or, indeed, anything in the natural world. But "what stars are" and "how they work" are the product of stories we tell one another. Our ancestors saw planets as gods and organised their societies around such a concept. We see planets as great masses of rock, water and gas (or just gas in the case of our solar system's largest planets) orbiting a nuclear fusion reactor. Future generations might adopt a different conception of the heavens.

But, actually, the idea that we collectively made the world we inhabit goes much further than storytelling. After all, the environments we call home were created by us, collectively, from the raw materials provided by nature. If you were to pick up any physical object, chances are it would be something human beings manufactured or grew, guided by beliefs regarding what their fellow human beings were like and what they wanted or needed.

This fact seems most obvious when it comes to physical objects like radios or cars. We all know such things were manufactured by people. But, think of abstractions like 'Capitalism' or 'Government'. Where did they come from? They, too, were created by us.

But, whereas with a physical object like a pot, once it is created no more work other than occasional repair and maintenance is required to preserve it, in the case of abstractions like 'Capitalism' we have to wake up every day and recreate them.

But (and this was the real point that Marx was getting at) if 'Capitalism' or 'Total Bureaucratisation' exist only because we keep recreating them, why can't we wake up tomorrow and create something else? For, as Graeber commented, "we can all imagine a better world, why can't we just create one? Or at the very least [stop recreating] bad service providers and annoying bureaucratic red tape?".

Here, too, we find switching viewpoints from work as "productive" to work as tied to relations of caring, helps shed light on this question. It does so by revealing how come it is so difficult to create an alternative society operating by a different set of rules. This is because, when the actions we take derive, ultimately, from relations of caring, it is profoundly difficult to do anything other than recreate the world more or less as it already is.

As Graeber pointed out, "one cannot save to ensure a college education for one's children unless one is sure in twenty year's time there will still be colleges- or, for that matter, money. And that, in turn, means that love for others...regularly requires the maintenance of institutional structures one might otherwise despise".

For those who have been brought up to believe the mythstake of money having its origins in barter, and therefore see markets as nothing more or less than that sphere of activity where people undertake friendly and impersonal exchanges, it may seem hard to believe, once you disregard the interfering hand of government, that 'the market' would ever produce 'despicable' institutional structures.

But, once you forget about what ought not to happen according to the free-market enthusiasts' utopia, and consider the historical evidence, something becomes clear: Wherever you find commercial markets, you will find "the man with the gun". This symbolic figure may not actually carry firearms, but he does always operate within impersonal bureaucratic structures that are empowered to impose arbitrary resolutions backed, ultimately, by violence.

Take 19th century free-market liberalism, for example. What went along with its rise? Why, the creation of the modern police force. By now, the idea that we could call the police to settle almost any dispute, is so deeply ingrained, many of us find it hard to imagine how society could function without recourse to 'the police' or something like it.

This failure of imagination was one demonstrated by Julian Assange (b. 1971) during an interview with Occupy protestors, on his TV show 'The World Tomorrow'. Since many of those protesters held anarchistic beliefs, Assange questioned them about an incident that had happened at Zucotti park. Some of the folk that went along to that protest brought drums with them. What could be done, Assange asked, if these drummers kept at it all night, keeping everyone awake with their drumming, and there was no police force that could be called in to make them stop, or else? After all, in the anarchistic world favoured by these Occupy protesters, there would by definition be no 'police' that could be called to deal with a situation like that. The implication was that nothing could be done if a mob with drums felt like making a racket all night long.

If Assange had looked back over historical records, he would have noticed something never happening which should have, according to his beliefs. For most people throughout history, there was nothing like 'the police'. But, even though there was no such authority figure to call in order to settle disputes, we also have no record in ancient accounts of folk driven to distraction by neighbours holding wild parties all night long. But why not, if there was no impersonal bureaucratic structure that could apply the threat of force to make them stop?

The most likely answer is that such situations were dealt with in much the same way as the Zucotti park drumming incident was dealt with. What happened was that those Occupiers that did not like the drumming arranged a compromise whereby percussion instruments would only be played during certain hours. The 'drummers' agreed to this, and everyone was happy. The dearth of records of annoying neighbours in Mesopotamia or other ancient historical places suggests people have long found peaceful ways for those with conflicting interests to coexist, no police force necessary.

That being the case, one has to wonder: Why is it that since the 19th century, and certainly by the 20th, 'the police' had become such a ubiquitous presence in our lives that we now find it hard to believe any society could hold together without some impersonal bureaucracy that can threaten violence, thereby imposing arbitrary resolutions to this or that circumstance?

Well, the short answer to that is that 'free markets' developed, and wherever they are, you'll invariably find 'the man with the gun'. If we return to the topic of banking, finance, and the 'age of total bureaucratisation', we can figure out why one always accompanies the other.

Earlier on we saw how Capitalism shapes everything to suit its purpose, so that even religious structures are adapted so as to serve 'the money god'. You will recall how religious symbolism is a common feature of money, and how banks were usually built to resemble Greek or Roman temples.

This architectural choice started to change over the last three decades or so. Instead of large, freestanding buildings that looked like temples, we instead find storefront branches of the same few mega banks that all have the same look, more or less. Not for them the columns of the Parthenon, their preferred look is an immaculate box made of glass and steel dividers. And what do we find inside these pristine boxes of glass and steel? Given that these are bank branches, one would expect to find they contain 'money'. But, were you ever to gain permission to look around, you would find very little in the way of anything recognisable as 'money' and instead discover computers and armed security. According to Graeber, "they define the perfect point of conjuncture between guns and information, since that's all that's really there".

Immaculate buildings of steel and glass, information and guns, lots of guns. It all sounds a lot like 'The Matrix' doesn't it? No doubt, the Wachowskis adopted this look for a film based on the philosophical thought experiment of being in a simulation, because it is at these very places where life is most like a videogame.

How so? Well, because, in the case of both videogames and banks, we're talking about 'places' where nothing is ever really 'produced', but instead is just brought into being by 'gurus' (financial or coding wizards) who make it so by manipulating information.

Videogames, 'the Matrix', these are clearly worlds brought to life by the magic of computers. Can we really say the same thing about modern banking/ financial structures? Many of us apparently believe this to be the case. That is not to say we believe we are in a simulation as in The Matrix, but rather that much of our lives is the effect of technological development. What drives this impression is the fact that, as Graeber put it, "our immediate experience of everyday bureaucratisation is entirely caught up in new information technologies: endless handheld devices that reduce the world around us to maps, forms, codes and graphs. All this is, we tend to assume, the inevitable effect of technological development".

But, such an assumption is based on a great mistake, which is the idea that technological change is an independent variable. While we may not be able to predict the exact ways in which technology might advance, it is not actually free to go off in any direction whatsoever, but instead follows an overall direction that is dependent on social factors.

When was the last time you requested money from a cash machine, and did not receive the amount you asked for? My guess is that this has never happened, that every cash machine you have used either worked without making a mistake, or did not work at all.

Contrast this with statistics that came out after the 2000 US Presidential election, where it was revealed that we should expect a certain margin of error from the voting machines that counted the votes of the electorate. Somehow, the “world’s greatest democracy” cannot manufacture voting machines that will accurately calculate the choice of the demos, even though it has succeeded in providing cash machines that enable hundreds of millions of ATM transactions to occur every day with an error percentage rate of essentially zero.

It was not always the case, however, that financial technologies worked in an infallible way. Actually, it took decades of research and development to reach that level of reliability. Back in the 70s, the decade when finance and corporate bureaucracy began to build that alliance that would one day result in total bureaucratisation, a common reaction to something going wrong was to blame “some computer”.

Over the next few decades, a new corporate culture emerged from the increasing indistinguishability between private, state, and military paper-pushers and, as we ‘progressed’ towards Total Bureaucratisation, and the bureaucratic mindset spread, invading educational, scientific and government circles, the technologies that facilitated all this got the necessary attention, until we had gone from a reality in which a bank’s computer was something of a joke, to a world in which financial abstractions had that utter certainty that Heidegger (1889-1976) called “ready to hand”. In other words, something of such fundamental and ubiquitous importance to the practical infrastructure of our daily projects and affairs that thinking about it as something in itself, becomes totally unnecessary.

No doubt, in many ways, developing financial technologies to the point where it could form the assumed backbone of our social reality has delivered convenience for the public. Buying stuff by waving a phone around like it’s a magic wand is so much simpler than having to pull out notes and coins from a purse and then waiting to be handed the correct change. But, look at the world around you, at all the crumbling infrastructure of our decaying urban environments, and understand that not of this just happened. It was, instead, what resulted from all those policy decisions that allocate funding, be it for landscape preservation, scientific research, or whatever. As Graeber pointed out, “this is the world that all those endless documents about ‘vision’, ‘quality’, ‘leadership’ and ‘innovation’ have actually produced. Rather than causing our current situation, the direction that technological change has taken is itself largely a function of the power of finance”.

“There ain’t no such thing as a free lunch”, so the saying goes. So: what price did we have to pay for that aforementioned convenience? The commodification of our personal data; the loss of our privacy as we put tools of total surveillance in our pockets and, above all, a world in which public and private bureaucracies merged together in a mass of paperwork, the purpose of which was to facilitate the direct extraction of wealth.

Which brings us back to the “man with the gun”. One thing seems likely, which is that this symbolic character has a deep connection to, or relationship with, something we discussed earlier, that being the ‘Iron Law of Liberalism’.

You will recall that such a ‘law’ is based on plentiful historical evidence that whenever policies intended to lessen government interference and move closer to a ‘free market’ are

put into action, the result is always the opposite of what was intended, since it always results in an increase in the amount of people doing administrative work.

But, bureaucracy is not the only thing that increases, for there is also an increase in the range and density of social relations that are ultimately regulated by violence, or at least the threat that violence will result from continual refusal to comply. The 'Man with the gun' is the symbolic character of this threat at the core of commercial markets.

Now, it's best not to think of the 'Iron Law' and 'the Man with the gun' as two related concepts, but rather as two different ways of talking about the same thing. Because, after all, what should we expect if we are heading for an age of total bureaucratisation? We should expect to find daily life becoming more bureaucratised, something that, by definition, entails the imposition of ever more rules and regulations. And how can it be assured that impersonal rules operate properly and are not just ignored? By ensuring that, ultimately, they are backed up by the threat of force. So: attempts to achieve the liberal utopia of a 'free market' results in the 'iron law' of a massive increase of administrative work, and all that bureaucracy is backed up, ultimately, by the threat of violence, as symbolised by 'the Man with the gun'.

That being the case, were we to visualise this character, we really should think of a bureaucrat wielding a weapon. But the term 'Law Enforcer' does not tend to bring to mind a gun-toting paper-pusher, but a police officer. And when popular imagination conceives of a police officer, what results is more of a mythological character than something that aligns with what actual police officers mostly do.

This brings us back to something mentioned earlier, namely a concept attributed to Weber. We learned how Weber's writings give the impression that he saw bureaucracy as so obviously a superior way of doing things that all other ways would inevitably come to conform to the bureaucratic way. But while this would be a very effective way of doing things, it would lock humanity in an 'iron cage' that would not allow for any charismatic heroes. The image of the 'bureaucrat' as the faceless gray man in a suit fits this rather bleak outlook.

Is it really true, though, that no heroic, mythical character can come out of bureaucratic structures? Evidently not because, ever since the late 19th century, we have seen the creation of a great many such mythological characters in the form of literary and cinematic detectives, police officers and spies.

These mythological bureaucratic heroes have had a profound and really quite misleading effect on the popular conception of what 'the Police' are really there to do. This is because what fictional police officers, detective chief inspectors and other law enforcers spend all their time doing is bringing perpetrators of violent crime to justice. Fighting (particularly violent) crime is what fictional law enforcers like Vera Stanhope or Inspector Morse or Kojak or countless others do.

Now, obviously, the popular imagination is not wrong in thinking that fictional law enforcers 'fight crime', because that is indeed all these mythological characters do. But the reason why I call these 'mythological' characters is because, in reality, 'criminal law enforcement' is, for the most part, concerned with something that is the exact opposite of this.

When real gang fights, drunken brawls, acts of domestic abuse and other forms of interpersonal violence happen, the typical response from the police is not to get involved at all. It's only when things get so out of hand that somebody ends up hospitalised or dead that the police get involved, but this is not because of the severity of violence, but because once the ambulance is called out or there is a dead body, the process of filling out paper work and following this or that administrative procedure must begin. The police get involved, above all, to make sure the bureaucracy of law enforcement is undertaken.

We see much the same thing with burglaries, the vast majority of which go unreported. Usually, such crimes get reported only when the victims need to replace things that won't be replaced unless the proper police report is filed, or insurance claims are processed. So, once again, we see that real law enforcers only get involved once crime results in paperwork.

Indeed, if you really want to feel the presence of criminal law enforcement, and you don't want to be hospitalised, then don't bother being mugged or assaulted. Instead, break the myriad rules and regulations that total bureaucratisation is increasingly imposing on our lives. This is much more likely to result in police action because, as Graeber pointed out, the police "spend most of their time enforcing all those endless rules and regulations about who can buy or smoke or sell or build or eat or drink what where".

That is why it is appropriate to say that what real law enforcers do is almost the exact opposite of what fictional police officers, detectives etc do. Because, whereas the latter see their only concern as working to rid the world of violence, real law enforcers spend a tiny amount of time doing work of that kind, and are mostly concerned with bringing the threat of force to bear on situations that, in the past, would have been resolved through the sort of peaceful compromise that resolved the Zucotti drumming incident.

While the police should be more properly thought of as bureaucrats with weapons rather than crime fighters, in most cases they are there to impose the threat of violence, rather than actually inflict it. So long as citizens do as they're told, they'll likely not feel the whack of the baton on the back of the head.

But, really, as former LAPD turned sociologist Jim Cooper has pointed out, something other than refusal to comply peacefully results in police brutality. While Batman may reserve his kicks and punches for criminals and would never lash out at an innocent, with real police officers the opposite is true. According to Cooper, "cops don't beat up burglars". This is because most criminals know they have broken the law and so, once well and truly caught they won't argue with the police officer. It's the job of their defence attorney to pick holes in the law enforcers' version of what happened. This is something defence attorneys are permitted to do.

But, the public are not permitted to challenge the police officer's right to define a situation, ever. Most acts of police brutality results when an innocent member of the public forgets this and starts 'talking back' to the police officer. That, above all, is what is most likely to provoke a violent reaction from a copper.

As Graeber pointed out, “the police truncheon is precisely the point where the state’s bureaucratic imperative for imposing simple administrative schema and its monopoly on coercive force come together. It only makes sense then that bureaucratic violence should consist first and foremost of attacks on those who insist on alternative schemas or interpretations”.

We should take that notion of “simple administrative schema” and return to a point raised earlier, that being that the ‘Free market’ and ‘bureaucracies’ are both utopias, in that they present an ideal which never quite materialises in the real world.

In the case of the ‘free market’, the simplification involves ridding human life of most of its passion, complexity and contradictory points of view so as to present humankind not as an emotive social being but rather as an individualistic rational agent whose only reason to connect with other such agents is to enable exchange that, once the convenience of ‘money’ is removed from the picture, remains barter.

Similarly, bureaucratic knowledge likewise tries to reduce the complexity of life to something that can fit forms, rules, statistics or questionnaires, which of course necessitates pretending most of the subtlety and complexity of real life does not exist and that what is left can conveniently fit some preconceived mechanical or statistical formulae.

It is this reductionism, the application of simple, pre-existing templates to what are, more often than not, messy situations that don’t easily lend themselves to reductionism, that leads to that most notorious and infuriating feature of the bureaucratic mindset: The way that such paper pushers behave, like for some reason they are blind to ninety-eight percent of what’s in front of them.

When dealing with a situation like that, one gets the impression that most of the work needed to make the formulae work at all has been offloaded onto you, thereby enabling the bureaucrat to remain oblivious to most of what is going on.

As we have seen, this is pretty much the situation that arises whenever we find systemic inequality. But systemic inequality requires something else, that being structural violence. Why do workers put up with bosses who wander around oblivious to what is going on around them, having delegated not only the responsibility to do the physical work required to maintain a business, but most of the caring labour, too? Because the boss holds their income hostage, and can therefore threaten them with the fear of drowning in debt, losing their homes, etc.

It is a tragedy of human life that the threat or application of coercion, force or violence can trump any argument, regardless of the merits of the opponent’s case. One time this truth was most starkly revealed was in 1986, when Ukrainian power plant operators were running a safety test. The workers knew that the test had become extremely dangerous and should be stopped, but their superior (who was under immense pressure from his superiors in the government to complete the tests) told them to either carry on with the test, or be fired and never find employment again.

So credible was this threat that the workers continued running the test, one thing led to another and the Chernobyl nuclear power station exploded, leading, according to some estimates, to 96,000 deaths.

No doubt a lot of bureaucratic meddling was involved in that disaster, made weighty by the existence of structural violence. There is a tendency to condemn bureaucracy as being a form of stupidity in and of itself, but the structural violence element suggests we should not see bureaucracy as a form of stupidity, but rather as a way of organising stupidity, because what you're inevitably dealing with are situations in which relationships have turned extremely unequal, with those on the bottom doing all of the imaginative work, while those on the top only need care about a tiny percentage of what is going on because, ultimately, they hold the trump card of violence.

From this perspective we can appreciate why it should be that absurdities arise in any bureaucracy, no matter the benevolent intentions that went into its creation. After all, what is it that the application of bureaucratic procedure tries to do? According to Graeber, "even the most benevolent bureaucracies are really just taking the highly schematised, minimal, blinkered perspectives typical of the powerful, turning them into ways of limiting that power or ameliorating its most pernicious effects".

The effect this has depends on one's point of view. From the lofty, blissfully ignorant perspective of those at the top, the way life can seemingly be reduced to forms, questionnaires and statistics means that what is really wilful blindness takes on the appearance of the prestige of science.

For those on the bottom, though, what results are assumptions about health, family, work, and other aspects of life that neither bear much resemblance to how life is actually lived when you are poor or working class, nor align with how meaning is actually derived from all that. Not surprising, then, that even the most worthy and benevolent bureaucratic interventions, such as the European social welfare state, had a weakness in the form of the wilful blindness of those commanding these administrative structures that the Right successfully exploited so as to gain the popular support needed to dismantle them.

Actually, it was not only wilful blindness that the Right could exploit so effectively, but also a certain uneasiness regarding what bureaucracy seemingly opposed. One can identify a common theme running through the youth rebellions from China to Mexico to New York, culminating in the Paris insurrection of 1968. That common theme was the perspective of bureaucratic authority as something opposed to and stifling of creativity, imagination and conviviality. In short, a force that was out to crush the human spirit.

If the utopian dream of the Right is the belief in an anarchistic market that can guide us all to greater, sustainable prosperity with minimal (some would even say no) state intervention, the utopian dream of the Left entails the creation of bureaucratic and administrative structures that take care of the dull, dirty and dangerous aspects of human life, thereby setting the human spirit free to exercise its creative potential. It could be said, then, that the Marxist dream is of a world in which the right administrative structures and technological developments are in place to enable society to work for the individual, whereas so long as class struggle exists the individual is sacrificed for the good of society. We should recall what



Marx said: "It is above all necessary to avoid once more establishing 'society' as an abstraction over or against the individual. The individual is the social being".

What this means is, we may have been wrong to assume that the fatal flaw in left-wing politics was its lack of a coherent critique of bureaucracy. The famous slogan from the '68 insurrection- "all power to the imagination"- reveals that the Left essentially is a critique of bureaucracy- or, rather, of a bureaucracy of a certain and infuriatingly familiar kind. Not the sort of administrative structure that does its job of providing social welfare so well that you forget its even there as you pursue and achieve your dreams, but the sort of structures leftist thinking fundamentally opposes, even if, sad to say, it recreates them time and time again: the bureaucracies that end up creating immense inequalities in caring or interpretive labour, run by authorities who wield that trump card of the stupid: violence.

Utopias are funny things. For those who fall under their spell, they seem tantalisingly in reach and no amount of past failures completely dissuades advocates from trying again. But for those not bewitched by utopian promises, it's obvious that those true believers are simply not being realistic.

Now, this raises a question: what 'reality' does such an admonition refer to?

One's first response to a question like that would naturally be that it must refer to physical, tangible, concrete reality. Dreams of a better way of organising society are all very well, but once such dreams have to work in the real world with its factories and roads and shipyards and railway terminals and the countless other physical objects, the result of this encounter with hard reality is that the dream dissolves into insurmountable problems.

It would be wrong, though, to assert that this insurmountable difficulty is due to the fact that it is intrinsically difficult to administer such objects via any system other than money, markets and hierarchies of power. History shows us this is not the case at all, since we have many examples of communities successfully administering common resources via methods that go further in democratising society than modern administrative methods do. Rather than blame the objects themselves, then, we should look elsewhere for the true nature of this 'reality' utopians are accused of ignoring.

We find a big clue in the phrase 'Real Estate'. Why is land and property given that label? It is not so as to distinguish 'actual' property (houses, factories, shopping malls etc) from 'fantasy property' like the floating island in 'Gulliver's Travels' or Hogwarts School. No, the term 'real estate' should really be read as "Royal Estate", because the 'real' in this phrase comes from the Spanish 'Real', meaning 'Royal'.

You may recall how John Locke was very much opposed to the monarch's right to take possession of other's property. If that sounds like stealing, you are forgetting about the monarch's right. 'Royal' estate is so-called because all land in a sovereign territory is, ultimately, the property of the king or queen. Think of this as similar to downloading a book to Kindle. Unlike when you buy a physical book, the purchase does not mean the book is your property. It remains Amazon's property and the company grants you license to read it. The same thing is true of all those streaming services. You may consume all the entertainment

you can stomach, but the music, movies and games are never really your property. At any time, the companies are well within their rights to take it all away.

Similarly, since 'real estate' means "property belonging to the sovereign", the state has every right to impose regulations. Of all the things that are most difficult to hide from the government's armed representatives, large, physical infrastructure takes top place. Anyone who ever turned a squat into a legally owned home understands this. It's impossible to evade the attention of building inspectors whose demands for repairs and maintenance are so costly a bank account has to be set up, and that of course won't happen unless you comply with the requisite legal regulations.

You could try ignoring all the jobsworths and paper pushers and officials who insist those rules and regulations apply to you as much as anyone, but that's really not a good idea, and why not has everything to do with being 'realistic'.

Why does the King (or 'the State') have sovereignty? Ultimately, sovereignty is due to the fact that the king or the state has a monopoly on violence. It is this violence (or 'force' as it is euphemistically called) that gives all those regulations and codes and laws their weight. So, being 'realistic' has nothing to do with recognising natural, material facts, or accepting some truth about human nature or anything of that sort. Instead, it means understanding that the systemic threat of violence has real effects; real consequences. You'll find that out the painful way if you insist on buying or smoking or selling or building or eating or drinking or using or taking what where, while ignoring the rules and regulations that grant permission to engage in such activities. After all, eventually, the state will enforce its laws, taking away property, locking you in prison, sending in the army with its big guns.

All this relates to something pointed out by the Italian philosopher Giorgio Agamben (b. 1942). Philosophy is notorious for posing seemingly straightforward questions that don't have straightforward answers. One such question is, "how do we know if something is alive?".

According to Agamben, so long as you approach this question from the perspective of sovereign power, there actually is a straightforward answer. Something is alive because you can kill it. Sticking with this perspective, we can similarly answer the question, "why is property real?", in a straightforward way. Property is real because the State can seize or destroy it.

When we refer to 'the State' taking action, exercising its rights and defending its interests, we are on more metaphysical ground than when we say such things of queens. This is because, whereas a queen is a human being with motives, purposes and interests, a state is not. The President of the United States has purposes and interests, but does the USA have its own purposes and interests, above and beyond those of its citizens? Unless you mean in a purely metaphysical sense, no it does not.

But, if this is so, why does it seem so realistic to speak of states pursuing their natural interests? What makes natural interests 'real'? Recognising that the state can ultimately bring overwhelming firepower to almost any situation, and following Agamben, here's the straightforward answer. National interests are real because they can kill you.

According to Graeber, “the critical term here is ‘force’...whenever we hear this word invoked, we find ourselves in the presence of a political ontology in which the power to destroy...is treated as the social equivalent of the very energy that drives the cosmos”.

The idea that systemic violence is foundational to reality is not a universal political ontology but, rather, the perspective of the Right. From this perspective, ‘normality’, when it comes to how individuals relate to each other, means “relations mediated by money and markets”, while, for groups, normal relations are organised by relations of hierarchy and command. As for ‘Bureaucracy’, its purpose, so far as the Right is concerned, is never to rid the world of violence but rather to lessen its impact just enough so that the fraud, violence and gangsterism from which commercial markets really evolved can be prevented from totally destabilising the system, while leaving its ability to extract profits intact.

The reason the Left should be thought of as essentially anti bureaucratic in its inspiration is because it rejects this political ontology. Not in the sense of denying the reality of violence, but in the sense of not placing violence at the very ground of social being.

There’s a reason why “all power to the imagination” should be thought of as the quintessential slogan of the Left. Let’s return to that utopian socialist, St. Simon. He placed artists at the heart of his vision for a better society, saying that they needed to become the vanguard of a new social order, the builders of the grand visions that, hitherto, had not been realistic, but were becoming possible through the power of industry.

Marx, that most famous social revolutionary, had very little time for the utopian socialists of his day. And yet, despite this contempt from so great a figure, there was, and continues to be, a great affinity between artistic avant-guards and social revolutionaries. We see this affinity in the way these groups borrow each other’s language and ideas, as if there is one, grand, overarching idea that unites them.

To understand what that might be, we should return to the thing that, according to Marx, distinguishes human workers from worker bees or any other animal. The distinguishing feature was that humans don’t just build things out of instinct. For humans, before structures are built by following physical laws and architectural and engineering rules, they are raised as structures in the imagination. The process that Marx referred to as ‘production’ referred not only to physical processes of hammering, sawing, gluing, nailing etc, but more so to the unique property of humans, namely the ability to first raise in the mind that which will later come to exist in the real world.

Forging structures in the mind that go on to have real effects is what humans have always done, and we can see the results all around us, for it is the very world we inhabit. Once it is understood that our reality is, by and large, something we created, we can appreciate why it is that our world is not a natural fact. There is an ultimate, hidden reality to the world, which is that it is something that only exists because, every time we wake up, we recreate it. Hence, “all power to the imagination” is the quintessential slogan of the Left.

This does, however, raise a troubling question. If all power is to the imagination and we can indeed imagine things we’d like and bring them into being, then why do we keep on

recreating the familiar world with all its acknowledged ills and evils? What is it that is holding us back from waking up tomorrow and creating a different, better world, one without toxic inequality, bullshit jobs and unsustainable economic practices?

The Right has an answer to that question, which is that the Left goes too far in emphasising human powers of creativity and production. Revolutionaries go so far in pushing these positive aspects of human nature that the negative aspects- states, armies, criminals, mobs, barbarian invasions- the 'means of destruction' if you will- gets ignored. But pretending such things don't exist not only does nothing to actually eradicate them, it actually results in Left-wing regimes that create much more death and destruction than the Right's pro-libertarian, pro-free market approach, which adopts the more 'realistic' stance that such 'means of destruction' exist.

This warning from the Right is one worth taking seriously, the proof of which is the totalitarian regimes that resulted from attempts to put Marx's Communist Manifesto into effect. And yet, we can derive a hope from those same repressive regimes, in the way they made a point of jailing poets, playwrights and banning this or that book. Why behave so repressively towards the arts, unless you acknowledge, deep down, that art and creativity really does have the power to make a different world?

It may be hard to credit imagination with such powers, because the modern definition of 'imagination' opposes it to 'reality'. I say 'modern definition' because that was not how the imaginary world was understood in Ancient and Medieval cultures. Rather than opposing the imaginary to the real, those people thought of dreams, inspiration and that sort of thing as a means of connecting material reality and the rational soul. They developed a model of the universe that enabled immaterial flight of fancy, existing in a heavenly realm that was utterly alien to the material world, to take physical form in everyday reality, with humans acting as the bridge connecting these dual realities. For our purposes, a detailed description of this concept is unnecessary. All we need to know is that, in Ancient and Medieval cultures, the imaginary world had a decidedly practical role to play in human affairs.

It was not until the 17th century that the 'imaginary' came to be defined as "that which we can think, but which has no reality". Under this definition, the practical aspects of the 'imaginary' were discarded and we adopted the perspective that places, events, people, and whatever else that came with the prefix 'imaginary' did not exist and, consequently, had no capacity to alter anything whatsoever.

The prime examples of this conception of the 'imaginary' would be world of fiction (books, art, movies, whatever) that create fantasy worlds like Narnia, fantasy people like Orcs and fantasy events like Theseus defeating the Minotaur. In all such works, we find a decidedly transcendent quality to such tales, in that not only are they separate from material reality, but also separate in time. After all, no matter how many times you go through a fictional tale, the same events occur in the same sequence. Edmund always betrays his siblings for Turkish delight, Alderaan always gets destroyed by the Death Star, and Goldfinger always quips that he does not expect Bond to talk; he expects him to die. This decidedly transcendent quality to the 'imaginary' as it is popularly conceived today means that a phrase like 'political ontology of the imagination' could only be a contradiction in terms. The imaginary is, after all, "that which we can think, but which has no reality".

Only, that really is not the only way we can define the 'imaginary', for there has always been creative uses of the mind that are not static, free-floating events that cannot affect reality, but rather mental models that have real effects on the material world, such that, consequently, both evolve together.

Where can we find this amazing imaginary power? Well, it happens every day in the most ordinary, mundane ways: The father who makes up a story to calm his infant child; the group of workers who figure out a way to correct a mistake before the boss is made aware of a serious cock-up; the women who must determine what mood the patriarch is in so as to modify their actions accordingly. In short, we are talking about all the myriad ways that caring/ interpretive labour can be put to practical effect. If the former sort of 'imaginary' had a transcendent quality, then imagination of this kind could be a more immanent conception.

If we return to that '68 slogan- "all power to the imagination"- it becomes clearer now that we need to determine what sort of 'imagination' is being referred to: the 'Transcendent' or the 'Immanent' kind? Lest we forget why it should matter which sort of imagination we should pursue, recall that history has numerous examples of attempts to impose some prefab utopian vision that turned into giant bureaucratic machines, vainly trying to impose such visions through violence. Indeed, attempts to impose the 'transcendent' form of imagination on the real world has had such dire outcomes, many advocate never trying for revolution ever again, saying there simply can be no alternative to the current, Capitalist system.

But, on the other hand, we have also seen that it is simply impossible to accept that the world we keep recreating, with its infuriating red tape, bullshit jobs and toxic inequality, is anywhere near to ideal on any practical level. Given that realisation, it would seem quite evident that another revolutionary situation is called for. Were such a situation to come about, "all power to the imagination" would be very good advice, if it was referring to the immanent form of imagination that encapsulates all the various forms of practical common sense that has always beavered away in the background, maintaining the powerful in their fantasy that they run the world. Unless "full power" was given to the practical, common-sense forms of imagination, allowing it to manifest in its many collective forms, the results of any revolution would likely be disastrous.

If we can blame the libertarian Right for imposing the fiction that we have no alternative but to keep on recreating the world in its current form (at least in broad details) we can find fault with the Left, too, a fault that manifests itself as a particular tension or contradiction in Marxist philosophy.

What I am referring to is a paradox surrounding Marx's conception of the role that imagination plays in production. As we have seen, when it comes to material production, Marx saw the imagination as playing a crucial role in the productive process. Not for human architects the process of building structures relying on nothing but instinct- leave that sort of practice to the birds and the bees. No, human engineers and architects should first dream up a design, then draw up architectural designs, plans or blueprints, and only when that imaginary phase of the process is complete should the practical work of assembling the machine/ erecting the building, etc, begin.

However, when it came to social creativity, we find Marx adopting an attitude that is the direct opposite of how material production should properly proceed. Marx only really considers one form of social creativity, namely revolution. But, since dreaming up a revolutionary scenario and planning how it should proceed before going forth and changing the world all smacks of Utopianism, Marx, who held Utopianism in deep contempt, could have nothing to do with such plans. The social creative aka revolutionary should never try to draw up a blueprint for a radically new society; instead revolution should unfold as the actual immanent practice of the proletariat, and the way such practices will unfold must remain mysterious to we pre-revolutionaries, lacking as we must the requisite conceptual tools and mental models needed to understand what comes after a revolutionary creative act.

So, there's a definite discrepancy in Marxist philosophy. But why should that be? The most reasonable answer would appear to be that the imagination works differently in the domain of material production than it does in social relations.

To see why, we need to return to what Graeber has called "lopsided structures of the imagination", a reference to all those situations in which a division opens up between one class of people who end up doing most of the imaginative labour, and another class who do not.

In most cases, it is the subordinate class who do the creative labour. But there is an exception to that rule and it happens to be the very area of production that Marx chose as his main focus of study. For, in the sphere of factory production, we find it is the dominant class who actually do most of the imaginative labour, in that they get to design the products and figure out practical ways of manufacturing and distributing them.

This topsy-turvy way in which imaginative labour is organised in industry leads to something we discussed earlier, which was the feeling of alienation. With those at the top monopolising most if not all of the tasks that really exercise logical and creative powers, what's left to be relegated to the working class in industry (if we ignore caring labour, which we'll get to in a moment) is all those mind-numbingly boring mechanical jobs that leave one with a feeling of being separated- alienated- from a meaningful existence, while the end result belongs to the Capitalist, not the collective of workers who performed 99.99% of the work required to bring it to market. We have seen how this is all perfectly fair under the rules of exchange, but it leads to another way in which alienation is part of the experience of a capitalist system, since the workers are necessarily separated from the fruits of their labours.

These forms of alienation are pretty familiar, but if we now move into the other main sphere of social living in political economy, we'll find the greatest alienation of all.

In the tradition within which Marx worked, society was generally seen as divided between two spheres. One was 'wage labour' (which was taken to mean 'factory work') and the other was 'domestic labour'. If 'factory work' was the paradigmatic example of wage labour, then for 'domestic labour' the exemplars were housework and childcare, both of which, certainly in Marx's time, were viewed as duties properly relegated to women.

But, the differences went further than that, for whereas the first sphere (wage labour) was concerned with the creation and maintenance of physical objects, the second sphere was primarily concerned with creating and maintaining people and social relations.

We have already seen how this way of thinking about life as neatly divided into tasks done by men on one hand, and tasks done by women on the other, does not actually refer to any real society. There is no such place, at any time in history, where most men were factory workers and most women housewives (at least not exclusively so). But this was how society was imagined to be organised, and this conception is the root of the problem for Marx.

Why? Because, as we have seen, so far as the 'sphere of wage labour' is concerned, the more imaginative tasks, the sort most likely to have transformative effects if manipulated appropriately, were relegated to those at the top and, thus, most rewarded by the current paradigm. Presumably, then, such a class would be least likely to want to upset the current system. That's not to say nothing at all has changed, for we have seen how bullshit jobs now proliferate in 'services' because the most powerful players in banking and finance behave more like feudal lords than capitalists. But that was nothing like the revolutionary outcome Marx anticipated.

When inequalities emerged in the sphere of social production, the major imaginative work of 'caring' and 'interpretive' labour was not performed by those at the top, but by those at the bottom. Because of the way all this was conceptualised as two spheres of social activity, it was easy to see those kinds of work ('industrial' and 'caring'/'interpretive' work) as being fundamentally separate from each other. This imagined separation was further exaggerated by the way such tasks were gendered, for 'domestic labour' came to mean "women's work" and, in time, "women's work" was not recognised as 'work' at all.

That was a particularly big mistake to make, because, far from writing off stereotypically 'women's work' as not work, it should really be recognised as work in its most primary form. I would say most of us understand this on an intuitive level, simply because it aligns with our deepest values. After all, what do we really care about? Not things, but people. You'll find few songs devoted to objects and physical possessions, but countless stories, poems, songs and plays devoted to our loves, passions, rivalries- in short, the many and varied ways of relating to other people.

With one exception, all societies have recognised work aimed at the development of people as activities of the most fundamentally important kind, with the manufacturing of physical stuff subordinate to that primary purpose. The exception, of course, is the Capitalist society, which forces us to pretend that people exist only to output more (possibly nonmaterial) stuff in pursuit of surplus value. This may well be the most alienating feature of the Capitalist way of life, as it forces us to pretend life has the opposite purpose to that which we know, in our heart of hearts, to be the authentic life. But it was very convenient for those at the top, for it created social situations where such people (kings, celebrities, CEOs, politicians) could live out a fantasy of creating the world, oblivious to the fact that it is only because their subordinates do so much "woman's work" that such a fantasy is even remotely plausible. Still, it's a nice fantasy for those who get to indulge in it, so why should they ever wish to be woken up from this sweet dream they are having?

For the rest of us, though, doomed to perform alienating work so as to maintain a few in a comforting cocoon of delusion, the need for a revolutionary change in the way society is structured comes across as a far more pressing concern. But, at the same time, we have to be aware that the last time such revolutions were attempted, what actually resulted were bureaucratic procedures that seem so stupid because, being as they are methods of minimising the toxic effects of structural violence, they are ways of managing situations that were stupid to begin with. Right now, what with environmental breakdown and the rise of bullshit jobs, things do seem to be going further and further in the wrong direction. The great revolutionary question of our age could well be: Is this an outcome that is doomed to repeat, perhaps due to an inherent flaw in 'Utopianism' or social theory, or can we actually find some way of affecting a revolution that fundamentally changes the world for the better?

Looking back, the old assumptions about how such a transformation of society could be brought about, the idea that such an outcome could be the result of a single uprising or successful civil war, seems naive indeed. How could the whole apparatus of structural violence and the reality imposed on the mind by right-wing ideology, be so simply cast aside so that revolutionary creativity would have its unfettered chance to make the world anew?

Such rhetorical questions imply this possibility of fundamental change is a hopeless one. But what is really puzzling is the fact that one can identify moments in history where that very outpouring of creativity did seem to be underway. More puzzling still is not so much that these moments later dissolved away as quickly as they began, but the way in which it all unravelled.

What happened in May '68 is as good an example as any of what I am talking about, for here we find that the student/worker uprising generated a not inconsiderable amount of sympathy from the public. But, when polling day came around, what did the Electorate do? They sided with a right-wing government, which is exactly the sort of decision you would expect of people who emphatically opposed what the May '68 revolutionaries represented. What on Earth happened?

A popular way of answering that question is to say that, in a short period of irrationality, the public had been caught up in the fantasy of what the revolutionaries promised. But come polling day, sanity was restored and the public understood revolution was not in their interests.

There is, however, a more subtle and sophisticated explanation than this, one which has a lot to do with post-Marxist thought.

Notice how it was 'the Public' that had revolutionary sympathies, but that it was 'the Electorate' who voted in a Right-Wing government. But why should we take care to notice such things? Are these not the same people?

Well, in an important way, the answer is actually no. You may recall how Marx rarely talked about how individuals would likely behave in a CMC/MCM circuit, instead concentrating on the personas or roles that have to be adopted in order for such circuits to work at all.



As far as Marx was concerned, the very logic by which these circuits operated, and the contradictions, antagonisms and syntheses that should result, should have been enough to move the dialectical process towards a revolution that would end class divisions once and for all.

But, when things did not turn out that way, post-Marxists realised that more work needed to be done if revolutionary change was to have a permanent effect. It was not enough to have in place the right physical infrastructure like robotic factories, automated logistics systems, vertical farms and whatever else made communism a practical possibility, because the people first had to be changed, their minds altered, so that they would not defend the current system, nor seek to reform it, but act to dismantle it altogether and then go on to collectively build something radically new.

Key to making this happen was the understanding that ‘caring labour’ or the work needed to be done to ensure ‘the market’ always had a supply of wage labourers, did not consist solely of ensuring new family members were born and raised to replace those too infirm to work. More important was the work of ensuring the right kind of people, organised into the right kind of groups, got underway.

So, let’s return to ‘the Public’ and how and why it is different to ‘the Electorate’. The biggest mistake would be to regard ‘the Public’ as an entity with relatively stable opinions, interests and allegiances. ‘The Public’ is not an entity, but a creation. It is a product of certain specific institutions under which only some forms of action are appropriate.

Broadly speaking, we may say that people adopt the role when they are an audience to public spectacles, or when they are consuming public services. More specifically, ‘The Public’ is a creation that comes into being when certain forms of action implying certain ways of talking, thinking, arguing and deliberating, are undertaken. ‘The Public’ watches TV, signs petitions, attends public hearings, rides on public transport, and writes letters to elected officials.

No doubt that’s only a partial list of what we may do in our capacity as ‘the Public’, but “what we may do” is not boundless, for only when certain actions are taken do we become ‘the Public’. So, for example, we saw earlier how the Public consumes public services. But, the market also provides plenty of goods and services that are privately supplied, so what happens when individuals consume these products and services rather than public goods and services? Well, in that case, they stop being ‘the Public’ and become ‘Consumers’ instead. As ‘Consumers’, they may deem certain courses of action appropriate whereas, in their capacity as ‘the Public’, they would never take such action.

Here’s an example of something ‘the Public’ does not do. ‘The Public’ does not work. No editor would permit a sentence like “most of the English public work in the care sector”. This is because, in the context of ‘working’ the same people who are thought of collectively as ‘the public’ in other contexts become, instead, ‘the Workforce’.

But, while ‘the Public’ does not work, going to work does, apparently, fall under those actions one may do in their capacity as ‘the Public’. After all, riding on public transport is an action

'the Public' can take, and most people catch the train or ride the bus from home to the workplace and vice versa.

This distinction- "the public does not work/ the public does go to work", results in what is one of the most infuriating right-wing attitudes. Should a transport strike shut down a rail network or bus service, the right-wing response is always to denounce such actions as a damned inconvenience to 'the Public'. But, somehow, the fact that those strikers are, themselves, part of 'the Public' never seems to occur to those demanding the strike end. Nor, for that matter, does it ever seem to occur to the right-winger that if the strike ends up improving safety, or preserves services minority groups need, or raises wage levels, all that would be a public benefit.

Actually, though, were an individual to be in a situation where they need public transport, then, in their role as 'commuter', they may well also condemn a strike they might have given their full support to, when acting in ways that fit other roles.

Which gets us to the point, as well as the premise on which the entire anarchist project of re-inventing society is based. When organised into certain kinds of groups or collectives, certain actions or decisions can seem appropriate, while, when those same people adopt other roles, such actions may seem 'unrealistic', 'unwise', 'dangerous'. So, for example, if citizens are organised into a parliamentary system, only some forms of action will seem 'realistic'. But organise those same people into, say, a nested series of public assemblies, and what they deem 'realistic' will change. This is what happened in '68. Formed into certain groups, revolutionary dreams seem appealing, but when in the role of 'Electorate', those dreams seemed unrealistic.

Now, so far we have concentrated on differences, the alternate forms of decision and action we can take as we switch roles from 'the Public' to 'the Workforce' to 'the Electorate'. But, we should also note that all those collectives share something in common. In every case, we are talking about a group that is brought into being by inherently bureaucratic, institutionalised frames of action. As such, the same negative features accompany such groups: Alienation and the enforcement of extremely limited horizons. Little wonder then, that following the neutralisation of this apparatus, an outpouring of social, artistic and intellectual creativity results. After all, what could be more fitting, in a revolutionary moment, then to try to see the world from an unfamiliar point of view, and to feel the right, and a pressing, practical need, to recreate and reimagine what is around us?

A term like 'revolutionary moment' hardly implies something of lasting, let alone permanent, effect. As past experience has shown us, the revolutionary moment comes to an end once those revolutionary groups assemble themselves into a group with some new function. The danger, at this point, lies in the potential for this new group to then end up constructing new sets of rules and regulations which will require the establishment of bureaucratic institutions, all of which will derive their power and authority from 'the Police' (or, at any rate, something very similar) that enforces those rules and regulations through violence. In short, we end up recreating the world we thought our revolutionary moment had overthrown.

There seems to be two familiar terms that need to be properly understood for such a trap to be avoided, and those times are 'power' and 'violence'. The trouble is, both of these terms

are commonly misunderstood. The way 'power' is often misunderstood is encapsulated in that famous phrase from the 'Spiderman' comics: "With great power comes great responsibility". Those who hold positions of power and privilege would appear to agree, for more often than not they act as though to be in such a position entails carrying the burden of a great responsibility.

But, as we can see from all those examples of powerful people living in ignorant bliss while underlings work hard to ensure the caring and interpretive labour that sustains such fantasies is being done, actually power is not so much defined by responsibility, but by delegation. Being in a position of power means you do not have much to worry about (other than losing that position) not much you need to know about and not much to do. The 'Great and Powerful' do not worry; they cause others to worry (as well as cause them to figure out how to solve problems and how to get things done). To be powerful is to whisper a command that sets a vast machine of human labour in motion, and when the final results are ready, it all somehow vanishes from public awareness and the fruits of all that labour seem to have come from the vision and capability of 'the Powerful' and nowhere else.

Rather than seeing 'Power' as synonymous with 'responsibility', we should accept the truth, which is that the more power you wield, the lazier you can be. A moment's thought should be sufficient to persuade anyone that someone at the top of a business hierarchy worth 100 billion dollars does not work more than ninety-nine billion times harder than a minimum-wage domestic cleaner. But what is more, that domestic cleaner, who is not in a position to delegate her duties or offload her worries to anyone, almost certainly works quite a bit harder.

Another way to look at this would be to approach the subject from the viewpoint of 'responsibility', which the powerful supposedly mostly carry. If someone at the top of a business hierarchy were asked to justify the fact that they earn what is a lifetime's salary for the average worker in just a few days of the working year (or maybe even just a few hours), and will retire with more money than most can dream of making in several generations, they would most likely say "I am responsible for everything that goes on in this business. The buck stops here! In recognition of this ultimate responsibility placed on my shoulders, the market has decreed that my pay should reflect this awesome burden".

But what is missing from this sort of explanation is the fact that the more responsibility you have, the more that becomes a symbolic, rather than a practical kind of responsibility. Yes, symbolically speaking, whoever is at the top of the business hierarchy bears ultimate responsibility for everything, but obviously on a practical level there is no way an individual could take care of every little task involved in running a business. That would be ludicrously impractical even for a modestly sized business, let alone a multi-national corporation. Necessity therefore dictates that the big boss at the top delegate responsibility to those lower down in the hierarchy. In fact, so much responsibility gets delegated that, if anything were to go wrong, it's highly unlikely 'the buck' ever would stop at the top because the blame will almost certainly be attributed to some subordinate. In the highly unlikely event that the boss should have to take the blame, he or she will have earned so much money by then they could afford to retire in splendid luxury, even if their firing did not trigger a 'golden parachute' payout, which it almost certainly would. Contrast this to the low-wage worker, who has far more practical responsibility to be concerned about, and whose pitiful compensation means

any job loss due to blame they must carry means dire financial consequences. Being powerful is all about the work you do not have to do, the responsibility you do not have to bare, and the blame you do not have to carry.

There's only so much bureaucracy can do about this. Such administrative structures can, to a certain extent, democratise power. But that relationship to laziness is something bureaucratic structures cannot eliminate. Instead, they institutionalise that laziness and as we are all obliged to play along (because, after all, we have to follow the rules and stick to the regulations) that laziness becomes deeply habituated.

This presents the first great obstacle, because giving full power to the imagination with the aim of remaking the world into something fundamentally and permanently new requires an enormous amount of work, something that the habitually lazy are ill prepared for.

Moving on to violence, the mistake is to focus on its more dramatic aspects. It is, of course, understandable that the more explosive aspects of violence is used to catch attention in a world in which media craves clickbait and viewing figures. It is quite possible to use violence so as to send dramatic messages, as evidenced by those terrorist events we still remember years or even generations after they happened. But the problem with focusing on dramatic violent events is that it makes us forget that violence's most salient feature is that it is very boring. Also, as Dostoevsky (1821-1881) pointed out, the worst kind of violence doesn't impart any message at all, but instead forces the sufferer to endure utter meaninglessness.

Consider this quote, in which he comments on that dreaded sentence of hard labour in a Siberian prison camp. Actually, the work itself was not notably strenuous. In fact, most peasants worked much harder than those convicts. But it was not the toughness of the labour that made it such a cruel punishment, but that fact that there was no purpose to that work. Whereas peasants worked partly for themselves and could see there was some point to what they were doing, those condemned to 'hard labour' got nothing out of their work.

"If it were desired to reduce a man to nothingness...to crush him in such a manner that the most hardened murderer would tremble before such a punishment...it would only be necessary to give his work a character of complete uselessness...Hard labour, as it is now carried on, presents no interest to the convict, but it has its utility. The convict makes bricks, digs the earth, builds, and all his occupations have a meaning and an end....But let him be constrained to pour water from one vessel to another...to move a heap of earth from one place to another, and then immediately move it back again, then I am convinced that at the end of a few days, the prisoner would hang himself....preferring to die rather than endure such humiliation".

Such comments help us to understand how come those who are doing bullshit jobs tend to report feelings of confusion and depression, when the popular opinion (if constant Tabloid complaints about 'the workshy' are anything to go by) people should be thrilled to be paid to do nothing.

What could possibly be worse than meaningless activity? Perhaps the answer is: to be denied the possibility of any activity, interaction or communication? That pretty much sums up the most terrible form of punishment that can be meted out to the incarcerated in

American prisons. In what is one of the most violent places on earth, the worst punishment is to be locked in an empty room for years with nothing whatsoever to do.

It would be wrong to suggest that this particular act of violence conveys no message, since it presumably communicates to other convicts the dire consequences of rule breaking. It's just that trying to decipher the message we presume the application of violence is intended to convey blinds us to the fact that, more than anything, violence is a means terminating communication; of cutting off the possibility of sending messages of any kind.

So far, we have considered the salient features of violence from the perspective of the victim. But what does it do for those who are in a position to inflict it? Above all else, it confers on them a position of unquestionable authority. One sees this in the way parents end all arguments by saying "because I said so!", how bosses cut through all the complexities involved in any situation with a curt "just do your job!", and how, with a simple swing of the baton, law enforcers get to silence those scrambling to give their version of what's going on and who is responsible.

All such cases involve an acute imbalance of power where the ability to threaten violence lies almost entirely on one side. It should also be obvious that a state of unquestionable authority and a condition in which communication is not possible go hand in hand. After all, what could "unquestionable" possibly mean, other than that even if the underling should become aware of some profound practical flaw in the master's methods, and the blindness and stupidity that necessarily results, still the master can remain in blissful ignorance of what the underling is only too aware of. Or, at least, the master can remain unaware of what the slave must understand, so long as that slave devotes time, energy and actions towards understanding and anticipating the master's confused perceptions, and tidying up the mess it causes. If the underling should ever question why they should have to do the bulk of such interpretive labour, the master can always remind them that potential violence can quickly become the real thing.

## CHAPTER THIRTY-SEVEN

We have previously seen how a market system based on perpetual growth required a change in social attitudes once productivity was capable of meeting basic needs, and that transition was one where we went from defining meaning in what was produced, and acquired stuff on the basis of its utility, to a concept of reality based on signalling our individuality through consumption, as well as believing buying stuff (including 'labour') counted for more in terms of creating the world around us than labour did. By the late 20th century, it had become all but impossible to miss consumption culture and, perhaps inevitably, marketing, advertising and other aspects of consumer culture began to have an influence in areas one might consider to be outside the sphere of economic concerns.

One such example would be Church. Membership of mainstream church attendance had been declining in the latter part of the 20th century. In the past, churches faced with an increasing number of 'unchurched' folk might have sent out missionaries to try and convert the heathen population. But, this being an era of marketing, the Church tried something different. It did what any business would do when looking to relaunch a flagging product. They began thinking of potential members as 'customers' and conducted market research in

order to determine what it was 'the customer' wanted. The various surveys and research indicated that people were not much interested in the kind of sermons they had sat through as children. Not for them the angry sermon condemning sin. In fact, market research showed people were not much interested in traditional church services at all.

So pastors like Rick Warren (b. 1954), Bill Hybels (b. 1951) and Robert Shuller (1926-2015) set about reconfiguring church in order to better accommodate what the 'customer' wanted. Out went the hard pews, replaced with comfortable seating. Out went all the imagery of conventional churches. There would be little in the way of traditional Christian iconography, such as crucifixes or images of Jesus. The result of this transformation was a building that looked less like a church and more like architecture that fit seamlessly with the modernist corporate style environment of the rest of the city.

It was not only the physical appearance of the church that changed to suit the modern, corporate, secular world. The sermons changed as well. The more demanding principles of Christianity, with its teachings of modesty and humble living were discarded, replaced with positive messages very much like the ones New Thought had preached. The new breed of pastor saw themselves not as critics of the secular, materialist world but rather as active participants within it. They preached a 'prosperity Gospel', which claimed God wanted you to achieve status, wealth, and the other trappings of material success

In growth terms, this tactic of transforming churches into secular conference centres spreading the Good News that God would cancel your credit card debt proved very successful. The churches led by the likes of Schuller, Warren and Hybels became 'megachurches' which, if you include those attending via TV broadcast, preached to an audience of millions. Being so big, megachurches had to employ hundreds of people and find millions of dollars to keep the organisation running. These conditions led to their pastors becoming less and less like traditional clergy, and more and more like the CEOs of large corporations. As Ehrenreich explained, many of these churches were "nondenominational, meaning they couldn't turn to a centralised bureaucracy for financial or any other kind of support...They depended entirely on their own charisma and salesmanship".

So the audience of a megachurch entered a building that looked pretty much like a corporate headquarters. The person preaching to them wore a business suit like any CEO and probably thought of himself as a 'pastorpreneur'- part pastor, part entrepreneur. And the message the pastropreneur delivered was much the same as the one the corporate world wanted to get across. Through positive thinking, and adequate personal effort, you could make anything happen. Getting ahead, becoming successful, acquiring great riches, it was all within your power to achieve if you only believe with all your heart that you deserve it. After all, as televangelist Joyce Meyer preached, "God wants to give us nice things".

But, underneath all that positivity was the dark undercurrent of New Thought's attitude toward negativity, which it considered to be a sin. If, despite all your positivity and effort, riches did not come your way and the trappings of success continued to be elusive, it was no use looking for any flaw in business, economics or politics. Instead, blame yourself. You obviously did not try hard enough, or believe in your own success fervently enough. Pastor Robert Sculler advised his congregation to "never verbalise a negative emotion".

We saw earlier how business executives had taken that advice to heart by dismissing any employ who had any bad news to report (and, as we approached the bursting of the subprime mortgage bubble, there certainly was bad news to be reported). Not only did these top business people live in a comforting bubble of reassuring cliches, but all the practical, caring and interpretive labour being undertaken by their subordinates meant this was one class who could almost be said to be living the 'self-actualisation' philosophy from which much of the new bureaucratic language emerged.

'Self-actualisation' philosophy emerged around the seventies, and it could be thought of as a sort of individualistic fascism, since it taught that the world is something we simply create through willpower. Some conservative Christian theologians had started to think along similar lines more or less when self-actualisation philosophy emerged, but in their case they had taken to seeing money as an extension of God's power, with that creative force then transforming into material reality through the entrepreneurial mind. It was such beliefs that led to a concept of a world where financial abstractions had become the bedrock of reality. For, as Graeber commented, "if one gives sufficient social power to a class of people holding even the most outlandish ideas, they will, consciously or not, eventually contrive to produce a world organised in such a way that living in it will, in a thousand subtle ways, reinforce the impression that those ideas are self-evidently true".

## CHAPTER THIRTY-EIGHT

When our ancestors wanted to know what was the moral thing to do, there was one authority in particular which, it was assumed, knew how to answer such questions. That authority was the priestly caste or, at any rate, some sort of religious figure.

These days we apparently do not have to consult religious authorities in order to learn what is right and what is wrong, because now we can also turn to a more secular source of knowledge. What source is that, exactly? The opinion writers, such as the aforementioned Richard Littlejohn, who comment on current affairs in daily newspapers, blogs and podcasts.

You may have noticed that I said we 'apparently' do not have to consult religious authorities. This is because, particularly when the topic is 'work', the thoughts expressed by opinion writers tend to reflect the theological roots of the discipline of economics. To recap, the theological tradition with regards to 'work' is based on the story of the Fall, in which we learn that work is both a curse and a blessing and, ultimately, a sacred duty. It also teaches us that humans, being as they are inherently sinful, lazy creatures, will shirk that duty at every possible opportunity.

This theological way of thinking about work is reflected in the so-called secular thoughts of opinion writers whenever such a person asserts that to be a 'hardworking' person is to be an admirable character, or that contempt is the only appropriate emotion to be directed at those who avoid work. Such opinions get expressed a great many times. Indeed, they are so common it's fair to say that such originally theological notions of work have near universal acceptance. The most obvious indication that this is so can be seen in the way such opinions are very rarely questioned.

You have no doubt heard a politician say that if they are elected they will create more jobs, because this is one promise every candidate, across the political spectrum, always makes. But have you ever heard anyone reply that some jobs just aren't worth having? Almost certainly not, and if somebody did voice such a controversial opinion, then we can rest assured that the response from the public would be that the person is a fool uttering words that have no place in a serious discussion.. 'The Public' would be just as certain to dismiss as ridiculous any assertion that hardworking people may not be admirable, or that avoiding work may not be contemptible. Opinions such as these are deemed unacceptable.

It is pretty plain that, when it comes to public debate, It is assumed that we ought to continue that theological concept that equates work with sacred duty. Since that is the case, it's not hard to see why there is not more of an outcry over the proliferation of bullshit jobs. The reason why not is because, when we generalise about work, for the most part we concur with all those moralists who insist that it's always better to have more jobs and that it is one's sacred duty to seek out and remain in employment. Since all work ought to be seen as sacred duty, it follows that there can be no such thing as a bullshit job, because any work is preferable to no work at all.

But while 'the public' may concur with the general opinion that work is a value in itself and so, by definition, never bullshit, it is also the case that, when we think about our own jobs we do, at times, apply quite different criteria when it comes to the value such work has. This happens whenever somebody describes the work they do as "bullshit", which is to say their job is pointless, meaningless, or maybe even pernicious. In short, they believe life would actually be better if the job did not exist.

In describing a job as 'bullshit' or 'pointless', one necessarily operates within some tacit theory of value. But what kind of value could a job have and what is the appropriate way to measure it? Basically speaking, there are two ways in which a job might be valuable. Either it is valuable in itself, in which case it is worth engaging in such work for its own sake even on an unpaid basis, or it is valuable to other people in some way. We may safely assume that the best work has both qualities and that bullshit jobs have neither.

As well as 'bullshit' jobs there are also 'shit' jobs. That is to say, a job that is very unpleasant to do but which yields some positive benefit. Few people would want to scrub filthy toilets or go down into sewers to clear away some foul-smelling blockage, but we can all appreciate what a good thing it is to have clean toilets and sewers in proper working order.

As to how the value of any job should be measured, economists seemingly have an answer to that. The value of any work is determined by 'utility', and utility is simply the degree to which a product or service adequately satisfies some want or need. Whenever somebody wonders whether their job serves some public good or not, they too are applying a measurement of utility to their occupations.

In some cases, the answer to such questions is pretty obvious. Take road maintenance for example. Why does that have 'utility'? Well, obviously, because people use wheeled transport to get around and such vehicles require flat, solid surfaces on which to travel, rather than tarmac so marked with potholes it resembles a lunar landscape.



Keeping our roads in good working condition has obvious utility, then, even if such maintenance does sometimes cause traffic jams and other inconveniences. But now contrast that with a scenario in the film 'Falling Down', which is all about a white-collar worker who is turned into a psychopath after the annoyances and pressures of urban life cause something to snap inside him. In one instance, he confronts workers who are carrying out repairs to a road, which, he suspects, was already in good working order.

"I don't think there's anything wrong with the street", he tells them, "I think you're just trying to justify your inflated budgets...if you don't spend the money you have projected this year, they don't give you the same amount next year".

We can safely say that if real road construction companies carry out needless repairs merely to justify "inflated budgets", that would be bullshit work. After all, carrying out necessary maintenance is useful, but just pretending to fix a non-existent problem is work of zero utility.

Utility would seem to be a handy way of measuring the degree to which some good or service is useful, then. It does, however, come with one obvious problem. When we describe something as 'useful', what do we mean by this? What we mean is, it's effective as a way of getting something else.

Take breakfast cereals for example. They have 'utility' because they are an effective means of giving the body the nutrients and calories needed to start the day. This is obvious enough. But, why should it be that our supermarkets offer so much choice of breakfast cereals, particularly when there's often not much to choose between different brands? Why does a customer pay for this box of cornflakes rather than that?

The economists' response to this is that this is not their question to answer. The reason why not is because we are talking about matters of taste and it's simply not their business to pass judgement on such a subjective matter. Their task is to determine how rationally people set about satisfying their needs and wants, not telling them what those needs and wants ought to be in the first place. You can only measure that which is quantifiable and subjective taste is too ambiguous for precise calculation.

Thing is, though, if you keep asking "why?", any utility will end up in this sort of subjective problem. People want to use roads to get to some other destination? Why? To get shopping done? To visit friends and relatives? Why? Invariably, if you dig right down into the 'why' of people's actions, at the root will be the sort of personal taste or family tradition or cultural ethic that economists say falls outside of their field of expertise.

We always end up with this subjective problem because utility itself is ultimately subjective. Since that is so, sooner or later economists have to say "shut up and calculate". In other words, since we ultimately cannot say precisely why a job is useful, we should not try to justify such feelings, but instead assume any product or service for sale in 'the market' has got to be valuable to someone somewhere, even if we ourselves find it hard to see how.

If the attitude of 'the public' is anything to go by, generally speaking, and when it comes to other people's jobs, this is a stance we tend to agree with. But, as Graeber pointed out, "when it comes to their own jobs, their experience often glaringly contradicts with the idea

that the market can always be trusted in such matters. It follows that, if the market can get things so wrong in the one area the worker knows best, then, surely, she cannot just blindly assume the market can be trusted to assess the true value of goods and services in those areas where she lacks firsthand information”.

That the market is not an infallible arbiter of value is felt most keenly by those doing jobs they feel to be bullshit. Such an opinion is obviously as much a matter of subjective taste as any assertion that a job has utility. But there is something peculiar about bullshit jobs.

For the most part, it is accepted that the human experience includes many subjective states that cannot be precisely measured or defined. Nevertheless, we accept they exist. Take ‘Consciousness’ for example. It’s notoriously difficult to define precisely what that term means, and since it’s so subjective there is no way of determining in some quantitative manner the degree to which something has consciousness. But still, we just accept that other people are telling the truth when they claim to be aware of this or have feelings about that.

Same thing is true of emotions like ‘love’. Songwriters may occasionally ask “how deep is your love?”, but this is only meant in a poetic way and it’s not actually possible to measure the degree to which this emotion is felt. But nobody would ever claim that all those who say they are in love are deluded.

But, when people claim that their job is bullshit, such a value judgement is often dismissed as obviously incorrect. This, you will recall, happened to Kurt, working for that private subcontractor to the German military. Many a free-market enthusiast has asserted that he is simply mistaken in believing his job as no utility whatsoever, whereas he remains certain the job is a complete waste of time and money. And David Graeber, who did more than anyone to raise awareness of the phenomenon of bullshit jobs, received no end of correspondences telling him the phenomenon could not exist because it’s just impossible for that to happen under Capitalism.

Why is there such a reluctance to accept that bullshit jobs exist? I think it’s fair to say that we would find such reluctance whenever a feeling is both unmeasurable and of fundamental importance to a belief system. For a ‘Free Marketeer’ to accept that bullshit jobs exist in any significant number is akin to a monotheist accepting that God does not exist. To do so would be to fatally undermine a belief that is so dear to them, and since there is no way to really prove it is they and not those who adopt the opposite stance, who are deluded, they can continue having faith in their cherished belief system.

Meanwhile, that 37-50 percent of the population who feel their job is bullshit are unable to define precisely what it is that makes their job nonsense., mostly because that’s a question of value and such questions are always at least a little murky. But still, even if there can be no precise measurement of the degree to which a job lacks utility, could there not be some sort of common sense understanding of ‘bullshit job’?

To see what the common sense understanding might be, we should turn to someone who identified both valuable and bullshit aspects to his job. This person was ‘Tom’, who works for an American-owned postproduction company based in London. His job is to work on visual effects.

When it comes to adding visual effects to movies, this is an aspect of his job that “has always been very enjoyable and fulfilling: I get to make cars fly...and dinosaurs attack alien spaceships for movie studios, providing entertainment for audiences worldwide”.

However, when it comes to doing postproduction work that advertisement agencies request, he felt that to be bullshit work because in that case “we use visual tricks to make it seem like these products actually work”.

So, what makes one aspect of his work “enjoyable and fulfilling” and the other “bullshit” has to do with deception and lies. We all accept, when we pay to see a movie, particularly in the sci-fi and fantasy genre, that we will be shown things that are not real. No matter how natural looking Godzilla appears, thanks to the genius of special effects wizards like ‘Tom’, we all know that’s not really Tokyo being razed to the ground by a 200ft tall radioactive monster. Occasionally visual effects are executed so flawlessly we may mistake what we see for some natural thing that was filmed rather than a computer-generated thing added in post-production. But, ultimately, we know it’s all just fantasy.

Now contrast this kind of entertainment to the post-production work carried out in TV commercials. You will recall that Tom said “we use visual effects trickery to make it seem like these products actually work”. Given the way he phrases this aspect of his work, we may safely assume that the products do not really work. But are the public aware of this, in the same way they understand what they see in movies is not real? Maybe so in some cynical sense of equating all business people with con artists and seeing commercials as the way they try and sell their snake oil. But, by and large, people see adverts as a means of promoting genuine products and services that meet genuine wants and needs (as indeed, they can be).

But what Tom’s work entails is a double deception. First of all, various techniques are used to make the people you see on the screen appear much prettier than they really are (and, being models, actors and pop stars, they are already prettier than most without all that fakery). As Tom explained, “we reduce the bags under the eyes of women, make hair shinier, teeth whiter, make pop stars and film stars look thinner”. Remember, that none of this achieved using products like shampoo, toothpaste or diet plans that might also work on you and me, it’s all done through visual effects that exaggerate the perfection of the image of a person.

So, we see these beautiful people on the screen and we’re supposed to compare our lives in an unfavourable way to these lovelies. And now the second layer of deception is brought into play, in the way visual effects are also used to greatly exaggerate the effectiveness of the products sold as being able to do something about the inadequacy we’re made to feel. As Tom commented, “these techniques are literally used in every commercial on TV, plus most TV drama shows...we essentially make viewers feel inadequate while they’re watching the main programs and then exaggerate the effectiveness of the “solutions” provided in the commercial breaks”.

Now, Tom sees this not just as a problem in his area of expertise, but a problem with modern jobs in general. “I consider a worthwhile job to be one that fulfils a pre-existing need, or

creates a product or service that people hadn't thought of, that somehow improves their lives. I believe we passed the point where most jobs were these types of jobs a long time ago. Supply has far outpaced demand in most industries, so now it is demand that is manufactured. If we're at the point where, in order to sell products you have to first of all trick people into thinking they need them, then I think you'd be hard-pressed to argue that these jobs aren't bullshit".

I think we can indeed use Tom's insights to define a common sense understanding of what is, and what is not, a valuable job. If your job provides a good or service that answers a demand or improves people's lives in some way, you may consider yourself as doing genuinely valuable work. But if all you are doing is creating demand, such as tricking people into believing there's something wrong with them, or luring them into debt so interest can be charged, or manoeuvring them into making an error so you can penalise them with fines and fees, that would be work of no real value.

So what we learn from this common sense definition is that the degree to which a job is valuable has to do with the degree to which it improves people's lives. But what does it mean to "improve people's lives"?

By and large, theories of value put forward by economists have never really answered that question. Instead, they have served as a way of explaining commodity prices. As we saw in our analysis of the first few chapters of *Das Kapital*, the price of a commodity is dynamic and subject to change, becoming higher or lower depending on conditions of supply and demand. So, for example, as coronavirus spread there was far greater demand than usual for such protective equipment as face masks and surgical gloves, and so the price of such items rose to reflect this increased demand.

When we say prices rise or fall, the implication is that there is some level that such changes are being compared with. These days, we would call it the 'equilibrium price'. But back in the middle ages the preferred term was one more befitting the discipline of moral philosophy that economics evolved from. Back then, the 'equilibrium price' was thought of as the 'just price' of a commodity.

Returning to the surge in demand pushing up the price of protective equipment, a term like 'just price' encouraged the question, "at what point do circumstances justify the change in price, and at what point should a seller be accused of taking advantage of his customers?". Such moral questions assumed it was possible to under- or oversell things and this assumption became so widely accepted it was integrated into our common sense. Indeed, it still is a common sense attitude. If it were not, nobody would ever consider themselves to have struck an especially good deal or feel the indignity of having been ripped off. Instead, we would pay any price without question, lacking any sense of the fair price of exchange.

It is, however, more of a feeling or intuition than a calculation we can precisely make. Even though economics as a discipline has been around for centuries, nobody has ever succeeded in developing a formula that can precisely determine a commodity's real value and thus provide a definitive standard to show exactly how sweet or sour a deal is. If one considers all the factors that don't lend themselves to quantification, such as cultural taste and sentimental value, it would seem to be pretty obvious why no such formula as ever been

developed. Despite this, though, many an economist has assumed that such non-calculable forms of value ought not to prevent us from being able to make precise economic calculations.

Something else many economists do is to dismiss all those non-calculable forms of value. This they do by asserting that they are irrelevant to market concerns, or even that they are some kind of illusion. Such an attitude has two effects. Either it reduces theories of value to a circular argument, since one is reduced to asserting that whatever price a commodity tends to gravitate around has simply got to be its real market value, or it leads to a viewpoint of Capitalism as a total system.

This latter position is one adopted by the most radical free-market libertarians. According to this point of view, it is simply impossible for there to be any kind of value, other than those created by the system itself, and it is impossible for anyone to operate outside of the system. Why does parental love exist? So new generations of workers and managers can be raised to serve Capitalism. What is education for? Its only purpose is to mould people into the appropriate shapes for all those labouring and managerial roles required to keep Capitalism going. Why are bullshit jobs proliferating? They are not, because bullshit jobs don't exist. They can't exist. Any worker who thinks their job is useless is deluded. Any job that persists in the market must be producing surplus value that capitalists can extract as profit, and no other value matters so far as Capitalism is concerned.

Perhaps it is not altogether surprising that the most ardent pro-capitalists would adopt this sort of total systems view. But it may be startling to learn that this is also the view adopted by those whose philosophy is opposed to free-market libertarianism, namely the Marxists.

Actually, though, there's a good reason why those of an anti-capitalist disposition would also adopt this total system viewpoint. It serves as a reminder that half measures are doomed to failure, since such approaches never really challenge injustice and structures of power as they exist today and, absent of that challenge, our attempts to make the world anew ultimately results in those injustices and power structures being reproduced on another level. If we are to avoid this, Marxists assume, then we have to adopt the position that, from the perspective of Capitalism, there are no values save for those that work, directly or indirectly, to generate surplus value.

Put this way ("from the perspective of Capitalism...") the total system viewpoint makes some kind of sense. It's not too dissimilar to what happens when we play a game. Games always take place within some clearly marked boundary, such as a board or a pitch. Only some people may come within that boundary and, for as long as the game lasts, they may only perform a limited range of actions. Whatever is going on outside of that boundary is irrelevant. Beyond the football pitch traffic lights are turning red. It would be absurd for play to stop every time that happens, because traffic lights and the rules associated with them are not part of the game of football.

So far as economic theory is concerned, there is another good reason to adopt this "from the perspective of Capitalism..." position. If one is to turn human life into something that can fit within the parameters of an equation, you first have to do an awful lot of reductionism and simplifying. You have to say, "yes, yes, all this complexity is going on, but for our purposes

we are obliged to ignore it". Such a position does not deny the existence of non-calculable forms of value; it merely asserts that if economic models are to work at all, the world has to be treated as some kind of game with (relatively) simple boundaries and rules.

This position becomes absurd, however, when it is assumed that there really is no perspective from which to contemplate human life other than the Capitalist perspective, and that therefore any sort of value that cannot be quantified is an illusion. Yes, for simplicity's sake, we might say a mother's love has only one meaning, and that is to reproduce the workforce, but to make the leap from "this is how it looks from the perspective of Capitalism" to a belief that this is how the world really is, is to leap way too far.

As Graeber pointed out, "Capitalism is not a single totalising system, [not] a set of ideas that have somehow come to take material form in factories and offices. The world is more complicated and messy than that. Historically, the factories and offices emerged first...and to this day they operate on multiple contradictory logics and purposes".

One can see, then, how this over-simplistic view of human existence, one which denies the existence of non-calculable value, bullshit jobs, or the possibility of operating outside of the Capitalist system, exists for much the same reason as why the mythstake of money's origins in barter keeps being retold, despite it being in near total contradiction to the evidence. In both cases, the real, messy, complicated and contradictory history of the human race is turned into a cartoon, and then true believers forget that it is only a cartoon and delude themselves into thinking this is reality they are talking about.

This delusional belief affects the way we look at value, for it makes it seem like it is a fixed, definable, quantifiable thing when it really is not. So what is it, really? The most we can say is that value is a constant political argument. Other than that, though, none of us are ever quite sure what 'value' really is.

As well as delusional thinking, there may be another reason why non-calculable forms of value get ignored, and that is because they are all labelled by a term that looks almost identical to 'value'. Since it looks almost exactly like it, it's tempting to assume that it functions in almost exactly the same way too. In fact, it could not be more different. What word am I talking about? 'Values'.

When we talk about 'Value', what are we talking about generally speaking? We are making references to any form of human activity directed towards getting money. One of (but not the) oldest purposes of money is to facilitate exchange in a C-M-C circuit and, as we saw in our analysis of *Das Kapital*, it is only when precise, quantitative comparisons can be made that such exchanges are possible. So, when we talk about 'market value', we are talking about the degree to which a quantity of one commodity can be compared with, and thus exchanged for, another quantity of a different commodity. When we say one product is worth £1 and another is worth £100, we are saying that one hundred of the former commodity has exactly the same value as just one of the latter.

Obviously a great many decisions we make and actions we take are directed, one way or another, towards getting paid. But most of us also understand that not every decision or

action is tied to money. If that was the case, a phrase like “he’s not in it for the money” would not exist, because we would have no way of comprehending it.

Whenever our decisions and actions are not directed toward getting paid, we are no longer operating in the sphere of ‘value’ but rather that of ‘values’. One of the most commonly heard phrases is “family values” and it is surely no coincidence that child care and housework are among the most common forms of unpaid labour. It’s true that second wave feminism highlighted the economic value of domestic life, but that was more to do with shining a spotlight on the level of contribution women make to society, and how much we rely on “women’s work” if Capitalism is to function at all. Maybe a few ardent feminists would have forsaken motherhood until a regular wage was attached to such work, but the idea that parenthood would go extinct unless it became a paid occupation is just ridiculous. There are too many natural instincts and drives operating outside of the sphere of value for that to happen.

Are there other forms of values besides “family values”? Indeed there are. We may also speak of religious morality, political ideals, integrity, beauty and so on. Human beings willingly participate in all kinds of activity with no expectation of being paid. Lots of church activity is driven by charitable or spiritual pursuits that have nothing to do with accumulating and possessing money. The same thing could be said of political volunteering (where would campaigns be without armies of volunteers freely giving their time to spread the message of this or that Party?). As for most artistic and scientific pursuits, they are also unremunerated.

Now, it is not the case that, whenever we’re operating in the sphere of values we don’t get paid. It so happens that some artists become very rich indeed, as do gurus and other spiritual types. But if so, most people would regard these as genuine artists and gurus, rather than phonies, only in so far as they were not “in it for the money” when they took up their calling. In other words, that some happen to get rich is incidental, a side effect, of pursuits that fundamentally have nothing to do with money.

To say something has nothing to do with money is to say it has nothing to do with quantitative exchange. People make judgements about art, deciding this painting is more beautiful than that; this music is more pleasingly melodic than that. Likewise, people may argue over how pious a religious devotee really is, or how far we should trust someone who claims to have political integrity. But they never apply any definite, quantitative value to such judgements, because to do so would be absurd. In other words, they never say “Joe Biden has 5.23 times the honesty of Donald Trump” or “the Mona Lisa is 14 times more impressive a work of art than Botticelli’s Venus”.

Yes, sometimes art does indeed end up with a market value, when it is auctioned off in a sale. In 1987, Vincent van Gogh’s “vase with fifteen sunflowers” was auctioned for £24.75 million. Even if it is never submitted for auction, a speculative price can be placed on a work of art. The speculative price of the Mona Lisa is estimated to be well over a billion dollars.

But whenever market comparisons can be made to something belonging to the sphere of values, whether that be an actual price tag or a speculative value, it’s understood that this is never a reflection of its real worth. As Graeber pointed out, “no one would actually say that a Damien Hirst shark is worth, say, two hundred thousand Vipassana meditation retreats, or a

Vipissana retreat, one hundred thousand fudge sundaes. It just happens to come out that way”.

Similarly, it would be an exercise in ridiculousness to try and come up with a mathematical formula to define exactly how (il)legitimate it was to storm the capitol in the belief Trump was cheated, or exactly how far one should go in neglecting their friends in order to practice transcendental meditation. People plainly make such judgements and decisions, it's just that they don't ever quantify them.

The reason why not has everything to do with their worth. I asked Google how much the Mona Lisa was worth and the reply it gave (before going on to give its speculative value) was “the Mona Lisa is priceless”. The same thing could be said of anything belonging to the sphere of values. To say something is “priceless” is to say it is unique, incommensurable. This stands the sphere of values in stark contrast to the sphere of value, because commodities have economic value precisely because they can be compared precisely to any other commodity, whereas values are valuable because they cannot be compared to anything. No price can appropriately describe their worth, hence they are priceless.

We have talked about these two spheres as though they were always separate from one another. If that was so, then life would be neatly divided between economic activity in which our only concern is the pursuit of material self-interest, whereas whenever we operate in other spheres, such as ‘family’, ‘religion’, ‘politics’, or ‘art’, our behaviour would have nothing to do with the pursuit of money.

But real life isn't really like this. Our motives are mixed, and the value of one sphere can leak into the other. Let's suppose that a statesman had claimed to be motivated only by a desire to serve The People, but it then transpired that this commitment to public duty was just a front to disguise his selfish pursuit of material gain. Would anyone be shocked to learn this? No, because it happens often enough not to be particularly surprising.

It's also fair to say that those running a business are often not motivated only by the pursuit of profit. They don't just want to make money, but to do so in an ethical way, in a manner that is socially beneficial. Many business people value their honour and integrity as much as their ability to extract surplus value.

Similarly, workers wish to know that they are doing work of social value, and few deem it enough that a job pays. If dishing out pay was all a job needed to do to have value, nobody would complain about doing a bullshit job, since bullshit jobs are usually pretty well paid. But, since they offer nothing from the sphere of values, most people who find themselves in bullshit jobs resent it.

Work should not just pay, but also do some good. When workers say they want work to be valuable and meaningful, in most cases this is expressing a preference for work that is beneficial and helpful.

None of this is to say that pay is unimportant. In most cases it is almost certainly the most important thing one gets out of a job. It is just that it is not the only important thing that must



come with a job if one is to be satisfied in employment. As well as paying, a job should have social value, a means to make a positive contribution to the world.

As we all know, not all jobs pay the same. There are poorly-paid jobs, jobs with pay that just about covers the cost of living, and jobs that pay handsomely. The same thing is true of social values. You get to make a great amount of positive contribution doing some job types and, at the other end of the scale, you have jobs that make scant positive contribution to society and may actually have more of a negative effect on overall wellbeing.

And now we come to one of the great tragedies of modern life. There tends to be an inverse correlation between a job's social value and how much it pays. In other words, the more you help others and benefit society through your work, the lower your wages are likely to be.

## CHAPTER THIRTY-NINE

Occasionally, the movie industry will bring out a film in which the plot revolves around humanity facing an extinction event. Examples include 'When Worlds Collide', 'Deep Impact' and '2012'. These movies tend to offer some hope amidst global catastrophe. A small group of people find a way to take shelter from the apocalypse. They seek refuge in underground bunkers, or leave earth in spaceships and seek a new life on some other planet. The audience leaves the cinema with some optimism despite having witnessed destruction on a global scale. That group of plucky survivors will rebuild civilisation anew.

What if we really faced a situation in which Earth either got destroyed or was to become inhospitable to human life, but there was a chance that a tiny percentage could be protected from calamity and later rebuild civilisation? Who would deserve a place on the ark?

One way we might go about making that selection would be to use pay levels as a measure of a person's worth. The thinking might go something like this: "Only a tiny minority can be saved, so let's only consider those earning six-figure salaries or more. Since these people earn the most, they must be the most valuable and thus they surely have the skills we absolutely cannot do without. We should certainly consider anyone on minimum wage as unworthy of admittance to the ark, as their low wages tell us their work is of low value and thus, not important at all".

If that was how a place on the ark was allocated, what class of professional would we be protecting? There would be no farmers, no mechanics, no nurses, no teachers, but there would be hedge fund managers, marketing gurus, corporate lawyers, career politicians and lobbyists on that ark. The executives of the largest corporations would have a place, but the minimum wage workers of those companies would be left to die. Does anyone really believe that a corporate lawyer is more fundamentally important to civilisation than a farmer?

Or let's talk about those executives. We're led to believe that their pay levels are so high because what they do is so vital and important, not just for the business itself but society in general. If that were so, presumably the business would soon collapse were those executives to disappear, and we would all be begging them to come back.

Top executives tend not to go on strike or 'disappear', so there's not much evidence to go on. But what evidence there is in no way supports that supposition. There have been some occasions in which positions at the top of organisations have gone unfilled. One such example would be the Uber corporation. The founder of Uber, Travis Kalanick, resigned and a host of other top executives walked out, too. As a result the company had to operate without a CEO, Chief Operating Officer, Chief Financial Officer or Chief Marketing Officer. Their absence had zero effect on Uber's day-to-day operations.

You may also recall that we previously talked about a bank strike in Ireland in the 1970s. The strike lasted for six months and during that time life just carried on thanks to people adopting forms of community credit. The strike was eventually called off because it was obvious that people's lives were in no way adversely affected by the banks' closure (If anything things improved slightly) and so the strikers had no coercive powers to force through their demands.

Now contrast that to the results of a strike that occurred two years previously in New York City. In that case, it was not the banks that went on strike but the city's garbage collectors. All it took was a mere ten days without the services of garbage collectors before the city became uninhabitable and there was no choice but to cave in to the striker's demands.

When the strike commenced such action was condemned by the press and predicted to be a waste of time. How dare these refuse collectors strike for better pay and conditions? Such greed is beyond all reason. They should know their work is not important enough to make its absence any serious concern. After all, we don't pay them much so their work cannot be all that valuable.

Ten days later and the opinion writers had a starkly different message. The editorial of the New York Times said of the strikers, "New York is helpless before them. This greatest of cities must surrender or see itself sink in filth".

So surrender it did, and New York garbage collection went from a job where "people treat us like dirt" (as one striker was quoted as saying) to one where you can make a fairly decent living tending to the sanitation of this great city.

Even so, refuse collectors earn a fraction of what city bankers or advertising executives do, even though the former work is of clear social value whereas the social value we get from the latter examples is nowhere near as obvious.

Is any job really of "clear social value" though? I would say some are, but only to the extent that most if not all people would feel some jobs are very much worth doing, while they may well struggle to see what possible benefit other kinds of jobs bring to society. But a phrase like "clear social value" implies that social value is something we can easily measure. The truth is that this is something that is not at all easy to measure, because there are too many subjective elements involved, making it very difficult to determine how objectively useful to society any job type is.

Indeed, so much of social value is unmeasurable, most economists have not even tried. But a few have, and in all of these studies it is confirmed that there is indeed an inverse correlation between how much a job pays and how socially beneficial it is.

One such study was carried out by the New Economic Foundation in the UK. Using a method known as 'Social Return on Investment Analysis', this study examined six representative occupations. Half were high-income occupations, and the other half were low-paying occupations. Here are the results:

City banker- yearly salary= £3 million- estimated £7 of social value destroyed for every £1 earned.

Advertising executive- yearly salary= £300,000, estimated £11.50 of social value destroyed per £1 paid.

Tax accountant- yearly salary c. £125,000, estimated £11.20 of social value destroyed per £1 paid.

Hospital cleaner- yearly income c, £13,000, estimated £10 social value generated per £1 paid.

Recycling worker- yearly income c, £12,300- estimated £12 in social value per £1 paid.

Nursery worker- salary c. £11,500- estimated £7 in social value generated per £1 paid.

Now, it should be pointed out that the jobs subjected to analysis in this study did not include those that were midrange in pay, meaning most bullshit jobs were not included in the study. Another thing to bear in mind is that the majority of jobs score a social benefit value of zero, meaning they are neither positive nor negative to society. Finally, we should acknowledge, as did the authors of this study, that many of the calculations used were somewhat subjective. Still, all that being said, this study aligns with the general principle that the more you benefit other people with the work you do, the less you'll tend to be paid.

All this talk of social value versus paid occupation leads to another question. Why do jobs come with such different pay scales? I do think it's quite easy to construct an argument showing socially valuable work has to be low-paying work. Since it is of such great social value, it must be a service that the vast majority will require at some point. If 99% of the population need access to service X, then service X had better be as cheap as it possibly can be so we can all afford this vital resource. But if service X is to be really cheap you cannot really pay anything other than low wages to those working to deliver it.

On the other hand, if 99% of us have no use whatsoever for the work you do, then it really doesn't matter if you charge extremely high fees for your service. A tiny minority can afford to hire corporate lawyers and hedge fund managers. The rest of us could never afford their astronomical fees but that's alright because the service they offer is of no use whatsoever to most people.

What's a great deal harder to figure out is why these generally useless/harmful jobs should command such high levels of pay. Various attempts have been made to find some justification but none really work and it's not hard to find counters to all of them.

Could supply and demand have something to do with it? No, because if it was supply and demand that determined pay, corporate lawyers would be paid less than nurses. After all, in the United States, there are plenty of law school graduates but an acute shortage of trained nurses. Despite this, one earns much more doing the pretty useless work of corporate law than one makes doing the undeniably vital work of nursing.

What about the dangers of a job? Maybe it's all down to a risk/reward ratio? No, that does not work either, because if how dangerous a job is determined pay levels, it wouldn't be bankers who got top compensation, but rather loggers or fishermen (in the USA) or farmers (in the UK).

What about education? After all, aren't we all told that if we go and get good grades a good, well-paying job will surely follow? Well, it's no doubt true that education levels do play an important part in determining salary levels. But, as David Graeber pointed out, "If this were simply a matter of training and education, the American higher education system would hardly be in the state that it is, with thousands of exquisitely trained PhDs subsisting on adjunct teaching jobs that leave them well below the poverty line".

It seems, then, that there is no obvious reason why some jobs command salaries way, way above the compensation paid for doing other kinds of work. Despite this, for the most part we just accept that most jobs pay poorly, and a few pay very handsomely indeed. Very rarely is it argued that there should be equality of pay for all members of society.

That is not to say, however, that such arguments are non-existent. Readers with good memories may recall that I mentioned a philosopher who did put forward an argument for equality of income. His name is G.A Cohen (1941-2009) and the way he framed his argument is particularly pertinent to our current topic, because it would seem that parts of it have been adopted and this only helped perpetuate the inverse correlation between value and pay.

So how did Cohen make the case for equality of income? Well, the argument opens with a question. Why is it that some people are more highly paid than others? The standard answer is to point out that people are not equally talented. Some are gifted with some sort of ability that raises them above the crowd. Perhaps they sing beautifully, or simply look more beautiful compared to most of us. Maybe they are great with numbers, or naturally adept at managing teams. Whatever form it takes, these gifted people earn more than most because of their disproportionate abilities.

But let's think about that word 'gifted' and what it means. Really, it can only mean that these people have already been blessed with a gift that the rest of us missed out on. Nature has already blessed them more than most, so by giving these people more money we are further rewarding those who had more benefits and gifts bestowed on them to begin with. That doesn't seem fair.

Now, it's true that many of these talented people are not relying only on innate ability, but rather skills that have been honed through a great deal of practice. Some people put in an enormous amount of effort to become superb at what they do.

But why do some people strive so? Assuming no coercion, there can be only two possible reasons. Either they choose to put in that extra effort, or they were simply born with a greater capacity for work. In the latter case, we're clearly talking about another gift so again it makes no sense to disproportionately benefit those who have already received more gifts than most.

Now let's think about those who were not born with an innate drive to work hard but nevertheless do put in an extra effort out of choice. What motivates that choice? Broadly speaking, there can be only two possibilities. Theirs is either an altruistic choice or a selfish one. If it is an altruistic choice, then they are working hard in order to benefit society overall. That being the case, awarding them with a disproportionate share of that wealth would contradict their purpose of increasing social wealth.

Finally, Cohen points out that we cannot really divide the human population into the groups of pure egoists on one side and pure altruists on the other. Human motives are never that simple but shifting and confused in a way that means no workforce can be described as completely selfish or totally altruistic. Since that is how it is with human nature, the only option we have left when it comes to handing out payment is to either reward everyone who makes greater efforts, or not doing so. Whichever option we decide to go with, some people will be frustrated by the outcome. Rewarding effort will frustrate altruists motivated to increase social wealth; not rewarding effort will frustrate the egoists' desire to help themselves. From a moral point of view, it makes more sense to frustrate the egoists.

And so we arrive at our conclusion, which is that people should not receive a greater reward for greater effort or productivity at work.

Now, clearly society has not fully accepted Cohen's argument, otherwise we would have equality of income. But what it has done is embrace parts of this argument and, in doing so, encouraged a situation in which the social value of a job is in inverse correlation to how well it pays.

Which parts am I talking about? The ones where it is pointed out that hard work, when it is not driven by an innate capacity to strive, is undertaken out of a choice that is either selfish at root or altruistic. If it is altruism that is driving that endeavour to work harder, then giving such people a disproportionate share of that wealth would contradict their purpose.

But society also disagrees with Cohen in one critical way, in that it rejects the premise that it's not possible to sort workers by motives. Actually, if one wants to do that, one need only look at whatever career a person has chosen and ask: Could there be a reason why that person does this job, besides the fact that it pays? If that is indeed the case, then we may know that such workers are in employment to increase social welfare and, therefore, we should not make their pay in any way generous, as that would contradict their purpose.

Since these are the attitudes society has adopted, we find ourselves in a situation where those who have the gratification of knowing their work is of benefit to others have no right to expect additional benefits like middle-class salaries or a pension that pays well enough for retirement to be enjoyed rather than just subsisting until the inevitable end.

Furthermore, since this societal attitude exists it has naturally led to the polar opposite attitude, which is that those who have to suffer from the understanding that the work they do is of no benefit to society whatsoever or, worse, actually harmful, and therefore there is no reason to do such work other than to get paid, should be paid more.

In what sort of world does any of this make sense? The answer is, the sort of world in which paid work is seen as being such a value in itself that all other considerations are seen as secondary at best, if they are even considered at all.

Such attitudes are adopted now and then. It happened in Ancient Greece with the philosophy of Stoicism, which taught that virtue is its own reward. That being the case, since doing socially beneficial work is obviously virtuous, no other reward beyond the satisfaction of knowing you are benefitting society with your work should be expected.

We also saw how, in the sixteenth century, Robert Carlyle argued for a Gospel of Work claiming, "all work is sacred...the noblest thing yet discovered under God's sky". Again, the assumption was that the more good one did by doing one's job, the more noble that work was and, therefore, the more inappropriate it would be to expect a price to be put on work of such absolute value.

Something like this attitude is prevalent in contemporary society, although it's not strictly speaking true that the consensus is that working is good. Rather it is the opposite, namely an attitude that not working is very bad. We see this attitude manifest in the way liberal politicians are always protesting on behalf of "hardworking people" as well as in conservative complaints about those on welfare, who more often than not are portrayed as "skivers". The broad consensus, then, is that, unless you're busy doing work you don't particularly enjoy, you must be some kind of parasite who deserves no sympathy and certainly no public relief.

Another sign of this attitude comes in the form of what is expected of those at the top and the bottom of society. Starting with the latter first, it reveals itself in the way we would rather avoid blanket social safety nets like universal basic income, and instead implement some kind of "means tested" benefits system that can identify some as non-applicable and deny them social support. It actually wastes much more money, time and manpower setting up the bureaucracies required to administrate all that paperwork, compared to the money that would be lost to those few people who would use UBI to avoid work entirely. But we're so used to thinking we're besieged on all sides by those who want something for nothing (and most of us remain unconscious of the fact that they did nothing to earn at least 99% of their possessions) that we actually prefer wasteful and punitive social security systems to efficient and economical ones.

As for those at the top of society, there have been times when such figures were celebrated for their ability to live in great luxury while not doing much of anything to earn it. Many an impoverished member of Great Depression 30s America found escapism from the grayness

of everyday life in the cinema, which put on films centred around the high society lifestyle of rich playboys.

What a contrast compared to today. Not for us the romantic escapades of the idle rich. Instead, the rich reveal themselves to be heroic by working day in and day out, keeping such an exhausting schedule it would not be unreasonable to classify them as workaholic. They are held up as exemplars that we should all strive to emulate (just don't expect your pay to be anything other than a tiny fraction of this elite few's stratospheric compensation).

That last comment points to the fact that such people have long been infamous for awarding themselves particularly disproportionate levels of pay. Once upon a time, that such a large share of social wealth went to this minority was justified on the basis that it was somehow a result of their hard work. But this became increasingly untenable as the pay gap grew, because there's no way that a CEO who makes a thousand times what an Amazon delivery driver makes works a thousand times harder. So, this line of reasoning was modified by slipping in "...and smarter".

How does claiming the most disproportionately rewarded are those that worked "harder and smarter" justify this situation? Well, it does two things. Firstly, it serves to remind us that the super rich are not idle. They do have jobs (or, at least, most of them do). Secondly, it implies that there is some mysterious way in which these elites do their work which somehow means they should receive so much more of social wealth. Really then, it's only the fact that they have (extremely well-paid) jobs that saves arguments of this kind from completely meaningless circularity along the lines of "rich people are rich because they are smart because they are rich because they are smart..."

Now all these attitudes and suppositions rest on a point of view that work gets its value from the fact we'd rather not do it. In other words, it's that same outlook on work that is found in the Biblical story of the Fall. Having made it a near universal opinion that "any activity we would rather not do is work" we simultaneously by default adopted an attitude that anything we might wish to do, because it is rewarding in some social or personal way, is less deserving of material reward.

If one were to look for a statement that summarises all of this in a neat way, this attempt by Geoff Shullenberger (a writing professor at New York University) is as good an attempt as you're likely to find.

"Bullshit jobs carry with them a moral imperative. If you're not busy all the time doing something- anything-you're a bad person. But the flip side of that logic seems to be that if [an activity] is valuable, meaningful and carries intrinsic rewards for you...you should give it freely, even (especially) if by doing so you are allowing others to profit".

And so we find ourselves working within an (anti)economy in which we're expected to allow others to profit from all that work we do on a purely voluntary basis, and at the same time they ensure we're kept in check by having us (barely) earn a living doing something we hate.

## CHAPTER FORTY

In the last chapter, we saw how 'value' is not really a fixed, definable thing but rather a constant political argument. This is another way of saying that value is what Politics is all about. On the one hand that seems obvious, given what a major part of political debate involves. Questions like "how are we to pay for X?", and debates about how high taxes should be and to which members of society or sectors of the economy the money thus raised should go, tend to form the bulk of parliamentary debates. Other than the Prime Minister, the top job in the UK government is Chancellor of the Exchequer, and the major political event of the year is the Chancellor's speech in which 'the Budget'- what the government will invest in, where cuts will be made, and other concerns to do with 'value', get outlined.

But, on the other hand, politicians are not elected to function as bean counters and nothing else. Yes, how competently they will manage the money extracted in taxes will always be a major concern, but really our political leanings have more to do with our values. We elect to office that party which best represents our own ethical concerns and sense of morality. How long a party stays in power often depends on how effective it is in delivering those values 'the Electorate' decided were most important.

The vast bureaucracies that politics builds exists so as to facilitate the deliverance of such values, but it's actually very rare for those building vast bureaucracies to admit what their values really are. Instead, they tend to do what mainstream economics do when thinking in general about what drives capitalist markets, namely, to invoke 'productivity', 'rationality' and 'efficiency'. Similarly, the 'robber barons' of the 19th century tended to insist that the actions they undertook were done in the name of 'Rationality' or 'Efficiency'. Such concepts must be useful in some way, in order to have remained the preferred stated motivation behind our actions for over a century.

But, whatever that usefulness may be, it actually does not have all that much to do with how effective 'Rationality' or 'Efficiency' are at reaching those ultimate values the government was elected (or 'the market' is entrusted) to deliver. Indeed, if anything, the opposite is true. To say one is acting in the name of 'Rationality' or 'Efficiency' is to use language that is intentionally vague, to the point where one might even say it is nonsensical.

Let's take a closer look at 'Rationality' first. What does it mean to be a 'rational' sort of person? I would say that most people would regard a rational thinker as being someone who bases their beliefs on reason and logic. Now, in Western intellectual traditions, 'Reason' has been seen as having a particular function to perform, and what that might be has something to do with the right-wing critique of creativity. To recap, this critique attacks the Left for not taking into consideration the 'forces of destruction' when it sets about upsetting the current order through revolution. This is an attitude that goes way back, at least as far as Ancient Greece. We see it in the philosophies of Plato and Aristotle, this belief that what human powers of reason are for, more than anything, is to act as a kind of restraint on our baser instincts.

What are those baser instincts? They are our passions, our animalistic drives, and our powers of creativity and imagination. Why should these have to be restrained? The reason why, according to this intellectual tradition, is because these are impulses that are ultimately



antisocial and chaotic, so the last thing any rational person or society should want would be to allow them to run wild.

By the time Platonic and Aristotelian ideas had been incorporated into Abrahamic concepts of the soul, Reason had become well and truly established as that part of our nature that worked to keep the chaotic impulses of our baser instincts in check. In other words, 'Reason' was a moral force, properly outside of creativity and passion, conceptually speaking, and able to constrain what are always potentially violent, chaotic and destructive primal forces.

It was from this concept of reason that we got such familiar terms as 'Politics', 'Police', and 'Politeness'. At first glance those may not seem to have all that much in common, but actually they all share the same root, which is 'Polis', meaning both 'Political Community' and 'Place of Rational Order'. The common theme, then, is that our passions and creative impulses are dangerous, perhaps even demonic, and so the reasonable and rational thing to do is keep them in check.

We see, then, that, according to this intellectual tradition, Reason exists 'outside' of emotion. Much the same could be said of Rationality, at least from the perspective of some philosophical schools of thought. What such traditions tell us is that to be a rational person is to be a thinker who can apply logic in a pure form, pure because it is thought exercised in a dispassionate way.

In the contemporary world of fiction, the character who best exemplified this ideal was Star Trek's Mr Spock. He, you will recall, was a half-human, half-Vulcan who was all logic and no emotion. Or, to be more accurate, Mr Spock was able to completely separate his emotions from his reasoning, and to apply pure, objective thought to the situations encountered by the crew of the Enterprise.

Now, Star Trek never implied that Mr Spock's logical approach was always the best way to handle any conceivable situation. In fact, Captain Kirk often got the crew out of seemingly intractable situations thanks to his intuitions and gut instinct more than Spock's logical appraisal. But, in Roddenberry's fictional universe, Mr Spock was considered to be second to none in his capacity as science officer. And why would he not be? After all, according to the tradition we have been discussing, applying logic in a pure form untainted by emotion is the basis of proper scientific inquiry.

The thing is, though, nothing less than scientific inquiry itself has proven that someone like Mr Spock could only ever exist in fiction. It has been demonstrated time and time again by cognitive psychology that, were you to really divorce thought from emotion, the result would not be a superior thinking being, but a being that would not be able to think at all.

But could there be a more practical way of applying rationality? Some believe this is so, and point out that what makes an argument 'rational' is not that it is divorced from all emotion. Rather, the defining characteristics of a rational argument are that it is grounded in empirical reality and that it is logically coherent in form.

Do observation and reasoning really have much to do with one another? If that were the case, then nobody could use delusional premises as the basis upon which logically coherent

arguments are built; nor would a problem be assessed in a reasonable way but the logic applied to its solution be of a completely fallacious kind. But there are plenty of examples of people doing both.

Should we therefore conclude that empirical reality and logical coherency have nothing in common? No, they have something in common, which is the usual reaction people have when someone's argument is either delusional or incoherent. Since to be 'Rational' is to have the ability to make basic logical connections and to assess reality in a way that is not delusional, it follows that anyone whose argument is either delusional or incoherent can be written off as obviously bonkers.

Indeed, this is what happens, because crazies are considered to be 'irrational'. But, if all observation and reason have in common is a tendency to label arguments deficient in one, the other, or both as 'irrational'/'bonkers', then it's really not saying much to claim one's own argument is 'rational'. What are you saying? Merely, that your position is of a kind that is not obviously insane.

But, in another sense, it can be seen as a statement that is so strong it deserves to be labelled 'arrogant'. This is the case when one claims to hold a political position grounded in 'rationality'. After all, what does that say about those who do not share your point of view? It says much more than that they are merely wrong; it says they are insane, so messed in the head as to have no sense of what it could possibly mean to be right.

So, then, anyone who claims their politics is grounded in rationality is being arrogant? Actually no, not necessarily. The reason why not is because, sometimes, 'rationality' is used as a synonym for 'technical efficiency'.

Just as was the case with 'rationality', 'efficiency' has spawned whole philosophical schools of thought dedicated to its study. Also, as was the case with Rationality, reason is placed 'outside' of emotions and creativity. But, the difference is that, whereas with 'rationality' reason's chief role is to restrain our passions, so far as technical efficiency is concerned, rationality exists to facilitate them.

This complete reversal of reason can be seen most clearly in the way David Hume (1711-76) summarised this kind of philosophical position. He stated, "reason is and ought only to be the slave of the passions". So, whereas in the older Western intellectual tradition we previously talked about, Reason was necessarily a moral force, from this perspective Rationality has nothing to do with morality and we cannot rely on Reason to tell us what we should want. All Reason can do is tell us what is the optimum way to get it.

There's a reason it's known as 'technical efficiency'. It's because Rationality, in this context, is a purely technical affair, the means by which we calculate how to achieve our goals in the most efficient way possible, goals that we could not possibly assess in rational terms.

By now this should be starting to sound rather familiar, for it is that "shut up and calculate" position beloved of economists. That this particular philosophical school of thought should lead us to economics is no coincidence, because as Economics emerged as a field of study in its own right, it developed this sort of logic the furthest.

Does that mean to say, then, that if we trace this logic back to its roots, we would find it originated in 'the Market'? Yes, but we would also discover that it traces back at least as much to 'Bureaucracy'. Is that surprising? If so, it really shouldn't be, since it's always been the case that most economists are employed by large bureaucratic organisations. Also, to speak of 'Bureaucracy' is to name the only institution where "the means of doing" is treated as entirely separate from "what is being done".

All of which means focusing on "technical efficiency" can be a handy thing to do, because that way one gets to avoid having to talk about the irrational aims that ultimately drive human behaviour. And, given its shared roots in bureaucracy and the market, it stands to reason that the same sort of language gets spoken in either case. As David Graeber pointed out, "both claim to be acting largely in the name of individual freedom, and individual self-realisation through consumption".

This can be seen quite clearly in the way American-style Capitalism was justified. Remember, that while it likes to label itself as 'free-market capitalism', the way it has always operated is much more to do with corporatism/ bureaucracy. So, how should Bureaucratic Capitalism be justified? What such justification is trying to do is to make it seem acceptable that workers should abandon any control over the conditions they work under. If we return to the Reagan administration and the environment in which corporate takeovers and mergers flourished, we can see how antitrust enforcement was effectively abandoned.

What criteria should a proposed merger meet in order to be approved? Prior to the eighties and Reaganism, it was a question of whether such a merger would act as a restraint of trade. But, under the Reagan and all subsequent administrations, the criteria mergers must meet in order to gain approval is whether it "benefits the consumer".

What could be said to "benefit the consumer" though? Well, here we have to first of all recognise that we're not really talking about people in all their complexity, but rather a particular role people adopt in particular situations- the role of 'Consumer'. So long as one is operating in such a role, there's really only one thing you could want, and that is to be guaranteed a wider and cheaper range of products to use at home (the sphere of consumption).

Now, we have previously seen how 'deregulation' has been interpreted by the financial sector in a way that leads to more bureaucracy rather than less. The result of all those rules and regulations is that smaller players, less able to cover the costs of all that administration, get swallowed up by larger players until, finally, the whole sector is dominated by a handful of financial conglomerates. But it's not just true of the financial sector but most sectors of the US economy. There are very few sectors there not dominated by a few giant corporate/ bureaucratic oligopolies if not outright monopolies.

In some sense, then, this environment of mergers justified on consumerist grounds has been very successful. It has led to the dominance of bureaucratic forms of organisation, and that's the way things have been for about two hundred years. Such a span of time is quite sufficient to make these divisions between rational, technical means and irrational ends

seem like common sense, and corporate capitalism imposes this perspective no matter where you look.

After all, what should we see, were we to focus on what individuals are doing? By and large, we take it for granted that, so long as they are operating as 'customers' in the market, people will (or should be) acting in entirely rational ways, driven by the most efficient 'get rich' calculations and nothing else. But, having got that money through rational means, we then assume there's really no way of telling what use that money will be put to. Once 'the customer' leaves 'the market' and enters some other sphere, they'll be pursuing those ultimately irrational, non-calculable ends.

All this holds true if we switch perspectives from the individual level to a national one. In this case, what we see (or should see) is civil servants who consider themselves to be doing their job properly if they are finding the most efficient way in which to pursue national destiny. Working on the assumption that "reason cannot tell us what we should want, only how best to get it", these pen-pushers do not concern themselves with what particular national destiny the country's rulers have dreamed up. It could be a 'free market' or literally-applied Biblical law, or imperial conquest...It really is no concern to the bureaucratic mindset what it is, since theirs is only to make it happen, not to pass judgement on how good/bad it would be if such dreams were actually realised.

It is this separation between "what ought to be" and "how to deliver it" that give bureaucracies their peculiar nature. In theory, they are nothing more or less than a way of getting from A to B and are devoid of any concern over whether it is right or wrong to end up there. They are simply neutral social technologies and nothing more.

But, in practice, they turn out to be something else, something in complete contrast to this Hume-like perspective and more like a modern variant of that ancient idea that equated rationality with moral order and, consequently, an end in itself. This is the perspective anyone with a utopian vision invariably adopts, whether their idea of utopia comes in the form of free-market capitalism, Islamic fundamentalism, Socialism, or whatever. The utopian dream always makes the same basic claim that in the future we will have succeeded in creating a social order that actually does make coherent sense, unlike current and prior arrangements. It goes without saying that the creation of an efficient bureaucracy is seen as the cornerstone of any such project.

As I said, we have organised our societies around such assumptions for two centuries now, which is long enough for all this to seem like common sense. But two hundred years hardly represents the total span of human existence and really this is a peculiarly modern way of looking at the world. If we consider cultures further back in time, what we would find would be people who would have seen no sense at all in the sort of divisions we have been talking about. No mediaeval Christian thinker or person from the classical world would ever have thought of rationality as a tool, because it was literally the voice of God. And, in most times and places, the way in which one went about doing something was not separate from ultimate values at all, but rather the ultimate expression of who one truly is.

Could these more ancient perspectives of value and values actually be superior? Perhaps so. After all, one sign of superiority is if something happens whether planned, intended or

not. We have previously seen how this concept of the world as divided neatly into two spheres- one representing calculable 'value' and the other ultimate 'values'- is not an accurate model of human behaviour. In reality our motives are mixed and since that is so, even if one should succeed in dividing the world such that sheer technical competence is divorced from the domain of ultimate values, that would only be a temporary separation.

Inevitably, each sphere would start leaking into the other. Exactly how this leakage would occur is hard to say, because there are multiple possibilities. It could come about through an insistence that life become religion or, perhaps, art. It could happen because Rationality or Efficiency come to be seen as ultimate values themselves. But, however this movement to re-integrate a temporary separation between value and values actually manifests itself, in the end all such movements are premised on the very divisions they wish to overcome.

So, what are we to learn from all this? Well, one important lesson is that, since the fundamental assumptions remain the same, it hardly matters all that much whether one seeks to reorganise the world around market rationality or bureaucratic efficiency. Since they are so similar on a fundamental level, it's actually not that hard to see how bureaucracies and marketisation can fuse into the seamless whole that is total bureaucratisation, even if right-wing populism pedals the mythstake that these are antagonistic forces that were separate in the economists' origin myth of barter and should stay that way.

Should further proof of fundamental similarity be needed, just look at how easy it was for ex-Soviet officials who were enthusiastic endorsers of total state control of the economy to switch to total marketisation when 'shock therapy' was implemented. It should also be noted that the 'Iron Law of Liberalism' ("any government initiative intended to reduce red tape and promote market forces ultimately increases the total number of regulations, total amount of paperwork and total number of bureaucrats employed by the government") applied in this period of Russian shock therapy as much as any other period of history in which attempts to move closer to a free market took place. What is particularly remarkable is the fact that, for much of this period, the Russian economy was in free-fall, so there was actually much less activity to administer. Nevertheless, true to the 'Iron Law', the total number of Russian civil servants increased, from one million in 1992, to 26 million in 2004.

Another thing we learn is that bureaucracy is supposed to have something to do with efficiency or rationality. If many people would disagree that such terms best describe how Bureaucracy functions, that is because such administrations appear very different depending on one's perspective, and one's perspective is affected by one's social position.

Take those at the 'bottom' of society. From this perspective, Bureaucracy shows its cruellest side. Other than outright criminals, that class of people most reviled by Society is almost certainly the 'Unemployed'. To be part of this class means an unforgivable abdication of one of the most fundamental duties of any citizen- the duty to get out there, be 'productive' and work. It's not as if there is a lack of job opportunities, we are told. There are plenty of vacancies looking for jobless workers but, tragically, too many people these days have no work ethic whatsoever. It's just too easy to get 'benefits', which are state handouts extracted by force from 'hardworking folk' and given to the unemployed. Maybe among that jobless mob are some too disabled to work and therefore deserving of a bit of state-funded charity,

but it's well known that among those pitiable cripples there are way too many folk who could work but are content to sponge off society rather than do their bit.

Anyone who is aware of right-wing opinions on 'the state of the world today' will be familiar with sentiments of this kind. But, when you do find yourself among the 'unemployed', it usually transpires that reality is starkly different. Actually, it is getting harder and harder to find a job.

So far, we have talked about bullshit jobs as in the sort of jobs people are doing that really do not need to be done, since the absence of such work would either make no difference to society or would lead to an improvement. But there is also another kind of BS job, and that is a job that does not really exist at all. The technical term for this sort of (non)job is 'Ghost Job'.

This refers to an advertisement announcing that a job vacancy exists and that a business is actively hiring prospective employees, when there is in fact no vacancy at that business. In short, the job vacancy notice is fake.

Why would a business put out bogus recruitment notices? There are several possible reasons for doing so. A company- let's call it 'Scumbag Inc'- wants to give its rivals the impression that the business is doing well. One way to give such an impression would be to put up a load of 'we're hiring!', adverts on job-seeking websites. The rival businesses would see all those vacancies and think "Scumbag Inc must be experiencing growth since they are looking for new recruits to fill all these newly opened job opportunities". The rivals can't know that the adverts are all fake because they look just like genuine recruitment drives.

Another reason for creating ghost jobs is to scare one's own employees. Let's say you do work for 'Scumbag inc' and you learn that there is this big recruitment drive going on. You also know that there are no empty positions available at the company. Why, then, is Scumbag inc looking for new recruits? You fear that layoffs may be imminent, that the company is about to fire those not working hard enough and replace them with people 'willing' to work harder for fewer rewards. Since you cannot afford to lose your job, you resolve to work harder and accept a reduction in job benefits, hoping the axe will come down on someone else's job. You don't know that the recruitment adverts are fake, a ruse to get you to work harder for less reward.

There are other reasons for posting 'ghost job' advertisements. Whatever the reason, it's always the case that you cannot tell a genuine job vacancy advert from a fake one. It's quite possible to apply for hundreds of jobs only to get no reply, because the jobs never existed to begin with.

Even if we ignore the fact that the world of job recruitment is rife with 'ghost job' adverts, it continues to be the case that you'll probably get no reply, even if you happen to chase a real job. The reason why has to do with the sheer number of potential recruits companies can now call out to, thanks to the reach of the Internet.

There was a time when a business could not reach out to that many people. Before the Internet became so pervasive and when most people had no computer at all, it was quite

possible to approach a manager, say 'give me a job!', and sooner or later you'd be hired. If they were hiring, the means of communicating that a job vacancy was available could only reach a few people, or maybe hundreds if it was a big business able to select employees from universities. So, in most cases, supply and demand favoured the employee, who could get a job with relative ease since there were never that many rival candidates to compete against.

But now, thanks to the all-pervasiveness of the Internet, even small businesses have no difficulty in reaching out to thousands of potential new recruits. This of course means that your cv has an excellent chance of never being looked at, because it is buried amidst a huge pile of other job applications. Unless your cv happens to be near the top of that huge stack of job applications, you'll never get as far as an interview let alone an actual job offer.

Getting one's cv to a place near the top of that pile is not just down to luck, but more to do with having the ways and means to 'beat the system'. There was a time when, even if you were not the best candidate on paper, you might still end up being hired because you made a good enough impression at the interview. But, these days, so much of the job application process is automated and bureaucratised, one is incredibly unlikely to speak to a human being unless one knows how to get past all those systems that are in place to filter out contenders and reject them from the process. Unless you know the exact keywords, can supply the requisite formal qualifications and already have sufficient amount of prior experience, you'll never get as far as an interview, let alone a job offer.

While you are trying to jump through all those hoops and negotiate this maze of bureaucracy in the slim hope of getting a job, you'll also likely be having to deal with a similarly intransigent bureaucracy put between you and the benefits you're entitled to. Unless you can prove to that army of moralistic box-tickers, whose sole purpose in life appears to be geared around making life for the poor as hard as the law permits them to make it, that you are sufficiently severely crippled to deserve social support and/ or really trying hard enough to get a job, you'll likely have your social security terminated and will be trying to find employment with the threat of homelessness hanging over you like the sword of Damocles.

Once your eyes are opened to the sheer effort one is usually forced to undertake in order to have the remotest chance of getting a job these days, it becomes clear that it is simply wrong to say the unemployed are "not working". Oh, they are working alright. In fact, they might be among the hardest-working class there is. Their days are spent hanging on the telephone, filling in forms, standing in line, trying to negotiate the maze of infuriating bureaucratic procedures that have been put between them and a job, or minimal social services. All this work they must do for nothing, or next to nothing.

Even if they should somehow make it past all those obstacles and succeed in getting a job, there's a fair chance that it will be a job that does not pay. These days, many job applications put 'not applicable' where, once upon a time, the amount of pay an employee would receive would have been presented.

How can a job pay zero wages? Well, the deal is, you either accept this job, in which case you will be entitled to continue receiving state handouts, or you can turn the job offer down,

but if so you forfeit all right to social security. Really, then, these are not jobs at all but state-funded slavery.

Not that they are advertised as such. Officially, these are offers of work experience supported by the government. The business can only make you work free for a limited period, and thereafter either hire you or terminate your contract and hire somebody else to begin the process anew. But, if the business knows there is a ready supply of state-sponsored slaves who will work at no cost to the business, why would they ever give up this sweet deal and hire a real employee?

Now, none of this is to say that getting a real, wage-paying job is impossible. Of course that's not the case, because people continue to successfully get a foot on the jobs ladder and change careers. It's just that the process is much harder to negotiate than is popularly depicted, and it is a system that seems designed to foster resentment.

Some actually manage to land a job with relative ease. They then 'learn' from the right-wing press that the employed are besieged on all sides by jobless scrounges who want something for nothing at their expense, and they get angry. "I got a job! Why don't they get a job, too?". This resentment is all the more likely if the job one is doing is not all that enjoyable. Since ninety percent of workers hate their job, such resentment at this imagined mass of state-funded idlers is rife.

Many more did not get to take shortcuts through the maze of job hiring bureaucracy, but instead experienced perhaps years of frustrated effort before finally being hired (and even then they may well have had to work for free in order to prove they were truly worthy of the wage). Such people might have a bit more sympathy for the unemployed, since they are more aware of just how difficult it normally is to secure any kind of job.

But that also gives them a reason to resent the unemployed. "Yes, now I have a job", this sentiment says, "But it feels like a precarious position. Above me are executives and financiers making deals in mergers and acquisitions, eager to fire their employees as that's a quick and short-term way of increasing the value of their stock options. And below me are all those unemployed, many of whom may have been stuck in that hell for even longer than I was, and thus reduced to a state where they could be pressured into doing this job but with longer hours, fewer in-work benefits and less pay. Those at the top use the desperation of those at the bottom to force people like me to accept an ever more raw deal out of our job!".

Meanwhile, the unemployed feel resentment towards those who have proper jobs. All their lives they had been told that Capitalism wants people to succeed, that success comes to all who chase their dreams and believe in themselves. But once they tried to enter the world of employment, they found themselves in a system that seemed designed to frustrate their efforts to land an adequately-paying job at every possible opportunity. Rather than being primarily concerned with enabling success, Capitalism's main concern is to ensure most of us fail, because to fail is to sink into debt, and what is created out of debt? Money, which gets concentrated into the hands of an elite few. Just like a lottery, you can only have a minority of mega-winners if you also guarantee a majority of losers who end up with worthless tickets. So, from this perspective, the system is designed to ensure a majority fail



and puts needlessly difficult bureaucratic procedures between a person and basic social security.

Moving 'up' from those at the 'bottom' of society, we eventually find ourselves contemplating how Bureaucracy looks from the perspective of the professional classes. If Bureaucracy reveals its cruellest side to the lower classes, what the middle-classes see is bureaucracy at its most pervasive. There is a world in which nothing can really be considered 'real' that cannot be entered into some sort of paperwork or database.

To see what is meant by such a statement, consider the fate of a nameless first-year archeology graduate student at Yale university. On the first day of this student's term, tragedy struck. Her husband was killed in a car crash and the shock of this manifested in a peculiar way. For some reason, it caused a mental block that left her incapable of doing the most rote forms of paperwork.

Other than that, her academic ability was in no way affected. She still attended classes and during these sessions she was an avid and insightful contributor to discussions. When it came time to submit essays, the papers she wrote always earned her excellent grades. In short, everything about her academic performance identified her as a great student who should have completed her course with excellent qualifications.

But, rather than graduate, this student was expelled. Why? Because of that weird mental block mentioned earlier. Those teaching classes would always discover that this otherwise excellent student had never formerly signed up for the class, and the bureaucrats in charge of registration would remind everyone that, whenever formal methods of inclusion and success are established, then from an organisational point of view 'success' exists only on paper and human reality has little if anything to do with it.

"As far as the guys in Registration are concerned, if you didn't get the forms in on time, you didn't take the course. So your performance is completely irrelevant" was how the situation was summed up.

I can only imagine that most people would say reality should work precisely the other way around; that one's academic performance should take priority over administrative box-ticking. In other words, if someone had proven to be an excellent student, as evidenced by the contributions she made in class and the grades her essays earned, then the mere fact that this formal application was left unsigned or that box left unticked, should be of no relevance whatsoever.

Also, anyone who has filled in the application form that must be completed in order to be formerly accepted into some of the top universities knows only too well that mistakes and omissions can be made, since these forms can be forty pages long. So, if it should transpire that some aspect of paperwork was not completed, just get the student to fill in the missing details and let her carry on being an excellent student.

But that's not what happened. In the end it was decided that, since this student was so inept at handling paperwork, an academic career was clearly the sort of profession she was ill-suited for. She ended up being expelled from Yale.

Her practical ability meant very little from this administrative point of view. It's the filling in of paperwork that matters, not performance. This sounds a lot like that species of bullshit job known as 'box-ticking', where doing paperwork attesting to work being done is seen as far more important than actually doing the work. Again, I think we can point to resentment as a factor here.

Readers may recall that we previously looked at some statistics that provided a handy refutation of attempts to explain away the rise in bullshit jobs. Those statistics showed changes in "Administrative Growth at Public and Private Institutions from 1975-2005". That this period saw such an increase in administration and administrative staff refutes the claim that bullshit jobs are really dull but necessary bureaucratic procedures needed to deal with more complexity, because higher education is no more complex to manage in 2005 than it was in 1975. And the fact that private colleges saw more than twice the growth in administration as public ones refutes the accusation that bullshit jobs in the private sector exist only to deal with interference from the state.

For our current purposes, what really matters is that we have seen a major increase in administrative roles in higher education, and that a great many of these jobs serve little to no good purpose but instead owe their existence to the various ways in which bullshit jobs get created.

We have also seen how ending up in a bullshit job has a profoundly negative effect on one's psychology. It begins with a profound feeling of disillusionment. These people, like the rest of us, had been brought up to believe that, with some hard work and self-belief, anyone could land a career earning a decent income by doing work of social value. But now they find themselves in a job that pays well but which has no good reason to exist, since it contributes no social value.

Then, that disillusionment, the feeling they have been lied to, turns to anger and resentment. These are negative emotions that need a target- a hate figure- to be directed against.

So, which class of people become this 'hate figure'? The Unemployed? Well, yes, almost certainly some resentment is felt towards this class, but only because Capitalist society sets them up as a universally-despised class. Could it be the Rich? Again, there may be some resentment aimed at them (resentment the Rich would likely dismiss as "class envy") but they would also likely look up to the Rich, admire them for their achievements and aspire to join their class in the future, again because Capitalist society encourages such feelings.

No, the real hate figure, so far as those doing bullshit jobs are concerned, are not primarily the Unemployed or the Rich, but rather that group of people who hold the polar opposite position in society to their own job situation. More than any other group, people in bullshit jobs resent workers employed to do real productive or beneficial labour.

One can see this is the case simply by observing where anger and resentment, whipped up by right-wing rhetoric, gets directed. In the USA, the Republicans have been very successful at mobilising resentment against the education system, but that resentment never gets

aimed at the school administrators who actually cause the problems, but at the teachers whose only 'crime' is that they do work of clear social value.

We also see it in the way resentment is targeted at the auto industry. Again, it's the real, productive, blue-collar factory workers who are forever targeted for their supposedly bloated wages and benefits, but auto industry executives, the class actually causing problems and fuelling Capitalism's evolution into a cancerous system, get let off the hook.

So, the resentment felt by those in bullshit jobs takes the form of "there are people out there doing work that anyone can see is socially valuable. They get to help people, or provide goods or services that enrich all our lives. How dare they expect to receive a decent wage as well as do beneficial work, when I am expected to turn up day after day doing this nonsense administrative stuff?". One can well imagine administrators doing bullshit admin work in universities taking perverse delight in seeing the aspirations of students crushed.

Let's now turn our attention to the group those in bullshit jobs most despise, and see where resentment felt by those doing real productive and beneficial labour is directed.

The resentment that this class of people feel is a result of the fact that they got the raw deal out of that inverse correlation between the social value of a job and level of pay. But, it's not just the case that the more your work benefits society, the less you should be paid. In Capitalist society, we are also taught up to admire the Rich purely on the basis of their material status and aspire to be like them. The wealthier you are, the more respect you deserve.

But, you cannot really make that a general belief without also encouraging the polar opposite attitude, namely that the less you earn, the more you should be disrespected. And so, not only are those who do socially-beneficial jobs poorly paid, they are also more often than not treated with disrespect and lack of appreciation for their contributions.

Almost without exception, then, one must enter the world of employment making a terrible choice. Either you do work of obvious social value, but on condition that you will be poorly paid, disrespected and constantly accused of greed simply for wanting a modestly comfortable life; or you can have a job that pays well and is respected, but deep down you know that respect is not earned because the job contributes very little if anything to society.

But, as with most rules and generalisations, this one comes with an exception. There are careers out there that offer the best of both worlds. That is to say, not only do they pay extremely well and attract heaps of praise, but they are also jobs where you get to do work of clear social value. You get to bring Beauty to the world, or Truth, or Justice, and so you get to feel noble about the work you do, as well as being greatly respected and hugely rewarded.

Actually landing such a glamorous job must feel like winning the largest jackpot in lottery history. But here's the problem. The class of people we're now discussing can imagine winning the lottery, or finding some other means of becoming rich. They may not think it at all likely, but it could happen.

But, what they cannot see happening is ever being able to get one of those dream jobs. This they can never do, because such jobs have been monopolised by a tiny group that constitute a closed caste, a modern 'nobility', who have ensured we plebs will never achieve the cultural heights they occupy. It is this modern nobility that working-class conservatives most despise. We are talking about the 'Liberal Elite'.

Now, this resentment is not just caused by the liberal elite monopolising dream jobs. It's also a result of how liberal elites regard (particularly White) working classes. In today's woke, politically-correct culture, it is usually deemed unacceptable to apply negative stereotypes to a group. Woe betide anyone who labels a People as violent, ugly, or stupid, for they will be denounced as bigots who should be cancelled.

But, as ever, there is an exception to this rule, and we can see what this one is by considering the reaction to the most seismic events in 21st century politics.

Why do people bother to vote? There are two reasons why people head to the ballot box. One is that there is a political party that they support and want to see elected into office. Or, they have grown disillusioned with Politics in general, but have not quite given up on democracy entirely (if they had, they would have stayed at home). What these people do is signal their displeasure by casting protest votes.

Now, normally, protest votes never elect anyone into power or cause any major political upset. The most those casting them hope for is that enough protest votes will be registered to make the political class wake up, see there is a great deal of dissatisfaction with the status quo, and do something about it. But, in the 2016 European Referendum and Presidential Election, an angry, disillusioned electorate went out and put a cross in the box marked 'Brexit' and 'Trump', not because they thought either of them were particularly great, but much more so because they had come to really hate the Establishment (seen as 'The Blob' in the UK and 'The Swamp' in the US) and saw both elections as an opportunity to stick two fingers up at a society that made them feel left behind.

Only, this time, incredibly, so many people voted for Brexit and Trump, something happened which, from an Elitist perspective, is never supposed to happen. The result of an election is never meant to change anything, really, other than the names of those elected to govern the nation. You wake up on the day after the election, and discover that the Chancellor is now a woman called Rachel whereas before it was a bloke called Jeremy (and the other names associated with various branches of high political office are different, too) but other than that life just carries on as before.

But, on the day after the 2016 elections, we woke up the day after and realised, this time, it might really be different, that life would not be the same from now on. When the results became clear, a question was asked which soon became the most pressing concern. How could people possibly make a democratic choice that was so obviously against their best interests? At least, that's how the Media reacted to the results.

This subdivision of the 'Liberal Elite' (and, indeed, the whole class in general) immediately jumped to what they saw as the only possible conclusion. The White working class and 'populism' were to blame for both results, because White, working-class people are too

stupid and xenophobic to see that Populism exploits their prejudices for reasons that have nothing to do with making the world a better place. Racist idiots, lots of them, fed misinformation from populist Right-wingers and not intelligent enough to recognise it as the harmful propaganda it was, were suckered into casting protest votes and, tragically, this time democracy had to implement that decision, even though it was stupid (although this was then followed by attempts to frustrate Britain's departure from the European Union and to use the legal system to throw out the Trump Administration).

As I said before, normally when an identity group is labelled as 'stupid', 'ugly' or in some other derogatory way, polite society reacts against this and condemns it as bigotry. But, if we did not know it already, the 2016 reactions show that bigotry is perfectly acceptable so long as it's White, straight, working-class folk that are the targets of negative stereotyping.

So, that's one reason why those doing blue-collar jobs hate the 'Liberal Elite' more than any other group. It's because they see the 'Liberal Elite' as a group that look down their noses at them, seeing them as a bunch of knuckle-dragging cavemen. In doing so, the Liberal Elite reveal themselves to be hypocrites. After all, this is a class that loves to present itself as defenders of equality and warriors fighting Bigotry. Yet, they are quite comfortable with singling out the working classes for negative stereotyping.

But, if we want to see the worst hypocrisy of all, we find it in the Liberal Elite's pretensions towards egalitarian politics, a front that stands in stark contrast to the perception that this group represent a closed caste, a modern nobility.

Now, so far, we have only asserted that the 'Liberal Elite' represent a closed caste without really justifying this accusation. If it's justification you're after, all you need do is take a look at a list of lead actors in a major motion picture and count how many have at least two generations of Hollywood actors, writers, producers and directors in their family tree, and how many broke into this club with no familial ties to Hollywood whatsoever. You'll find it all but impossible to find anyone in the latter category, whereas the former will grow into a very long list indeed.

So, the evidence only leads to one conclusion, which is that the film industry is dominated by an in-marrying caste. Maybe once upon a time, in the 30s and 40s, some talented but otherwise ordinary person could go to Hollywood- a name once associated with magical social advance- and become a star in The Movies. But those days are long gone. Unless you can rely on nepotism to grant the necessary favours, you will never get a job in the movie industry.

This is the case not just with Hollywood but with all liberal professions. For all but a tiny elite, the only way to pursue work in the name of Truth, Beauty, Justice or Charity is to relinquish all rights to a paid occupation and work in such areas on a purely voluntary basis (probably supported by doing other paid work you hate).

But, should you want to be well paid for such work, and therefore want to try and break into Journalism, the art world, Publishing, Activism or Human Rights, you will find a thousand invisible barriers created by family wealth, social networking, and cultural capital, stand in your way, making it nigh on impossible to achieve such dreams.

As Graeber explained, “the ‘Liberal Elite’, then, are those who have placed an effective lock on any position where it’s possible to get paid to do anything that one might do for any reason other than money. They are seen as trying, and largely succeeding, in constituting themselves as a new American nobility... monopolising the hereditary right to all those jobs where one can live well and still feel one is serving a higher purpose- which is to say, feel noble”.

We started this discussion of society’s resentments by talking about the ill feelings directed towards the unemployed, and then moved ‘up’ until we got around to discussing why the liberal elite are targets of resentment. But we have not yet reached the top. Yes, in many ways, the liberal elite are like a modern nobility and exert great influence over society, but they do not wield the greatest power of all in a world where so much comes with a price tag attached. I am talking about the power to make money.

Now, in popular language, the ability to make money is seen as a power possessed by anyone who works, and from that perspective the labourer on minimum wage, the film star on a multi-million dollar contract and all employees in between are all “making money”.

But this belief is wrong in more ways than one. For a start, doing a job never really ‘makes money’; it just entitles you to a share of the money that already exists.

Putting it that way is rather misleading, too, because it leads us to believe that someone, somewhere, must be ‘making money’ for it to then be divvied up among all other workers. The problem with someone who, say, bakes lots of cakes in the hope of selling them at a fete describing their motivation as “making money by selling cakes”, is that it mistakes money for a material thing, like cakes. It’s sensible to say one is making cakes because cakes are material objects made by bringing other material ingredients together in the right way.

But money is not a material object. Do not be fooled into thinking it is because you have held a coin or a dollar bill in your hand. They themselves are not money, as proven by the way we are becoming an increasingly cashless society without diminishing the way money continues to rule our lives in the slightest. What the coin, the paper slip, the digits on the computer screen or any form ‘money’ takes that you can see or touch are never themselves money but just a way of giving material form to something that has no material form. Money is relational rather than material.

It’s the relational nature of money that makes it so difficult- impossible, actually- for any individual to make. I could take a scrap of paper, write some numbers on it and proclaim it ‘money’, but unless I can find others who agree that this is money and who will render services and goods in exchange for it, it’s no more money covered in my scrawling than it was when it was a blank scrap of paper. To the extent that we can say money is “made”, it comes in the form of an authority to say “x amount of money exists” and have a majority accept this claim and adjust their behaviours accordingly.

It obviously requires a supreme amount of authority to be able to proclaim that money exists and for this to be accepted on national (let alone global) levels. Indeed, it is so much authority it is too much power for one person and instead manifests as the power that forms out of the relationship between the two largest bureaucratic systems we have: The financial sector and the political system. So, if anyone could be said to “make money” it would be the top politicians working in the Treasury and banking executives. Only, they are always careful not to say they are creating money through the ritual of mutual contractual process, but rather that they either got the money that’s divvied up in the Budget by taxing the Public, or that they “borrowed it”. Either way, we have this pretence that the money was always there, like it existed already and it’s temporarily in the hands of those we should most trust to redistribute it in the most fair and impartial way. It is never really explained where this money came from to begin with.

Now, it’s true that the question, “where will you get/ find the money to do X?”, is often asked. But this is never intended as an invitation to lay out the money creation process in a way that’s honest, accurate and simple enough for the layperson to understand. Rather, it’s a challenge to justify a person’s or collective’s claim to have the budgeting, managerial and practical skills required to complete some task/ project in a cost-effective way. Once again, the money is just ‘there’ somehow, with no explanation for its origins.

Perhaps the closest we ever got to someone actually explaining “where money comes from” was this statement by Alan Greenspan, who at time of speaking was the head of the Federal Reserve Bank in America. In response to public anxiety over the latest financial crisis, he said, “this is not an issue of credit rating. The United States can pay any debt it has because it can always print money to do that, so there is zero probability of default”.

If you want a chuckle, it’s worth watching this clip just for the reaction of some guy in a suit who shares the stage with Greenspan. Guy-in-a-Suit has this momentary look of incredulous horror, as if Greenspan had let slip some secret that should never be divulged in public.

I imagine his thoughts were something along the lines of, “for God’s sake, Alan, you can’t say things like that. If people hear that the USA can “pay any debt it has because it can always print the money to do that”, they might just ask awkward questions like, ‘well, if that’s so then how come we’re always being told there’s not enough money to build hospitals, or to pay a living wage to all workers? Why is my household drowning in bills despite my wife and I both working two jobs if money can be printed to pay off any debt?’. Only the super-rich get to enjoy the sort of material comfort that comes from being permitted to behave like debt is inconsequential. We can’t have common folk learning this truth of our society because if they did there would be a general strike which would expose the illusion of Capitalist= wealth producer”.

But, even though Greenspan’s comment gets us closer to the truth because it drops the pretence that money is a finite material resource, it’s still misleading in that it continues to present money as a material thing produced by material processes. He claimed that the US monetary system makes money by “printing it”, a phrase which invokes images of endless rows of dollar bills coming off some printing press. But, while notes and coins may still be the most recognisable representation of money, in reality 97% of money in existence does not take the form of notes or cash at all, but exists only in banking ledgers as ‘credit’. Also, that

3% of money that is (for now) notes/ coins only have value, ultimately, because we believe so. We give credence to the claim that it's stated value is really what it's worth. In other words, it's all credit, a mutual agreement. Materially speaking, money never really exists.

What all this means is, whenever some authority figure like a politician or an economist tells you "the money is there to do X", they are lying. The money is not there; it never is. But, equally, when they say "there is no money" that's a lie too because it's never meant in the sense of "money doesn't really exist in any material sense. Rather, like 'fashion', we merely adjust our behaviours as if it existed". Instead, it's meant in the sense of abandoning this or that project until such time as we can "find it", "borrow it" or "make it", all material activities requiring material effort. Really, then, money is an immaterial, relational, symbol of relative value that's always 'there' so long as we have sufficient faith in the future, but never "there" in any material sense.

In many ways, then, economists, bankers and politicians are the modern equivalent of temple priests, oracles and other mystical, religious types who performed strange rituals and studied texts written in near incomprehensible languages, all so they could proclaim the judgement of the gods and the consequences for Society. Saying "we can't build X because there is no money" is no different to saying "we cannot build X because that would anger Zeus". In either case, it's only really true to the extent that enough of us believe it and adjust our behaviours accordingly.

There is, however, a big difference between those ancient rituals and the modern equivalent. The ancient, mystical forms of ritual were very colourful, communal affairs that were meant to be seen as mysteries and nothing to do with Rationality or Efficiency. They were wrapped up in layer upon layer of deep symbolism, and such they offer endless opportunity for study and interpretation. Anthropologists and archaeologists can study these ancient forms of ritual practice and writing and get so much out of it, because we are dealing with human constructs intended to meditate upon the mysterious, rather than being some definite solution to a well-defined problem.

But, our modern rituals and sacred texts, the administrative procedures and bureaucratic rules and regulations that lie behind the so-called 'money creation process', are not supposed to be mysteries to be experienced but rational processes intended to solve practical and social problems. An Egyptian wedding ceremony, or coming of age initiation rite among the Yanomami, are supposed to be profoundly deep ritual customs, whereas paperwork is supposed to be boring. As Graeber explained, "paperwork...is designed to be maximally simple and self-contained. Even if the forms are...bafflingly complex, it's an endless accretion of very simple but apparently complex contradictory elements, like a maze composed of two or three very simple geometric motifs".

The thing with mazes is, so long as you know how to navigate your way out, the one current path to the exit is pretty simple. A few right turns here, a few left turns there, and you escape. Most of the paperwork and regulatory procedures we're made to do are similarly simple once you know exactly what you're meant to do. But, mazes are of course designed to confuse so nobody is denounced as an idiot if they get lost among the twisting paths and dead ends and need a guide to help them find the exit. The most infuriating thing about bureaucratic rituals is that, while in theory they are not supposed to be bafflingly complex



labyrinths, in practice they often are. But the authorities who know what to do solve them easily.

As Graeber said, “one of the most infuriating bureaucratic tactics is to disguise information through a fake pretence of transparency: for instance, to bury a key piece of information in a flurry of departmental emails- so many that no one could possibly read all of them. When we complain that we were not informed of a new policy or responsibility, the bureaucrats triumphantly produce the date (usually months in the past) and details of the documents where the new rules were listed....[when] puzzles are supposed to be puzzles..there is no officious person who will show up to lecture you on how this is all perfectly transparent and simple and there’s obviously something wrong with you for not having immediately figured it out”.

Now, when I say Bureaucracy and Administration are not meant to be profoundly complex mysteries but perfectly efficient and rational procedures, I mean this is how we are generally supposed to believe they should be (and then blame our own incompetence when it turns out not to be so). But, when you consider the truth of “where money comes from”, you begin to suspect that such baffling complexity is deliberate.

Money is created out of something that is just as immaterial and relational as money itself is- Debt. In the popular imagination, one could not be more different from the other. If you are “in the money”, you can buy anything for sale, and you have the power to make work happen. Things are starkly different for those in debt. For them, every price tag represents a barrier preventing them from acquiring this good or accessing that service, and it’s profoundly hard to get any project started because everywhere they go there is that refrain, “you can’t do this because you don’t have the money”.

So, Money and Debt could not be more different in their effects on a psychological and social level. But, they are not just opposites but polar opposites, meaning the relationship between them is so tight one cannot exist without the other. The creation of debt IS the creation of money; the creation of money IS the creation of debt.

To put this another way, for every amount of money a person possesses, there has to be a corresponding amount of debt other people have to be liable for. It is not the case, however, that the amount of money in existence is exactly equal to the amount of debt. Actually, the bureaucratic procedures that create debt/money always ensure that more debt is created than money to repay it.

Since this is the case, we can see there is yet another reason why it is inaccurate to claim “I am making money”. To the extent that one’s actions are “making money”, the result will always be more debt than money, so it’s much closer to the truth to say you are making debt. If one wanted to state the truth more accurately still, and take into consideration the fact that debt/money is relational and therefore something no individual can make, the phrase “I am making money” should be interpreted as “I am participating in a system that mostly produces debt”.

Earlier, we talked about a philosophical point of view that says something is real if it can kill you. I would also suggest that something is real if it brings about consequences. Now,

clearly, being in debt does bring about consequences and so, regardless of how immaterial a thing it is, debt is nevertheless very real indeed.

Or is it? In order for consequences to matter, you need to know they will happen to you. We now know it is the likelihood of being caught, rather than the severity of punishment, that acts as a deterrent to crime. In other words, if the penalty is death by slow torture but there is virtually no chance of ever being arrested, that's far less of a deterrent compared to time in prison enforced by a police and legal system very efficient at catching felons.

Now, in the case of being in debt and the consequences that result, the likelihood of your ever having to face those consequences depends on the likelihood of your ever meeting a creditor more powerful than you are who can call in that debt or mete out punishment should you be non-compliant. The less political, financial, and martial power you can call upon, the more likely it is that you'll have to face the consequences of not repaying a debt, and thus, the more real it is.

For most of us, then, lacking as we do much in the way of political, financial and martial power, the chances of encountering more powerful creditors who can call in our debts or else are so high we can say for certain that it will happen. For this reason, even if we're only in debt by a moderate amount, less than a thousand pounds, say, we would feel a huge pressure to do our moral duty and pay off that debt, even if that meant seriously downgrading our quality of life to do so.

Now, as ever, the inverse to all this applies as well. The more political, financial and martial power you possess, the less likely you are to find yourself in a situation where you could be coerced into repaying your debts. At the very top of the global system we have those nation states that wield so much political, financial and (above all) martial power, no other entity can possibly coerce them into repaying their debts. Therefore, there are no consequences to being in debt, which means the debt is not real (or can be treated as if it is not real). Even if it is minus 100 trillion and counting, it is of no concern, really, because the day when it must be paid back or else shall never come. At least, not so long as the most powerful player on the global stage retains that position.

There is something else that should be borne in mind, something that we will study in much greater detail in future volumes. Human beings are social animals with the unique ability to create a kind of reality through intersubjectivity. A necessary aspect of being a social, intersubjective animal is the development of networks of obligations.

That is another way of saying that people have always had favours done for them or volunteered to help others. But how we view such assistance often depends on whether we are assisting "one of our own", i.e, somebody of our own identity group or class, or whether it is somebody outside of that inner circle that we are doing favours for.

In the former case, favours extended to "one of our own" often take the form of a gift that nobody seriously expects to be repaid. But, when dealing with those very much outside of one's own class/ identity group, favours are treated as debts. A debt is a quantified obligation, meaning it is known precisely how much one must pay back to call things even, cancel the debtor/creditor relationship and restore formal equality.

All classes follow these vague rules. So, when the poor offer assistance to their fellow poor, such favours are most often treated as gifts that don't really need repaying. For this reason, small businesses run by local people often fail because they are forever offering extremely relaxed credit to their customers/ friends and neighbours. But corner shops run by foreigners, who do not feel that need to extend favours/ gifts to their customers (many of whom do not belong to their identity group) do much better.

The Rich also treat favours extended to their own class in this way. But, think about what that means when rich people 'borrow' from banks, those money-lending businesses that are always owned and managed by other rich people. When we see rich people enjoy wildly disproportionate levels of material wealth we never really question why this is so, as the explanation seems self-evident. Of course they have so much material wealth, they are rich! But, actually, that material wealth has much more to do with the fact that, when rich people lend money to their own class, it's treated more like a gift than a debt. "You want a ten million dollar loan? Sure! Pay me back whenever". The richest in the world have such great material wealth because the money creation system they control lets them treat 'debt' as though it does not matter at all.

We have already seen some examples of how all this results in great injustice, even if its is strictly-peaking legal (and guess which class has the most power to redraw legal boundaries). We have seen how fraud perpetrated by banks is dealt with way less harshly than honest financial mistakes made by the poor. Moreover, such double standards apply not only to rich/ poor people but rich/poor countries too. For the longest time, Third-world countries struggled with crippling debt repayments arranged between the IMF and the corrupt leaders of those countries, but somehow the far greater debts that 1st-world countries have built up have had nowhere near as bad an impact on how wealthy such societies like to pretend they are.

As Graeber pointed out, "In a way, you can see current world economic arrangements as a much larger version of [debtors' prison]...the US in this case being the Cadillac debtor, [third-world countries] the pauper starving in the next cell- while the Cadillac debtor's servants lecture him on how his problems are due to his own irresponsibility".

But, surely, one cannot ignore the reality of debt and never face consequences? Yes, that's true, and the bursting of all speculative bubbles represents that moment when the fantasy of ever-increasing credit meets the hard reality of ever-expanding debt. When that happens, though, the state partner in total bureaucratisation/ total marketisation steps in, turns private debt into a public liability and makes sure the poor get the hangover for the wild parties of the super-rich through austerity politics.

It's nigh on impossible to learn how the debt/money creation process works, the consequences that result and how different they are depending on your position on the global stage, and not see this as a system that simultaneously creates structural advantage for the Rich and structural oppression for the Poor.

Also, perversely, it's possible to see how, from the perspective of those at the very top, all the absurdities and resentments the system generates do look like 'efficiency', like a system doing what it is meant to be doing.

Let's take all those resentments first. Resentment against the Unemployed, against workers doing jobs of social value, against the Liberal Elite. What purpose do all these forms of negative feeling serve? Well, from the perspective of those at the top, it all serves to distract angry sentiment from being directed at them. In other words, resentment directed anywhere other than at 'the top' is of little use in terms of actually fundamentally changing anything, and should really be seen, ultimately, as just another means of preserving the hegemony of the ruling classes.

Now let's see why all this looks like 'efficiency' from the top. Any system that does what it is supposed to do deserves to be described as 'efficient', and the more it carries out its purpose, the more efficient it is.

The purpose of a Capitalist system is to expand capital. In order to have capital you need money. And where does money come from? Debt. So, the more debt you can generate, the more capital you can ultimately extract from the system.

It's imperative, then, to drive people, businesses, organisations, nations, the world, into increasing debt, all to feed the insatiable hunger of the most efficient capitalist player. As we have seen, when those bureaucratic and administrative systems are anything but rational and efficient, people are more likely to fall into debt or trigger those fines, fees and penalties the banking systems makes most of its profits from.

All of this can be seen as a sub-species of Marxian notions of fetishism. Recall how there is a fetishistic quality to commodities under Capitalism, since the way this system works leads us to socialise objects and objectify human beings, which under any other society the inverse would be seen as the proper way to live. What this subspecies of this phenomenon does is take all that bureaucratisation and administration and turn it, ultimately, into financial capital. That is say, from the perspective of those at the top, all those bureaucratic ways of evaluating things, all that assessing, all that weighing of the relative merits of plans, projects, and who should be promoted and rewarded, are not just means of value but the source of value itself. It's the very inefficiency and absurdity of it all that makes it all very efficient, from the perspective of those financiers and speculators who "make money" by really nothing more than gambling with other people's debt.

As Graeber said, "what is the world of securitised derivatives and other such exotic financial instruments but the apex of the principle that value is ultimately a product of paperwork...of a mountain of assessment forms that begin with the irritating caseworker determining whether you are really poor enough to merit a fee waiver on your children's medicare and ends with men in suits engaged in high-speed trading of bets on how long it will take to default on your mortgage".

## CHAPTER FORTY-ONE

At the end of the last chapter, we saw how the modern anti-economy fosters all kinds of resentment and how such negative feelings serve to distract attention from the way those with the power to “make money” are really benefitting from the privilege of treating debt as inconsequential, while simultaneously using it as a mechanism for oppressing those lacking financial/political power while taking hard assets from them.

We also saw how a system that comes across as wasteful and inefficient to those who have to deal with infuriating bureaucrats is actually efficient from the perspective of those working at the executive level in financialisation, because that very inefficiency creates debt that then gets moved around the financial system so as to increase on-paper wealth.

Now, the fact that financialisation means wealth accumulation through gambling with other people's debt has implications for the idea that our current system remains 'Capitalism'. Controversial though it may be to say, those at the very top of this system may not be driven by Capitalist imperatives but rather something else.

This is a controversial thing to say, because it would appear to provide a handy get-out clause for anyone who insists on believing that the utopian free market Capitalism is viable, despite all evidence to the contrary. All one need do, when confronted with the many harmful consequences of growth-based selfish competitive behaviour, is to claim that the current system is not really 'Capitalism' in the pure sense, but rather a corrupted version of it.

More specifically, it is claimed that any absurdity seemingly being produced by the Capitalist system is all due to government interference. Never mind the plentiful historical evidence that show attempts to lessen the impact of state interference always ultimately massively increases administrative and bureaucratic procedures, or the fact that there has never been a commercial market successfully run under totally deregulated conditions. Just say “but what we have today is not Capitalism” and you can carry on fantasising that this mythical free-market Capitalism would really work if only it were given a chance (yet again).

What is most infuriating about this excuse is the way that when proponents of communism point out that the deadly personality cults of Stalinism, Maoism etc were “not really communism”, the proponents of Capitalism never let this excuse stand, even though it actually makes more sense than their claim that “what we have is not really Capitalism”.

After all, it's really only the opponents of Communism who apply the 'Communist' label to such regimes. But that's now how the parties who ruled over the USSR, China and other so-called 'Communist' countries described their system. 'Communism' had not yet been achieved. It remained a distant dream, one not realised until the State had withered away, thanks to a successful combination of technological development and social change that rendered the State superfluous to requirements. In the meantime, what the revolutions had put in place was an intermediary stage between Capitalism and Communism known as Socialism.

Now contrast that to the attitudes of the architects of Capitalism, the likes of Smith, Ricardo, Hayek and Milton Friedman (1912-2006). They always insisted (in public, at least) that the system they were striving to build was Free-Market Capitalism, not some other, intermediary system that was supposed to make free-market capitalism possible, eventually.

Furthermore, if we refer back to Marx's work, it's plain that he saw Communism as being born out of the most advanced Capitalist nations. Now, thanks to the benefit of hindsight, we can see that no country, from the 19th to the early 21st century, had reached anything like sufficient advancement. From the 2020s we have seen advances in artificial intelligence, but the dream of super-efficient, all-purpose robot workers still falls pretty far from the reality. There is still plenty of room for AI and robotics to grow, providing profit-making opportunities that Capitalist businesses can chase (regardless of whether or not the forms of AI and robotics they invest in harms more than helps society, which is quite possible but irrelevant to Capitalist ethics).

The same thing could be said of nanotechnology, the practical application of which falls even more dramatically short of the vision of assemblers that can manufacture for you anything you desire and does not violate physical laws, be that a diamond ring, flying car or...well, let your imagination run wild. Again, there is vast growth potential in this field, which actually cuts across a great many scientific and technological disciplines.

But, while these technological capabilities are still quite primitive in the 2020s, in Marx's day they did not exist at all. And, more to the point, when the Socialist revolution did kick off, it was not in the most advanced Capitalist nations in Marx's day (which were themselves very primitive, technologically speaking, compared to what we have today) but in countries like Russia, which were primitive so far as 19th century industrial Capitalism was concerned.

In other words, it's a bit like people learning that flying machines capable of carrying hundreds should be possible one day, based on a model of how certain technologies are progressing, but rather than wait for the day when it's within our capabilities to work with jet engines and carbon fibre bodies, they rush ahead and cobble together a flying machine with what is actually available, completely inadequate though it is. Then, when the maiden voyage in the death trap they have built turns into predictable disaster, opponents use this failure as justification for saying passenger jets will never be possible, no matter what advances in technology there may be.

Lastly, if your stated aim is to bring about Communism but what you actually bring about is an extremely rich and powerful oligarchy ruling over the impoverished masses with an iron fist, would it be fair to say that those aims had been corrupted? Clearly yes. After all, the aim of Communism is to bring about a reality in which people are no longer used as a means to some end, but instead live in a system that enables them to express their individuality without being coerced into meeting the ideals of others. Such a system is most likely brought about if we adopt the minimalist definition of wealth and seek happiness in relationships more than in material acquisition and competitive one-upmanship.

But what if you intend to establish Capitalism and that results in the extreme inequality of an oligarchy, as happened when something close to a free market was attempted in 90s Russia. Could we likewise call such results a corruption of the Capitalist ideal?

No, because to establish an all-powerful oligarchy in no way counts as a violation of Capitalism. After all, what does Capitalism seek to do? It seeks the growth of Capital from a current situation of scarcity. That is its one and only true aim and anything else, such as

increased prosperity, is at best a secondary consideration, worth pursuing only insofar as it does not interfere with the primary concerns of maintaining scarcity and driving capital accumulation.

Therefore, if the growth of Capital can continue under the sort of concentration of wealth and power that is diagnostic of an oligarchy and the gambling with debt that financialisation consists of, then there can be no corruption of Capitalism if its accumulation should persist, even if the very same structure that has concentrated so much wealth and power has led to a majority that feel impoverished and indebted.

Furthermore, consider the imposition of prices in Capitalism versus Communism. Where the latter is concerned, the ideal would be the elimination of the price tag. The way to bring that about would be through technical abundance combined with the minimalist definition of wealth. In other words, we use our best scientific understanding of what humans really need to live well-adjusted lives (something which has always involved social relationships more than material luxury) and then ensure that what material resources that are crucial to this aim are so abundantly available as to become worthless in a 'value' sense. You don't slap a price-tag on resources as abundantly available as the air we breathe.

But, so far as Capitalism is concerned, one should never seek to eliminate the price-tag, but rather to increase the ubiquity of the price-tag, such that everything you need or want, and everything you try to do, comes at a monetary cost that you are going to have to pay, one way or another (if it seems free, then you are the commodity). After all, the more price-tags attach themselves to our wants (and, unlike under true Communism, it does not matter if these are bogus wants that have nothing to do with minimalist wealth) the more capital can be squeezed out of this world we have created.

We have already seen how, under Capitalism, there is very little incentive to solve a problem when you can service it instead (since, that way, you can continue to extract profit, even if the problem persists for bogus reasons). Furthermore, since Capitalism seeks to increase the range of things that have a price-tag slapped on them, there is no reason to suppose that such an imperative would stop at the door of the Government and other regulatory bodies. Once the money gets its hold on such institutions, having the law on your side and the banking system looking favourably upon you has more to do with what on-paper wealth you have accumulated than the merit of your case. It really is no corruption of Capitalism if the guiltiest rich man can buy his way to a "not guilty" verdict, and the most innocent person of limited financial means ends up incarcerated in the prison-industrial complex doing slave-labour for this or that corporation.

In other words, not only is toxic inequality and poverty amidst plenty not a corruption of Capitalism, it is the outcome we should expect. Saying "but what we have isn't really Capitalism" in no way refutes the fact that oligarchy, not 'freedom', is by far the most probable outcome of running a Capitalist system.

But still, would it be at all fair to say that the most powerful players in the modern system may actually be operating under some other logic? The existence of bullshit jobs strongly suggests this could be the case, particularly if we are talking about Capitalism in the classical sense. We have previously seen how Marx preferred to talk about industrialisation,

and we put this down to being a form of work that required a disciplined and organised workforce, and therefore the most suitable people for an army of the proletariat.

But Marx would not have been the only one who identified the factory system as the most obvious example of Capitalism in action. So too would anyone looking at such a system through the perspective of classical economic theory. After all, classical economic theory sees profits as something that results from the management of production. On the one hand you have the owners of the means of production. On the other hand, you have those who are hired to either use those means of production to turn out commodities, or to carry out whatever maintenance and tidying is required to keep the means of production in proper working order.

The Capitalists who own the means of production and hire workers to run and manage it seek surplus value, and there's only one way in which that outcome can be achieved. They need to ensure that the income they receive from their clients and customers is greater than the costs of running the means of production, and such costs obviously include the number of workers they employ and amount of wages each receive.

One can quite plainly see how, under the assumptions of classical economic theory and its focus on the management of production, it would make no sense whatsoever to hire unnecessary workers. After all, if the aim is to maximise profits, then surely one would seek to employ the minimum amount of workers needed to maintain the system at optimal level, and pay them the bare minimum to do so. Any business that ignored the imperative to be ruthlessly efficient and hired flunkies to sit at a desk for eight hours a day, but have nothing useful to do for seven of those hours, should be driven out of business by their more competitive rivals.

When one looks at Capitalism through this classical perspective, it would appear to make no sense whatsoever for there to be a substantial percentage of bullshit jobs. Subsequently, both doctrinaire libertarians and orthodox Marxists tend to dismiss claims that jobs that serve no practical purpose (i.e, they really have nothing to do with making, building, fixing, maintaining, or managing anything). That some claim their job is, indeed, bullshit, is dismissed as some kind of delusion.

The problem with such an assertion is that studies continue to show that a sizeable percentage of people do believe their job is of no real benefit to society. While the percentage may not always be as high as those cited earlier, it's still substantially more than one would expect looking at the jobs landscape through the lens of classical economic theory.

Rather than assume an inordinate amount of workers suffer from some kind of delusion, we might do well to ask if classical economic theory is the best tool for understanding the contemporary world of jobs. You may recall how we previously looked into the testimony of one 'Simon', who blew the whistle on bank executives who seemed to behave more like feudal lords than capitalists, at least when it came to their own staff.

Such behaviour suggests we should look to Feudalism, rather than Capitalism, if we are to understand the underlying causes of the rise in bullshit jobs. Technically speaking, the feudal



system was one of 'Direct Juro-Political Extraction', which is really just a fancy way of saying feudalism was a redistributive system. You had the peasantry who worked in a largely autonomous way to produce wealth. They had their own means of production, their own land, and when they worked, they worked to provide for themselves and their own communities

Or, at least, they did so some of the time. But not all of the wealth produced by the efforts of the peasantry went to the peasantry. This was because a large portion of the wealth collectively produced by the efforts of the peasantry went to the Nobility who, using such means as fees, tolls, rents and levies, extracted rents from them.

The question was, what to do with all that money the nobility extracted through rent? One possibility was to use it all to fund a life of great luxury. Of course, monarchs and dukes living in grand castles and stately homes did signal their disproportionate wealth, but it was not wise to lavish all of one's rent on personal luxury. The reason why not was because the Nobility had another means of obtaining wealth, which was to steal it from one's enemies.

Meanwhile, their enemies were thinking they, too, could get rich through robbery, and no doubt looked upon those estates with acquisitive eyes. How could the upper nobility prevent the lower nobility or the commoners from rising up against them and forcibly taking their property? Well, strong defences helped, of course, but along with that, kings and lords relied on redistribution. That is to say, once a pot of loot had been grabbed via robbery or rent extraction, the nobility would then portion out shares of that loot to those of lesser rank in the feudal hierarchy.

Thus, thanks to putting on feasts and festivals, and also via occasional gifts and favours, a portion of the money extracted from the peasantry was returned to the peasantry. Compared to a wage labourer working under free-market conditions, feudal commoners worked far fewer hours and enjoyed many more holidays and festivals. In social terms, then, it might well be fair to say that the feudal peasantry were way better off than the industrial wage slave, who barely got any time for anything other than work or recovering from it. But the money returned to the peasantry via this method of redistribution was never all that much compared to what had been extracted from them. It was the bare amount needed to keep a lid on commoner unrest.

Mostly, the redistributive process portioned out shares of the loot, not to the peasantry but to the lesser nobility. Two things resulted from such a process. One was that it provided the aristocracy with another means of signalling their pomp and magnificence, because they were acquiring warriors, flunkies and retainers who protected and projected their material status. After all, when one has important-looking folk in flashy uniforms saluting you and calling out "make way for the most august Duke Bigshot!", wherever you go, you do tend to look like a person of some importance.

Secondly, all those flunky roles worked as a means of distributing political favour. It was a means of creating an elaborate hierarchy of honours and titles that gave the lower-ranking nobles something to squabble over. Thus distracted, they would hopefully be too busy fighting among themselves to win favour to organise into an army that could take their ruler's property by force.

Now, it's fair to say that, in any society, fundamentally the work of making, building, fixing and maintaining infrastructure has to go on. No amount of flunkies would convince anyone that you are high and mighty if your estate is overrun with weeds and your castle is falling apart for want of attention. It's just that, as well as practical economic work of this kind there was also a political process of appropriating, allocating, and distributing money and resources. Since wealth was obviously extracted through political means and distributed for political purposes under Feudalism, nobody thought to look at 'Politics' and 'the Economy' like these were two separate spheres. The idea that 'the Economy' could be studied as an autonomous sphere of human activity had to wait for industrial Capitalism.

Nowadays, we are told, the industrial sector is shrinking and the 'service' sector is growing. But, as we have seen, it's far more true to say that we have witnessed the rise of 'information work', particularly of the financial kind. Since the United States took over as the world's largest economy, the form of Capitalism that has reigned has not been free-market Capitalism of a sort that would have been recognisable to the founders of classical political economy, but rather corporate capitalism.

One could just as legitimately call it 'Bureaucratic Capitalism', since corporations are becoming less and less about making, building, fixing and maintaining things, and more concerned with a political process of appropriating, distributing, and allocating money and resources. This evolution of Capitalism, from a dream of free markets (which has never really existed, at least not in a totally laissez-faire, unregulated form) to 'Corporate Capitalism', has driven what has been called 'Total Bureaucratisation', which, as we have seen, works in a remarkably similar way to 'Total Marketisation'.

What this means is that the illusion may not be the belief that jobs can be bullshit from a point of view of 'productivity' and 'efficiency'. No, the illusion is that we can continue to think of 'Politics' and 'Economics' as two separate spheres. Under Total Bureaucratisation/ Total Marketisation, it becomes increasingly difficult and indeed pointless to make that distinction. Certainly so far as financial profits are concerned, wealth is gathered and concentrated largely through direct juror-political extraction.

Recall how banks and other major-league players in the financial sector tend to blame any increase in regulations and bureaucratic red-tape on 'the Government', but really all such regulations were most likely the result of a collusion between state and private bureaucracies moving back and forth through the revolving door between the State and big business. What the financial sector calls 'Deregulation' means "the sort of regulatory structure we prefer", which actually entails a substantial increase in rules and regulations, as that encourages a tendency for smaller financial fish to be swallowed up by larger fish which become larger still, until they are "too big to fail" and thus can expect a bailout should the more dubious aspects of financial speculation threaten to bring about an economic collapse.

Meanwhile, today's 'commoners' cannot expect a bailout, since the very process of rescuing banks at times of maximum financial crisis turns private debt into a public liability that harms everyday folk with austerity. But, even without austerity, ordinary people are harmed by this return to juro-political means because, if America's largest bank (JP Morgan Chase & Co) is anything to go by, about two-thirds of a banks' profits come from fees and penalties, just as

feudal lords had all kinds of fees, tolls, rents and levies which which to extract wealth from the Peasantry.

Also, when we talk about financial markets, what this generally refers to is a trade in other people's debts, the repayment of which is enforced by 'The Man With The Gun', i.e, the modern legal system. Thanks to the workings of fiat money and fractional-reserve banking, the more debt there is, the more money there is; the more money there is, the more capital can grow. People do not fall into debt purely by accident nor through their own moral inadequacy, but more so because this outcome is engineered by a juro-political process that, on any scientific-technological level, should really be seen as an 'Anti-Economy', so little does it really have to do with 'productivity' or 'efficiency'.

Consider, for example, how firms like General Motors or General Electric derive most, if not all, of their profits. One might think that such firms, being as they are at the heart of the old industrial order, would derive their profits from the sort of "management of production" that classical economic theory identified as the source of surplus value. But no. Actually, they no longer really make profits by selling commodities but rather through their own financial divisions. So, General Motors profits from the interest it collects on auto loans, not because it sells cars. Indeed, the majority of the most successful 'Capitalist' companies, such as Amazon, Apple, Facebook etc, actually derive most of their profits through rent-seeking activity that has more in common with Feudalism than it does Industrial Capitalism.

All of which means that we can understand the rise in bullshit jobs by dismissing the idea that modern Capitalism has anything to do with 'Productivity' and 'Efficiency', at least not at the executive level, and focus on how corporations have changed in terms of moral responsibility.

We have previously seen how, from 1945 to 1975, postwar conditions favoured what has been called a 'Keynesian Bargain'. To recap, the devastating effects of World War II meant there had to be a lot of reconstruction, and so there was a great deal of building, making, and fixing to be done. The USA suffered far less destruction of infrastructure than Europe, which was one reason why it became the post-war Capitalist powerhouse. It also saw a rise in militant unions and this socialist threat was countered by that aforementioned Keynesian Bargain, which amounted to a tacit understanding between workers, employers and the government that increases in worker productivity would be matched by increases in worker compensation.

In other words, corporations from 1945-1975 adopted a Paternalist attitude when it came to employment. If you could get a job at a major corporation, you were pretty much guaranteed a job for life that paid a middle-class salary plus other benefits, ultimately so you felt like you had enough of a stake in the Capitalist system not to want to tear it all down in a revolution.

But then, after the mid-70s, working environments were restructured in such a way as to bring about a separation between worker productivity and worker compensation. There were two aspects to this reconstruction. One was that Right-Wing criticism of administrative procedure as "bureaucratic interference into the workings of the market", as if to be a bureaucrat necessarily meant one worked for the Government (when, in fact Corporate Capitalism has always entailed a coordination of State, Private and Military bureaucracies).

Secondly, the whole moral outlook of business changed, from the belief that businesses were “chartered to serve both their shareholders and society as a whole”, to “the notion that the board must somehow balance the interests of other stakeholders fundamentally misconstrues the role of directors”.

There was no such thing as a ‘Stakeholder’, the new business mantra insisted. There was only aggregates of financial assets that served as the chips that speculators gambled with as they bet on stock market activity with the aim of increasing profits for shareholders (or fiddled the books to make it seem as though, on paper, profits were going up and yet another round of bonuses for shareholders was called for).

Along with this change in business perspectives, there was a change in the preferred economic theory. Keynesianism was out and Monetarism was in. According to the doctrines of this school of thought, even if money is no longer tied to any commodity (i.e, it’s not based on gold, or land, or any material thing) and even if most of the money that was being invested in the marketplace was purely speculative (i.e, completely detached from any relation to production or commerce) the primary concern of government and central bank policy should be to control the money supply so that it acted as though it was a scarce commodity.

It was expected that, once such changes were implemented, there would no longer be any guarantee that wages would rise as productivity increased, and indeed that link can be clearly seen to decouple in productivity/ wage level charts from this period.

But why should the working classes remain loyal to businesses if it was no longer rewarded? In order to retain faith in the system, believers in Monetarism tried to sell people on the idea that everyone could buy a piece of Capitalism and speculate (i.e, gamble) their way to prosperity.

This was a promise that had interesting consequences for rents and rentiers. Keynes had spoken of the “euthanasia of the Rentier”. Like Smith and Ricardo before him, Keynes considered rentiers to be what remained of the Feudal system. As he put it, “I see...the rentier aspect of Capitalism as a transitional phase that will disappear once it has done its work”. Although a phrase like “euthanasia of the rentier” does sound like a call for violent revolution, what Keynes actually anticipated was the class of ‘rentier’ being gradually eliminated through a gradual reduction of interest rates. “The euthanasia of the rentier, of the functionless investor, will be nothing sudden”, he reckoned, “and will need no revolution”.

Monetarist economists thought there was another way of dealing with the class of rentiers. Rather than planning for its elimination, the ubiquity of such a class should be the thing to aim for. This would be achieved by compelling everyone to act like mini investors, playing the markets with an eye on boosting their 401(k) retirement accounts and other investments and, by the 1990s, relying on mortgage-refinancing schemes and an expectation that property value can only rise, to treat homes like credit cards.

As well as being encouraged to play the markets, people were encouraged to ‘borrow’, and this had profound implications for what “buying a piece of Capitalism” really meant. For many, it meant a return to Capitalism’s dark beginnings when the working poor were prey for

loan sharks. Just as the bribery of legislators had been “dealt with” by redefining it as ‘lobbying’, loan-sharking was dealt with by making it legal to impose the sort of interest rates one would once have associated only with gangster-run protection rackets. So, for example, payday loans could charge annual interest rates of six thousand percent. As all this was perfectly legal, such loans were enforced by the mechanisms of the State with its judges, lawyers, bailiffs and police.

What all this meant was that, along with a progression toward Total Bureaucratisation/ Total Marketisation, this period also saw a move toward what some have called “the financialisation of everyday life”. This was the ideology of ‘Neoliberalism’, which really entailed pushing this idea that one had to operate within the Capitalist system because it had been, is, and always will be the only economic system that could exist.

So, Capitalism and Neoliberalism became, in Graeber’s words, “the organising principle of almost everything. We were all to think of ourselves as tiny corporations, organised around that same relationship of investor and executive: between the cold, calculating math of the banker, and the warrior who, indebted, has abandoned any sense of personal honour and turned himself into a kind of disgraced machine”.

Out of all this came a growing mountain of debt that, through the alchemy of financialisation, was turned into capital that could be shown, given appropriate manipulation, that profits had risen because ‘productivity’ had increased. But, if that increase was not finding its way into the pockets of ordinary workers (charts from 1977-2007 show ‘productivity’ taking off like a rocket and ‘average hourly wages’ and ‘average hourly compensation’ largely flatlining) where was all this money going?

Well, given how the fortunes of major investors, executives and the upper echelons of the professional-managerial classes swelled so dramatically during this period, it’s plain that a substantial chunk went to the wealthiest one percent (hence that Occupy Wall St slogan, “we are the 99 percent”). As well as bringing about that result, the benefits of “increased productivity” (which, remember, really meant driving people into debt that was turned into Capital through financialisation) was the creation of new professional-managerial positions that tended to be accompanied by administrative staff, both of which were as pointless to any genuine economic activity as feudal flunkies were unnecessary for any real work in maintaining the integrity of a noble’s estate.

But then, if such roles are indeed pointless from an economic point of view, why would any Capitalist business hire bogus employees and pay them professional-managerial salaries? This is done, not on economic grounds but political ones, just as was the case with the feudal system. As Graeber said, “managerialism has become the pretext for creating a new covert form of feudalism, where wealth and position are allocated not on economic but political grounds- or rather, where every day it’s more difficult to tell the difference between what can be considered “economic” and what is ‘Political’”.

Roughly speaking, then, we have gone from Feudalism to Mercantilism to Industrial Capitalism to Bureaucratic Capitalism to the financialisation of everyday life under Neoliberalism which, although promoted as “free-market Capitalism” by its proponents in the

upper echelons of the political and financial system (and which does indeed impose rugged Capitalism on the working classes) actually operates more like Feudalism.

So, in our attempts to actually bring about actual, functional, free-market Capitalism, we have not moved forward but instead gone full circle. That is not to say, however, that today's Managerial Feudalism is exactly like its Medieval predecessor. There is in fact a dramatic difference, in that Medieval Feudalism was based on a principle of self-governance, at least so far as the domain of production was concerned. In other words, there was a general belief that some people did work that entailed applying specialised knowledge (what we would no doubt these days call a professional job) and such experts should not be told how to do their job by anyone, other than fellow experts in that very profession. As was said earlier, "workers thought of themselves as artisans working in guilds, each with its secret knowledge and proud traditions that the next generation...would inherit".

But then came the industrial revolution and "all that...proud tradition was undermined by the managerial revolution, which applied 'scientific management' to reduce artisan workers to mere cogs". Neither 19th/20th century managerialism or 21st century financialised Capitalism reversed this trajectory. Rather, they accelerated it, and this had interesting effects on 'efficiency'. Rather than slimming down supervisory and managerial roles so those doing actual productive work could operate under their own autonomy, 'Efficiency' in the modern sense means essentially zero autonomy for actual producers who are constantly surveilled, managed and supervised by so-called 'efficiency experts' who, all too often, turn out to be taskmasters and box tickers familiar from the main categories of bullshit jobs.

None of this helped to make the system efficient from any technical/ economic point of view. Indeed, what it did do was make the system more cumbersome, inefficient and opaque. But, then again, as we saw with the example of PPI and the Medieval Feudal system, when you are running a political-economic system that actually works to appropriate and distribute goods rather than making, moving and maintaining things, the very inefficiency aids this process as it allows you to generate a pot of loot through debt which you can then skim profits from, and the sheer complexity of it all prevents most people from really understanding how they are being scammed.

At the same time, when you have a large portion of the population not really doing anything productive but instead funnelling resources up and down the political-economic system, they will organise themselves into an elaborately ranked hierarchy, not too dissimilar to all those honours and titles that the lesser nobility in Medieval feudalism were encouraged to compete for. No doubt champions of Neoliberalism would call such an outcome a corruption of free-market Capitalism, driven by the State's overbearing love of Bureaucracy. But, as we have seen in the example of 'Kurt', who did pointless private-sector sub-sub-sub contract work for the German military, this sort of sub-infeudation is a direct result of the unleashing of 'market forces'.

Something else this sub-infeudation does is affect the process of marketing and selling. When we think about such activities, we assume that the intention is to satisfy unmet needs by selling commodities to customers. But, in many different businesses, a great deal of marketing and selling has little or even nothing to do with getting products to customers, but

is instead a process that creates multiple levels of managers who sell products to one another merely to justify their otherwise pointless existence.

One sector that is particularly notorious for this form of sub-infeudation is the Entertainment Industry, and worst of all is Film and Television. We have already seen how this industry creates bullshit jobs by creating needless anxieties in people who are then offered bogus remedies during the ad breaks. We also saw how nepotism in this industry justifies the claim that the Liberal Elite are a modern Nobility. As well as this, the industry (particularly Hollywood) generates multiple levels of sub-infeudation that has nothing to do with productivity or efficiency.

It was not always so. Whistleblowers who have spoken out at the amount of bullshit jobs in the entertainment sector speak of a “Golden Age of Hollywood”, which lasted from the 1920s to the 1950s. What was so golden about it was that the business of making films back then relied on a relatively simple relation between producers, writers and directors. According to one insider, movie studios in the Golden Age “were not yet owned by conglomerates, and they had no board of directors...Instead of armies of executives, they would actually hire armies of writers for their story department. Those writers were on the payroll, supervised by producers, and everything was in-house: actors, directors, set designers, actual film stages etc”.

Now, previously we saw how the Paternalistic nature of businesses that developed in the post-war years eventually came under attack for being over-protective and therefore not ‘lean and mean’ enough to compete against more nimble rivals. During the sixties, the Hollywood system faced its own form of criticism, described by its opponents as “vulgar, tyrannical and stifling of artistic talent”. As happened in other businesses, Hollywood went through a restructuring and, for a while, that did allow some great talent to make its mark on the industry. Our insider tells us that “there were openings in the sixties and seventies (New Hollywood: Beatty, Scorsese, Coppola, Stone) as the film industry was in complete chaos at the time”.

But then, in the 1980s, corporate monopolies took over the studios, and what had once been a relatively simple process of making entertainment turned into a prime example of sub-infeudation. Our insider reckons, “it was a big deal, I think, when Cola-Cola purchased Columbia Pictures (for a short while). From then on, movies wouldn’t be made by those that liked them or even watched them”.

Nor, for that matter, were the new levels of management all that interested in getting an idea for a movie or TV show out of the pre-production stage, past the post-production stage, and thus into a form sellable to the sector’s customers. If anything, the intention is the exact opposite, according to another insider. “TV used to be commissioned by one channel controller who would ask producers he liked to make whatever shows they wanted. There was no ‘development’. There was just making the show. Now every company in TV (and film too) has its own development team, staffed by three to ten people, and there are more and more commissioners whose job it is to listen to their pitches. None of these people make TV shows. I have not gotten a show sold for four years. Not because we are particularly bad but because of nepotism and politics”.

We saw a reference there to the process of 'development', but the creatives who have to fight the modern entertainment industry to get an idea into consumable form have another name for it. They call it 'Development Hell'. What this refers to is what eventually replaced the simple, vertical operation of 50s Hollywood, which is a labyrinthine game that has nothing to do with efficiency and everything to do with swelling the ranks of executives and their flunky staff who are all engaged in a process of self-marketing they try to prolong.

These days, before a script can become an actual film or TV show, it's not enough to have it approved by one studio head or channel controller. No, one has to get the pitch past such clone-like executives as the 'Managing Director of International Content and Talent', the 'Executive Managing Director', and the 'Executive Creative Vice President for Television', to name but a few.

One would naturally assume that this daunting army of executive producers, producers, sub-producers and various consultants would have immense experience in the technicalities of making movies and TV shows. But this is not where their expertise lies at all. They have neither the ability nor, frankly, much interest in actually making shows. But they are highly qualified in marketing and finance and know a great deal about how to turn a creative process into an overly complex game of box-ticking that far prioritises pitching, assessing, monitoring and arguing over what is to be done, rather than getting out of the way so that the real creatives can do their job.

It starts with 'Pitching', or selling the basic idea for a film or TV show. Our insider says of the many executives now involved in this process that "you could spend months in the vacuum of communications with them...emails unanswered and so on...Their jobs are to read and seek out projects- yet they couldn't be more unreachable if they worked from a shack in the middle of the Amazon jungle".

Eventually, whoever is trying to pitch an idea may be granted a face-to-face meeting with an executive. Since said executive knows what the pitch is (having had it emailed to them already) you would think they would just say "no, we don't think we can justify producing this" or "yes, go ahead and begin pre-production".

But no. "In the meetings, they ask you to pitch them the project all over again...Once that's done, they usually ask you prewritten, one-size-fits-all questions filled with buzzwords...and without exception, they'll tell you about all the other executives that would need to approve the project in case it would be decided to move forward".

Now can pre-production begin? No. Instead what happens is "you go, and they forget about you...and you have to follow up, and the loop begins anew". One is made to go through this tedious process partly because being the person who says either "yes" or "no" to a project comes with the risk of responsibility. Saying "yes" comes with the risk of investing time and money in a show that audiences end up disliking, and all that lost money is the responsibility of the executive who greenlighted that project. As for saying "no", well the risk there is that the rejected idea turns into a smash hit when some other studio takes a chance on it. As the insider explained, "If he says no and then it succeeds somewhere else, he will get blamed for the oversight. Above all, the executive loathes taking responsibility".



But that's not the main reason why this initial phase goes on for so long. Really, it's because one is having to deal with a load of self-marketeers who have a vested interest in delaying the process for as long as possible, and this game continues past the initial optioning phase and onto the bare beginnings of pre-production.

According to our insider, "a lot of this process is just them justifying their jobs. Everybody in the room will have a different opinion just for the sake of being there. It's a cacophony of ideas, and they all talk in the loosest, most conceptual terms possible". As before one tends not to get any plain, straightforward answers that move the project forward or cancel it, just more vague non-comments and contradictory responses. "They'll say, 'I'm not saying you should do X, but maybe you should do X': both tell you to do something and not to do it at the same time. The more you press for details, the blurrier it gets".

This 'development hell' process can go on for years. Why? What does any of this have to do with the actual development of film and TV shows? Well, the truth is, it's not really a process intended to make shows, but rather a process intended to bring about a multiplication of intermediary positions and also a process intended to siphon off money before it can be used to provide entertainment. "In other words", Graeber tells us, "film and TV production is now not all that entirely different from the accountancy companies miss-training employees to stall the distribution of PPI payments".

The 'Development Hell' ploy involving layers of management dragging their heels is an extreme example of the sort of competitive game now seen in both corporations and those institutions (such as universities) that were once regarded as their very antithesis. In every case, we find Managerial Feudalism turning what used to be a system composed of relatively simple chains of command into a far more complex and inefficient maze of funding proposals, strategic vision documents, and development team pitches. Regardless of whether you look at corporations, or universities, or movie studios, or charities, you'll always find what are, from the perspective of technical efficiency and productivity, ridiculous ways of doing things. But, if one takes the process to be one intended to produce layer upon layer of unnecessary administrative and managerial positions, staffed by people who can speak 'Corporatese' very well but don't really know (or care to know) how to do the jobs they supposedly oversee, well, from that perspective, the process is very efficient indeed.

What is it that drives this crazy process of creating such an elaborate structure of multiple levels of administration? What lies at the root of Managerial Feudalism?

The way we have been encouraged to view the changing business landscape has done little to help us properly answer such questions. We are normally told that Industry has had its day, having been driven into obsolescence as, increasingly, people turned to the 'Service Sector' to find employment. Since we believe the 'Service Sector' took over from Industry in being the dominant employer, we still find it hard to believe that the economy could be rife with bullshit jobs, because surely a 'service economy' should be just as committed to streamlining management of production as classical economics assumed was the case with Industry. Why would any profit-seeking employer pay two or more barristers to serve people coffee when only one is sufficient? Why would a company providing cleaning staff pay them to pretend to perform cleaning duties that really don't need to be done? We accept that

Soviet Russia tried to achieve full employment via such bogus strategies as these, but we cannot accept that a service-based Capitalist system would tolerate such waste.

But we have been told falsehoods. There was no rise of the Service Sector; instead, there was the rise of the FIRE sector, and the Iron Law of Liberalism combined with Financialisation resulted in that thorough entanglement of politics and economics that is Total Bureaucratisation/ Total Marketisation, and what that has brought about is an era of Managerial Feudalism running an anti-economy that is great at performing the alchemy of turning debt into theoretical wealth that those in the privileged position of treating debt like it is of no consequence can use to enslave and rob the majority for whom that is most definitely not an option.

## CHAPTER FORTY-TWO

On the 26th of April, 1988, a Russian by the name of Valery Legasov (1936-1988) hanged himself. There were two reasons why he chose to end his life. One was that his life had already been cut short. He was a dying man, his body succumbing to the radiation poisoning he had received while investigating the disaster at Chernobyl and leading the efforts to clean up its aftermath. Secondly he hoped that, by taking his own life, the truth, which he had tried to get across at a trial of the men held responsible for the disaster, would be impossible to ignore.

Throughout Legasov's testimony, we find him attributing the blame to something more than the incompetence of the men who the Russian state had singled out as being culpable. Yes, they had indeed behaved recklessly on that fateful day, but they had done so on the belief that, with the press of a button, the nuclear reactor could be safely shut down. They did not know that there was in fact no such emergency stop, that activating that very procedure would, given the conditions they themselves had brought about, not shut down the reactor but turn it into a nuclear bomb.

They did not know because the fatal flaw in the design of that particular reactor type had been kept secret. Only those of much higher rank in the Soviet bureaucracy were aware of it, and they chose to suppress it. It had been deemed a matter of embarrassment should the public learn that Soviet reactors had dangerous design flaws brought about through cost-cutting measures.

During his testimony and also in the tape recordings on which he recoded his suicide note, Legasov pointed out that it was not just incompetence, nor the fact that cost-cutting measures had been taken, but mostly a fear or distrust of the truth, that had really caused the disaster.

"To be a scientist is to be naive", he said, "We are so focused on our search for truth we fail to consider how few actually want us to find it. But it is always there, whether we see it or not, whether we choose to or not. The truth doesn't care about our needs or wants. It doesn't care about our governments, our ideologies, our religions. It will lie in wait for all time...When the truth offends, we lie and lie, until we can no longer remember it is even there, but it is still there. Every lie we tell incurs a debt to the truth. Sooner or later, that debt is paid".

Throughout this work, we have been exploring the idea that, as human beings, we are storytelling animals and that the world we inhabit is largely one we created ourselves, through collective action and intersubjectivity.

As far as evidence is concerned, the stories we tell either align with the facts or they contradict the evidence. But there's actually more to it than that, because we can identify more than one way in which stories can be falsehoods. They come in the form of consensual fantasies, lies, and mythstakes.

Throughout the ages, humans have told stories which, everybody agrees, are either entirely fictional or where elements of an otherwise factual account have been made up. Given the sheer volume of fictional books, plays, films and TV shows we have made, going back at least as far as those images painted onto cave walls in Ardeche 32,000 years ago, we can say with confidence that sharing fantasies is an important part of the human experience, even if it does seem to be a curious and strange occupation if you really stop and think about it. Why do we put so much effort into constructing alternative worlds that have no basis in reality?

We'll leave that question hanging in the air because, frankly, I don't know the answer to it. At least the next form of falsehood- the Lie- is a bit easier to understand, even if such falsehoods can, at times, cause a great deal of harm.

A lie is not a consensual fantasy. Rather, somebody, or some group, know full well that they are spreading falsehoods, but they hope others will mistake such lies for truth and facts. Why would anyone wish to pull the wool over people's eyes in this way? Obviously, one reason why is because fraud pays. In our commercial world, where so much that is either tangible or intangible comes with a price-tag attached, and the increased ability to purchase commodities can be so easily converted into political power and vice-versa, and where our very existence depends on our ability to "make money", it's not all that difficult to see why some would be tempted to turn to deception.

One might even say that if the objective is to obtain maximum possible material gain from minimal possible initial investment (a not unreasonable summary of Capitalism) then such objectives are quite likely to encourage fraud, because it's a proven (though not always reliable) way of extracting wealth from others using nothing but misinformation, and false promises.

It's obvious that it's quite possible to profit from other people's naivety, vulnerability, and limited capacity to tell truth from lies, as con artists and snake oil salesmen have been doing so for as long as goods and services have been traded. When you see some fraudster enjoying a rich lifestyle, it's not hard to figure out why this character was motivated to lie, even if our morality requires us to condemn such schemes.

But now let's move onto what I think is the strangest form of story that does not align with evidence, which is the Mythstake. You will recall that a mythstake is a falsehood that the vast majority of us believe in. Nobody who repeats it does so knowing it to be false; they sincerely believe it is a story that aligns with the facts, a matter of historical and/ or scientific certainty. Such a story might have been repeated so often that we have come to accept it as common

sense, something “everybody knows”. But, really, there is very little evidence to support such a story and a great deal of evidence that conflicts with it or even outright falsifies it.

Returning to Legasov he claimed that to be a scientist is to be focused on a search for the truth. I think it’s fair to say that no genuine scientist would ever knowingly tell a lie, at least not in their role as a scientist. It is also wrong to portray a scientist as an all-knowing boffin. It’s never the case that scientists slap one another on the back and pass around congratulations on having discovered the final proof of this or that field of inquiry. When they get together and talk about their work, such discussions typically focus on what they don’t know, on what pieces of the puzzle are still missing or don’t fit together in a satisfactory way.

Since no true scientist lies, or covers up his or her own ignorance, such a professional never commits fraud. Yes, there are rare occasions when somebody in a lab-coat turns out to have been abusing the scientific method, often so as to profit from the trust many of us place in Science. But those are con-artists posing as scientists, not real scientists. But while no real scientist would ever knowingly tell a lie, they can be just as guilty of spreading mythstakes as anybody else.

As we saw back at the beginning, scientific inquiry either that takes observations and experiments in the here and now, and attempts to expand the truths and facts thus revealed to larger expanses of space and further reaches of time (until, that is, what is known becomes too vague and fuzzy, and we have to admit our ignorance in peering any further). Alternatively, scientific inquiry can take the deductive approach of starting from some idealised beginning, and then working forwards from there until you arrive at the present day, hopefully with a better understanding of why it is the way it is.

All scientific inquiry turns the world into something of a cartoon. No observation ever lets us see reality in its totality. No experiment ever accounts for every possible variability. And no idealised beginning ever reconstructs a wholly accurate representation of the past. By making up such pasts we are always creating myths. But, sometimes, the majority of us, experts and laypersons alike, forget that the point of origin from which we began our deductive inquiry was a myth. We believe such a story has got to be true, because it seems so beautiful, and we follow that pathway even as the evidence against it mounts up well beyond the point where we really should abandon that path and seek out an entirely different approach.

In this volume, we have investigated the mythstake at the heart of economics. This tale would have us believe that it is reasonable to begin our economic story in the “economists’ garden of Eden” (a phrase that reminds us of this discipline’s roots in theology). In this Eden, human beings spontaneously appear as individuals with no familial ties, social groups or political structures organising them into collectives. In this Eden, there is no debt, and when individuals meet they do so only for the rational purpose of exchanging commodities through barter. A strict division is thus formed between the world of Value and the world of Values. It ought to be possible, so this conception of human life would have us believe, to rid barter of its cumbersome qualities and build mechanisms of exchange that will operate in an efficient, self-correcting and self-sustaining way, and all with minimal (perhaps even no) governmental oversight and bureaucratic regulation.

Most of us still believe in this tale, as evidenced by the way we assume that, were money to disappear for some reason, we would necessarily “revert to barter”, falling back to the primitive state from which markets, and later on states and bureaucracies, emerged. It’s little wonder we believe this tale, because just about every popular account on economics and the history of money will justify the existence of money and markets with the words, “once upon a time people had to rely on barter” or words to that effect.

But it has been known, for the past ninety years, that the idea that money has its origins in barter is just nonsense. Nobody has ever discovered a People who used barter as the normal way to conduct their affairs; instead we find them using some sort of credit system whose main purpose rarely has all that much to do with the exchange of material stuff. Moreover, every time we have tried to reduce governmental interference and bureaucratic red-tape, in the naive belief we were somehow restoring the ‘free market’, what results has always been more governmental oversight and bureaucratic regulation than ever.

The co-discoverer of Calculus, Gottfried Leibniz (1646-1716) had a favoured form of logical inquiry, which is something known as “Reductio Ad Absurdum”. The idea behind this method is that if you proceed on the basis that a falsehood is true, your inquiry and practices will return absurd results. Such absurdities should inform you that there was no truth in your premises.

Now, think back to what Legasov said, regarding the dangers of ignoring the truth, “Every lie we tell incurs a debt to the truth. Sooner or later that debt is paid”. Thanks to Leibniz’s favoured form of logic, we can see how such a debt affects our lives. It is by making us endure a world that is becoming increasingly absurd.

By following the mythstake of money and markets originating in barter, we have indeed created a great many absurdities. A world in which there is an inverse correlation between social value and monetary reward. A world in which neoliberal champions of the “free market” somehow bring about a revolving door between big business and government, creating “Total Bureaucratisation/ Total Marketisation” that so blurs the line between them as to make distinguishing between the two an exercise in futility. A world in which perhaps fifty percent of workers have bullshit jobs that either contribute nothing of value, or make the world a worse place than it need be. A world that is supposedly running the most efficient economic system possible, but actually chases the decidedly anti-economic practice of running things in a wasteful, inefficient way, all so paper profits can be created out of other people’s increasing debts. Should anyone highlight such absurdities and, presuming such concerns are not dismissed as delusions, the remedy put forward is always “more of the same”; that we should reform the system we have rather than junk and replace it.

I think Legasov was right. We cannot keep ignoring the truth without incurring a debt that has to be repaid one way or another. In the last chapters of this volume, I want to show just how we were made to pay for this myth that is the self-correcting market system whose origins lie in barter.

## CHAPTER FORTY-THREE

To tell the story promised in the last chapter, we need to go back to the end of World War I, and discuss the ideas of one Arthur Tansley (1871-1955). He was not an economist by profession, but rather a biologist. However, his work would come to influence how the economy is popularly thought to operate, and all this resulted from a bad dream.

One night, Tansley dreamed he was in an African village. Then, his wife appeared and Tansley shot her with a rifle. Upon waking up, Tansley did not just dismiss the experience as nothing more than a dream, but was curious to know what underlying meaning it had. To that end, he became interested in the ideas of Sigmund Freud (1856-1959), travelling to Vienna in 1922 to be analysed by the man himself.

It was while he was investigating Freud's approach to psychoanalysis that Tansley became fascinated by an obscure part of Freudian theory. According to Freud, the human brain was really some kind of electrical machine. Data came in through our sensory organs, and in so doing bursts of energy were sent flying around networks inside the brain, just like circuits carrying electrical current.

This idea was fascinating to a biologist like Tansley, because he came to believe that this obscure part of Freud's theory had much larger implications than the man himself had supposed. Indeed, Tansley came to see this idea as having global implications. This was because he thought you could take Freud's model of the human brain as an electrical machine, and apply it to the whole of the natural world.

By running with that idea, Tansley became convinced that Nature's complexity could be reduced to vast, interconnected circuits that linked all animal and vegetable life, allowing energy to flow among them.

According to Peder Anker (b. 1966) who is an historian of ecology, "Tansley's idea of the mind was that of a network...Now this he would transfer, one-to-one almost, into his description of the natural environment, in which energy between species and among the species would constitute a system...so the grasshopper eating the grass will then be energy transforming through the tube into the dune where the beetle would do his or her job".

Having believed he had discovered these vast, interconnected circuits, Tansley decided that they needed a name, so he gave them one. He called them "Ecosystems".

Having invented the concept of ecosystems, Tansley came to see how they might be a way of talking an ancient dream in Western culture and giving it a firmer, more scientific basis. This dream, which went back thousands of years, was of a hidden, natural order to nature. Tansley hypothesised that ecosystems regulated Nature as if it were a machine. Indeed, ecosystems did more than regulate themselves, they were also constantly tending towards positions of equilibrium. In other words, should any disturbance happen, ecosystems would return to an original, balanced state. Tansley called this tendency towards balance "the great universal law of equilibrium".

But how, exactly, did ecosystems regulate themselves? At the time neither Tansley nor anyone else had a theory of how "the great universal law of equilibrium" actually worked. An answer of sorts to that puzzle would be found. But not by studying Nature. Rather, it would

come from theories surrounding a new kind of machine that would come to have a ubiquitous presence in our lives- the Computer.

Computers (or, more precisely, computer networks) would not only shed light on how Nature regulated herself, they would also enable Tansley's ideas concerning self-regulating system in Nature to influence a certain philosopher's ideas concerning self-regulating markets. That such a crossover should have happened was pretty remarkable, because one of the core beliefs of the ecological movement that grew up around Tansley's hypothesis very much opposed a fundamental aspect of this person's philosophical position. Nevertheless, there was destined to be something of a convergence between these worldviews.

During the same decade that Tansley developed his fascination for Freudian theory, a Russian emigrant fled from her native country, fearing the direction it was heading in, first through the leadership of Vladimir Lenin (1870-1924) and then, following his death, Josef Stalin (1879-1953). Her name was Ayn Rand (1905-1982) and the country she fled to was the United States.

Once settled in California, she happened to bump into the director Cecil B. DeMille (1881-1959) who gave her a job as an extra in his epic films. Rand herself would go on to be a very famous and extremely influential person, but she would achieve that not through acting but rather through her writing.

This change in careers from actor to writer really got underway when DeMille gave Rand a screenplay to write called 'The Skyscraper'. She didn't think much of it, hating both its plot and its characters. But it gave her an idea for a novel which was published in 1943. It was called 'The Fountainhead' and, through its protagonist Howard Roark and his struggle not to compromise on his architectural vision of how skyscrapers should be built, we learn about Rand's philosophy, which she called 'Objectivism'.

Rand believed that human beings had two ways in which to pursue wealth. This could be done, either through building, maintaining and repairing physical stuff and infrastructure, or through the exchange of political favour. That latter method could make someone very rich and powerful if they really knew how to play the game of back room deals, social networking and "who you know, not what you know", but all such wealth and power was utterly dependent on the former group continuing to do their jobs. Therefore, all those who obtained important and rich lives through politicking were ultimately parasites, feeding off of the real, industrious work undertaken by engineers and artists.

There are heroes and villains in the Randian world. The villains were those who promoted what she saw as the great lie, which was that human beings are social animals whose natural state is to be organised into collectives such as political systems or religious organisations that promote altruism. The heroes were those brave souls who rejected all the safety nets of socialism and embraced the truth. And what was that truth? It was the recognition that human beings are alone in the universe. The right and proper thing to do was to dismiss the seductive promises of religious and political figures, reject all such forms of control and adopt an ethic of self-interest. By living up to the principles of what Rand called "the virtues of selfishness", one could become a heroic figure who neither had outside support nor needed any.

'The Fountainhead' was not the first book that Rand had written. She had previously published 'We The Living' and 'Anthem', both of which were failures. There was every reason to suppose The Fountainhead would flop as well. Not only were initial sales sluggish, but reviews of the book were negative in the extreme. According to such opinion writers, it was a badly written story that revealed its author to be a delusional madwoman. Clearly, the job of politics was to manage and control the selfish desires of the individual. History had shown what would happen were selfishness and greed let loose to run unconstrained throughout society, because the previous decades had seen such laissez faire approaches to life result in the Wall Street Crash and the Great Depression.

But, as it turned out, The Fountainhead attracted a following of loyal readers who promoted Ayn Rand's writings through word of mouth. They did not claim that it was a particularly well-written story; rather, they pointed out that Rand was not mad or delusional, but rather a philosopher of extraordinary power who had given the world a grand and inspiring vision of how we ought to live. The initial print run of 7,500 copies grew and grew until by 1950, half a million copies were in circulation, and The Fountainhead was made into a film. Thanks to this commercial success, Ayn Rand could afford the time needed to expand her philosophy of Objectivism into a far grander book.

While she was working on what was to become her magnum opus, a man working with computer systems was developing ideas that would shed light on how "the Great Universal Law of Equilibrium" might work. His name was Jay Forrester (1918-2016) who became one of the early innovators of computers while studying electrical engineering at MIT.

By the 1950s, both the USA and the USSR had developed into superpowers armed with apocalyptic levels of firepower in the form of thermonuclear weapons. Due to the existential risks involved in two such formidable opponents engaging in open hostilities, these two ideologically opposed nations became poised on the brink of conflict during a period known as the 'Cold War'.

It was during this time that Forrester assisted in the construction of a global network of radar installations all linked to giant computers in the United States. This was the nation's early-warning system, the eyes and ears of a people fearful of the dreaded moment when their rival nuclear power showed its strength and launched a pre-emptive strike against the Western world. People like Forrester were employed not just to build early-warning networks, but also to develop 'game theory' strategies that modelled the world and provided plausible ways of maintaining a stable balance where nuclear powers remained on stand-by, preventing the Cold War from ever becoming hot.

Having built such a system that worked to keep Doomsday in check, Forrester came to believe that he had identified the process by which all systems, including ecosystems, kept themselves in balance. In order to see how that worked, he insisted, people needed a whole new perspective on life.

"Most people think of action as 'here's a problem, I'll take action and solve it'. Straight line. But that's not the system in which we live".



Instead, our systems (and, indeed, all systems) stabilised themselves through a mechanism called 'Feedback'. According to Forrester himself, "there is a problem, we take action, it may change things, it gives us a new environment for taking the next action and changing things". So, taking any kind of action led to consequences that fed through the system, eventually returning to shape our future behaviours in ways we could not foresee, and which influenced our decisions in ways that seriously challenged our notions of free will. "We live in these networks of feedback loops", he said, "that are controlling us and those things we interact with".

Forrester saw that the worldview he was developing seriously challenged the concept of people as independent beings. "We're just part of a system", he observed. "That is anathema to many people, because they like to think of us as independent, but basically they are driven in most of their actions by feedback loops".

As he developed these ideas, Forrester became one of the leaders in a new scientific movement known as 'Cybernetics'. According to this movement, Forrester's feedback loops were everywhere- working in our bodies, in our societies and throughout the natural world. "Physical systems, electrical systems, social systems, political systems, medical systems of the body. They are all fundamentally networks of feedback loops".

Cybernetics proved to be a compelling idea for both biologists and physicists alike, because it seemed to show how complex dynamic systems like society or the natural world could be held in balance. The mechanisms by how this supposedly worked was explained in the book 'Control and Communication in the Animal and the Machine' by Norbert Wiener.

Fred Turner, a cybernetics theorist, described Wiener's thinking. "If, as Norbert Wiener and his team decided, you can actually link the behaviour of machines and the behaviour of fleshy humans through mathematical formulae, and if you can model and predict those formulae using computers, then you end up in a world where...we are all now part of a universal system linked together by information".

The idea that ecosystems stabilised themselves through the method of feedback would eventually spread beyond cybernetics, to the point where Ecology and the balance of Nature became one of the dominant scientific ideas of the 20th century. Two key figures in this remarkable rise were the brothers Howard (1924-2002) and Eugene Odum (1913-2002). During the 1950s, Howard travelled all around the world so as to collect data from a wide variety of natural environments, such as ponds, tropical rainforests and coral reefs. Whenever he came across such an environment, Howard would apply cybernetic thinking so as to reduce the great complexity of wild Nature. He represented those ecosystems as electrical circuits and even went as far as building real electrical circuits, in order to learn more about how ecosystems maintained themselves. "Odum really believed that you could actually make a model of that system and monitor and watch how all the parts were working", reckoned the historian of science, Peter J. Taylor.

But what about Howard's brother, Eugene, what part did he play in all this? Well, he took the cybernetic ideas of Forrester, Wiener, and his brother Howard, and used them to create a very powerful vision of Nature that would dominate thinking for decades to come. This vision

was laid out in his book 'The Fundamentals of Ecology', which would go on to become the Bible of the Ecology movement.

Speaking of the effect this book had on ecological thinking, the ecologist Daniel Botkin said, "when I first went into Ecology, we really did believe that Nature had to have a fixed stability, it had to be stable. That's what we were taught. The miraculous thing about Nature was it was stable against all these problems".

The Odum brothers' work succeeded in elevating Tansley's machine hypothesis to a scientific certainty, so this total belief in the balance of nature is not surprising. Just as "every action has an equal and opposite reaction" was a maxim of science proved beyond all doubt, so too could we assuredly say that the world was a network of interlinked ecosystems with feedback loops that kept complex systems in equilibrium, like thermostatic controls regulating the temperature of a room.

Or, at least, that is how dogmatic ecological thinking came to see things. But, had more skeptical minds dug deeper into the Odum Brothers' work, something very troubling regarding their methodology would certainly have been exposed. For, what did they do? Well, they began with a metaphor, which was that ecosystems worked like machines. There's nothing wrong with metaphors. It might be useful to say something like "a heart works a bit like a pump" or to begin to explain gravity using the visual image of a bowling ball warping the surface of a trampoline.

But then the question is, what do you do with that metaphor? What the Odum Brothers did not do was to take the empirical approach of going out and gathering data and running experiments to determine the extent to which it is appropriate to apply machine-like analogies to natural environments.

Instead, think about what Dr. Botkin said: "Nature had to have a fixed stability; it had to be stable". That was the Odum Brothers' belief right from the start. To them, this "balance of Nature" concept was such a beautiful one that it simply had to be the way in which Nature worked. So, just like economists reducing the complexity and variability of human behaviour and human societies so as to turn that into something that can be captured in equations, and just like cosmologists disregarding inhomogenities so as to allow their Eden of perfect multidimensional symmetry, the Odum Brothers simplified and simplified the complexity of the natural world so as to come up with something that would fit their circuits and work with their equations. Yes, it all looked very scientific, but it was really something else.

As Dr. Botkin explained, "the balance of nature idea comes from two things. Ancient western mythologies and religious beliefs, and also from the machine age. The actual mathematics that came out of it was the mathematics of machinery".

In other words, in pursuing their cybernetic principles with all the zeal of a religious true-believer, what the Odum Brothers were really doing was creating a machine-like fantasy of stability. There was little biological reality to this vision. That had disappeared, replaced by inappropriate assumptions that natural systems behaved in mechanical ways and that animals were no different from robots.

All of which is to say that, at the core of the ecological movement there lurked a fatal flaw, in the form of the 'Fundamentals of Ecology' stretching the machine metaphor of cybernetics beyond the point of absurdity and distorting the scientific method so as to force an agreement with the belief that there had to be a balance in Nature.

Now, some readers might be wondering how all this connects to Ayn Rand. Because, other than her happening to emigrate to the USA and publishing her novels roughly when Tansley coined the term 'ecosystem' and Forrester and the Odum Brothers described how feedback loops worked, they don't appear to have anything in common.

Indeed, it would seem like her philosophy and that of Forrester could not have less in common if they tried. After all, according to the Randian worldview, to be human is to be an individual with full agency, whereas according to the cybernetic worldview of Forrester, we should not think of humans as individuals in charge of their own destiny, but rather as components in systems, nodes in networks acting and reacting to information flows. One would have to assume, then, that what we have here are two irreconcilable ideas.

But you'd be wrong. By the 1990s all these ideas concerning ecosystems, computer networks, market systems and Randian individualism would all come together to create a grand (though fatally flawed) vision of how a self-organising society could be built on a global scale.

## CHAPTER FORTY-FOUR

Let's go back to the Sixties to see how all this came about. By this time, the fusion of cybernetics and ecology was poised to expand beyond being just a new idea of Nature, to become a new organising principle for society, one that would have great appeal to those who had grown disillusioned with Politics.

It would be so appealing to such people, because 'Cybernetic Ecology' held out the promise of a new kind of world. Gone would be antiquated notions such as old political hierarchies and the authoritarian exercise of power, replaced with self-correcting social systems that mirrored how order was maintained in nature.

Utopian dreams need a great visionary if they are to achieve mass adoption, and in this case such a character came in the form of an engineer working for the US military who always believed there was a great purpose to his time on Earth. "I will make my life an experiment", he once said, "to search for the principles that govern the Universe".

His name was Buckminster Fuller (1895-1983), and he really was a genius. When he was in his eighties, he delivered an epic lecture that lasted a whopping thirty-six hours. It was called "Everything I Know", and it covered so many areas of expertise, Fuller was recognised as a polymath, meaning somebody with expert knowledge in a wide variety of fields.

Marathon lectures are one thing, but to persuade people of the validity of your ideas can require more than fine words. Nothing is more persuasive than tangible proof, and Fuller delivered on this, too.

This came about thanks to Fuller taking his core interest and turning it into a practical method for protecting the USA's early warning system in the Arctic. As he himself explained, "I'm an explorer of structures. I'm interested in the fundamental principles by which Nature holds her shapes together".

The challenge that Fuller faced was that the radar installations in the Arctic would have to remain in operation, night and day, year in and year out, in one of the most inhospitable places on Earth. It would obviously be necessary to house such powerful and important equipment in structures that could protect it from Nature's full fury. But whereas most people would assume that would require massive, strong buildings, that was not how Fuller approached the challenge.

Instead, he came up with a very delicate structure. Or rather, each tiny strut that made up the whole structure was, by itself, a delicate thing, but once thousands of such components were joined to form a giant interconnected web, the completed structure- what Fuller called a 'Geodesic Dome'- would be extremely strong and stable.

And it worked. As Fuller himself said, "these [geodesic domes] are very delicate. Yet they've been through about ten years of the most formidable conditions in the Arctic that any structures have ever had to stand".

By building geodesic domes that successfully protected the USA's early-warning system from the great storms of Nature, Fuller had delivered clear evidence of how it was possible to take ecological principles and put them to practical effect. But, could this idea be extended further? Fuller was convinced this was indeed possible, that the principle of copying Nature could also be applied to the creation of new systems for managing society.

By now it was the mid-sixties and the two superpowers were competing in a 'space race' with the ultimate goal of putting a man on the Moon. In order to get to the Moon, though, those plucky adventurers would first have to travel for days on end through the vacuum of space, an environment so inhospitable as to make Antarctic winters seem like paradise in comparison.

In order to protect them from certain death, NASA employed ecologists who were tasked with designing a closed system, monitored by computers, that ensured the environment inside the spaceship remained a comfortable one.

So far as Buckminster Fuller was concerned, that cabin, carrying astronauts in a comfortable cocoon of earthlike conditions as they journeyed through lethal space, provided the perfect analogy for how society should be organised. He presented this vision in a 1964 manifesto called 'The Operating Manual for Spaceship Earth'.

According to the historian of ecology, Peter Anker, "[Fuller] would say in his lectures, like, 'you guys wonder what it's like to be an astronaut. Well I can tell you. You are an astronaut. We're all astronauts onboard spaceship Earth'".

The NASA astronauts all had duties assigned to them, and Fuller insisted the human astronauts on spaceship Earth had duties, too, which was to manage the global system so

that it remained in balance, much like the habitable system inside the Apollo cabin was kept in balance.

Now, at this point it would appear that this perspective on cybernetics dramatically disagreed with a Randian perspective, because Fuller saw his 'Spaceship Earth' analogy as requiring a decidedly non-selfish position.

As Peter Anker explained, "notice that suddenly you are not in the centre anymore. The spaceship is in the centre, meaning that you start de-emphasising the importance of the individual human being because you're concerned about the welfare of the system, not the individual".

But, along with de-emphasising the importance of the individual, Fuller insisted that another conceptual shift was necessary if humankind was to successfully care for Earth's ecosystems, and this time his view was more aligned with those of Ayn Rand. "If Man is going to stay onboard Spaceship Earth", he once said, "it can't be done by Politics because Politics is so inadequate". In his opinion, politicians had a fatal flaw in their thinking, that being the naive idea that they could control the system. What that led to, or so Fuller supposed, was struggles for power leading ultimately to wars.

We should reject the idea that political control could be adequate, and stop seeing ourselves as being members of nations or classes. The proper stewardship of 'Spaceship Earth' necessitated the end of hierarchies of power. Instead, every person should see him- or herself as an equal member of a global system, a system which should be allowed find its own natural order. Once that dream was realised, once we became equal members of a society with our behaviours regulated by feedback loops, there would no longer be any need for hierarchies and struggles over power.

So, by the mid-sixties, both Ayn Rand and Buckminster Fuller had become deeply skeptical over the effectiveness of Politics and politicians to run society. Furthermore, it could hardly be said that they were alone in their doubts, because at this time there was an entire generation who were every bit as disillusioned with Politics.

You may recall how, In New York in the mid-seventies, the financial takeover of the city had led to a kind of exodus of radical thinkers, only it was more of a spiritual quitting than people physically departing from New York. Just prior to this point, between 1967 and 1971, a countercultural movement had risen up, and it resulted in one of the largest migrations in American history. Half a million Americans decided they had had quite enough of city life, and so they left those urban areas and set about creating thousands of experimental communes.

In many such cases, these experimental communes were based on the theories of Buckminster Fuller. Not only did they construct dwelling places following his geodesic dome architecture, but they also adopted his principles of societal organisation.

In one such commune, which was named Synergia by its members, those cybernetic principles were known as 'Ecotechnics'. As Randall Gibson, who was a member of Synergia, explained, "we were trying to create a society based on understanding ecosystems...A

society of inter-relationship and balance...That was sort of our ideal with what we called ecotechnics”.

Upon being accepted into this ecotechnic society, a member of Synergia became involved in a commune in which there was no hierarchy or centralised control, and where each member was united in their belief that equal members of a system could organise themselves into a distributed network capable of stabilising itself through feedback loops, just as ecosystems maintained their equilibrium.

But, how did they manage to keep politics and hierarchies out of their commune? Well, basically, anything that looked like politics was strictly forbidden. Forming coalitions or alliances with other commune members was not permitted. Should any disagreement or negative feelings arise between folk (always a possibility with passionate creatures such as we humans) those potential catalysts for conflict were dealt with one-to-one. Although these were group sessions, the group remained impartial observers with no taking sides permitted. Meanwhile, whoever had a problem with someone would speak openly about it to everyone. Then, that person they had accused would express their take on the situation to the whole group, and they would be listened to just as respectfully as the first speaker had been. Thus, through open dialogue in which every individual had an equal right to speak and be heard, Synergia would be a community of free individuals whose anarchic way of life would result in a stable group, thanks to that system of feedback.

“We didn’t use the word ‘system’, reckoned Molly Hollenbach, another Synergia member, “but we very much thought of the whole group, of ourselves, as all connected...It would be like a dance where we’re creating a new kind of society, freeing each person to be fully themselves in the group, but we are affecting each other at all times, like an organism of many who act as one”.

The counterculture movement had seen thousands of communes like Synergia being set up. As far as societies go, these communities were built on a small scale, but by 1968 a group of visionary Californians had come to believe that what such communes represented was a prototype of a new kind of self-organising society that could operate not just on the local level, but on a global scale.

Furthermore, they believed they had found the technological capabilities that would realise this dream. It would come in the form of the new kind of computers being developed on the West Coast. Prior to 1968, very powerful computers (powerful by 60s standards that is) came in the form of mainframes that occupied whole rooms. But, in a move that Buckminster Fuller would no doubt have approved of, toward the end of 1968 a conscious decision was taken to stop developing large mainframes and instead find a way in which many small personal computers could be linked together to produce extremely powerful computer networks.

It would be that combination of ‘personal computer’ and ‘networked computer’ that would allow the communes like Synergia to work on a global scale. Whereas back and forth dialogue between individuals served as the feedback loop holding Synergia stable, this global system would be a world of free individuals, their lives no longer dominated by

hierarchy or political control, all linked together through a network of computers that held the global system in balance through the feedback of information.

According to Stewart Brand (b. 1938), who was one of those computing pioneers as well as a leader in the commune movement, “they felt like computers had liberated them and...they were going to enable computers to liberate society...It was going to be a power to the People in a very direct sense. That was an iteration of the Internet, and of Google and all of that. This was a vast network that was self-correcting”.

So, by the end of the 1960s, two ideas had effectively fused together, at least conceptually. These were the idea that ecosystems maintained equilibrium throughout the natural world; and cybernetic theories of computers that promised to apply the feedback loops of Nature so as to come up with a new way of managing a global society. This was a revolutionary idea to be sure. But, or so its followers insisted, it was quite unlike past revolutions, for they had been political attempts to change the world, whereas this was a movement based on the natural order.

It would not be until June 6, 1969 that the first network control protocol packet would be sent from the data port of one IMP to another, thereby establishing the first ever Internet connection. As for the World Wide Web, it was still decades away.

But, once it was set up and running, what would it be like to live in such a networked world? Had you been walking through the streets of San Francisco one morning in 1967, you might have been one of the people who were handed a manifesto that outlined the world to come. Its author was Richard Brautigan (1935-1984) and he called his manifesto ‘All Watched Over By Machines of Loving Grace’.

“I like to think- and the sooner the better- of a cybernetic meadow where mammals and computers live together in mutually programming harmony like pure water touching clear sky”, this manifesto proclaimed. “I like to think- it has to be- of a cybernetic ecology where we are free of our labours and join back to nature, returned to our mammal brothers and sisters, and all watched over by machines of loving grace”.

## CHAPTER FORTY-FIVE

Ten years prior to Brautigan handing out his manifesto, Ayn Rand published what was to become her most famous work. Opening with the question, “who is John Galt?”, ‘Atlas Shrugged’ could be called a work of science fiction, but if so it is set in a world that is very similar to 1950s America. It was originally going to be called ‘The Strike’, but Rand came to realise that such a title gave away the answer to the mystery the plot centred around. So, she changed it to ‘Atlas Shrugged’, an enigmatic title to anyone who does not know why the events occurring in the story are happening, and a concise explanation for them, if you are familiar with the story.

In a sense, this story could be called a murder mystery, but if so it is not your usual whodunit. Normally, such a tale would involve the murder of a human body, but what Rand explores in this story is what killed the human spirit. The reader soon learns that the question which opens the story- “who is John Galt?”- is not meant as an inquiry into the identity of a

person; rather, it is an expression, a turn of phrase adopted by those who have abdicated their duty towards personal responsibility. It basically means “don’t ask questions to which nobody can possibly know the answer” .

There is, however, a John Galt in this story. Indeed, he is the tale’s hero. But he is not the central character. Throughout most of the story, we follow the struggles of one Dagny Taggart, the daughter of a man who established ‘Taggart Transcontinental’, the USA’s largest railroad operator in this fictional world. She has all the practical skills, team-leader qualities and managerial flair needed to coordinate and direct the many employees of the company, and to all practical intents and purposes, she is the boss. But, officially, the head of Taggart Transcontinental is her brother, James, who got that position thanks to inheritance and patriarchal thinking.

In this story, people like James are the true villains, but they seem to be motivated by the purest of intentions. In a world that is falling apart, they seek to increase the reach and strength of governmental powers, introducing new laws, new rules, and more regulation, so that people can turn to the protection of State support as that sense of giving up that is expressed in the “who is John Galt” catchphrase continues to spread. Not only that, but they extol the virtues of altruism, of putting the welfare of others before one’s own selfish wants, as the ethical principle by which humanity ought to live.

But, increasingly, this bunch of do-gooders gets taken over by hard-boiled cynics who use the heavy hand of government and altruistic sentiment, now twisted into the principle of “others should sacrifice their abilities for the welfare of the State” to plunder the world of its riches. As the world spirals towards the collapse of civilisation, more and more do-gooders decide its better to join those who don’t even bother to pretend like they have anything but short-term personal gains motivating them (or, maybe, this was always their intention and they just let the mask of altruism slip).

But not everyone ends up as that sort of villain. As well as battling against the increasing stranglehold of state regulation and a growing feeling of “why bother?”, Dagny has to contend with the fact that the industries her railroad depends upon are going out of business as people like her- those with practical money-making abilities- are mysteriously disappearing, leaving those mines, factories etc to collapse from lack of care. She seeks to confront and stop the enigmatic John Galt, who she believes is the ‘Destroyer’, bringing ruin to the world.

But, in actual fact, Galt is the story’s hero, on a mission to stop the motor of the world, which is the pursuit of profit through mutual self-interest. Capitalism and capitalists are the beating heart in the world of Atlas Shrugged, the railroads are the veins and arteries of civilisation, and Galt and his followers are engineering a cardiac arrest, not really to destroy the world but to starve its parasites- those who seek to get ahead through inheritance over competence and the trading of government favours over practical ability and market activity- of everything they need to feed their parasitical lifestyles.

Just as was the case with her previous book, Atlas Shrugged received damning reviews which somehow didn’t stop the book from becoming even more of a success than ‘The Fountainhead’ had been. There is something about this book that really stimulates emotions



in people, with some finding it absolutely ghastly, whereas others swear it is the most profoundly inspiring literary work there has ever been.

At the heart of this polarising view we have the philosophy of the author herself, which she called 'Objectivism'. The metaphysics of this philosophy is one of objective reality, meaning reality exists independent of human thought and that there are facts and non ambiguous rights and wrongs for humans to discover. The epistemology of Objectivism is Reason, which its followers take to be the only viable method for understanding reality. The ethics of this philosophy is based on "the virtues of selfishness" and the political system it favours is Laissez faire capitalism, that being the political-economic system most likely to enable those other ethical, epistemological and metaphysical conditions to work at an optimum level- or so the followers of Objectivism insist.

Since Ayn Rand says that we should let the world be taken over by selfish Capitalists doing whatever they want, unconstrained by any regulation, it's not too difficult to figure out why some people react with horror when they come across a story like Atlas Shrugged. This is even more likely to be one's emotional reaction if you take Rand's trust in selfishness and the profit motive to mean "I am going to take as much as I can and I don't care how many have to suffer as a consequence of my pursuit of unrestricted greed".

But this is actually a misrepresentation of her philosophy. As she herself once said, once you view the world as consisting of objective reality and accept reason and self-interest as the best way to understand reality and how to behave within it, then free-market Capitalism allows "people to deal with one another, not as victims and executioners, nor as masters and slaves, but as traders, by free, voluntary exchange to mutual benefit".

And it really works. Or rather, it does in the fictional world of Atlas Shrugged, since its author was able to create an alternative reality that is more of a cartoon representation of real life. For one thing, in the world of Atlas Shrugged, you can tell a good, honest businessperson from a fraudster just by noticing people's appearance. Do they look like all-American heroes, big and strong with piercing, bright eyes that see further than most? Well then, trust such people with your money. Do they have the shifty appearance of a Disney villain, especially in their pale, dull eyes? Run for your life from that type!

Furthermore, the author assumes that her main heroes actually possess the ability assumed by the economic models underpinning free-market theory. In other words, they are the ultimate rational agents, and since that is what they are they can instantly assess a person's value and set their pay level to precisely match the worth of their talents. Therefore, nobody who works for them is ever under- or over-paid, but gets exactly what they are due. This applies just as much to their own remuneration as it does for anyone else. These Randian heroes would never trade their ability for a penny less than it's worth, but nor do they seek so much as a penny more than their worth is due. I think it's fair to say that if the world really did work in this way- if you really could tell a fraudster at a glance and everybody's compensation actually reflected the value they bring to an organisation- then the free-market system would function perfectly well.

It's also worth pointing out that the strike in her book is not just one of top bosses, the owners of the mines, factories and railroads, abandoning their businesses. We know, from

those rare occasions when such top Capitalists have gone missing, leaving the rest of the workforce from their own PAs downwards to carry on doing their jobs, that such organisations will just carry on as normal, almost as if those very highly-paid individuals didn't really contribute anything to begin with. But, in this story, every "man of talent", meaning every individual with the practical ability to make, maintain and repair stuff, also go on strike, not only in the world of Industry but in the art world, too. Obviously, if the majority of people who do practical work throughout an economy were to go on strike, such that no ore is being mined, no crops are being picked, and no ships, trucks and trains are delivering anything, systems of government, administration and bureaucracy would soon cease to exist and paper currency would lose all value.

So, the world of *Atlas Shrugged* is a cartoon world that is not all that realistic. But maybe we should not be too hard on its author for creating a cartoon world that lacks realism? After all, one lesson we have learned throughout this work is that one is obliged to reduce the complexity and messiness of real life, and turn it into something of a cartoon, if one is to extract any kind of useful insight regarding daily life.

Does Ayn Rand manage to develop some useful insights by applying her philosophy? I think so. Many people would agree that one should think for oneself and use one's own powers of reason to figure out the rights and wrongs of a situation, rather than taking the easy option of having "the truth" dictated to you by some authority.

Being published just before the 60s, *Atlas Shrugged*, with its obvious distrust of authority and, in particular, the authority of Religion, Government, and groups of that kind, was well placed to be appealing to a decade that would become known for its anti-establishment, anti-government, find-yourself individualism. Certainly students on college campuses thought so, because, particularly in these places of higher education across the nation, *Atlas Shrugged* became the book to read.

One law school graduate said of the underlying philosophy of Objectivism that "dealing with Ayn Rand was like taking a post-doctoral course in mental functioning", and a professor of philosophy described Rand as "one of the most original thinkers I have ever met...At a time in my life when I thought I had learned at least the essentials of most philosophical views, being confronted with her...placed every thinker in a new perspective".

With such fulsome praise behind it, and backed by a growing mass of loyal followers whose belief in the philosophical genius of its author only seemed to be reinforced with every brutal attack from those reviewers and social commentators that hated the story and everything they thought it stood for, *Atlas Shrugged* became more than a best-seller. It became a phenomenon. On the 20th of November, 1991, the Library of Congress published the results of a survey showing which book was considered the most influential to American readers. *Atlas Shrugged* earned second place, beaten to the top position by the Bible.

It was also during the decade of the 90s that another group appeared who, if anything, were even more inspired by Ayn Rand than the college activists had been. This group was the new entrepreneurs of Silicon Valley. Not only did they consider themselves to be Randian heroes, they also believed that the technologies they were developing would make it possible to challenge an assumption that was constraining her vision of a free world. That

assumption, one at the heart of Western political thought, was that giving individuals too much freedom was a dangerous thing to do, because the result would almost certainly be anarchy of a chaotic and destructive kind.

But now, thanks to the development of computing and communications networks, something called the 'Californian Ideology' was forming out of the ideas and practices of this group. This was an odd mix of radical individualism and utopian theories about computer systems that promised to take those cybernetic dreams of self-stabilising ecosystems and apply the underlying principles to a new, far more powerful interconnected social system.

Once such a system was fully functioning, the concept of the nation state would become an irrelevant idea, and if politicians knew what was good for progress, they should give up their positions of centralised control and set this system and the individual free to create a new kind of democracy in which any "man of ability" had equal opportunity to make it as a Randian hero.

Not that every powerful person in American society immediately got onboard with this program. Some still believed that political power could be used in order to bring about improvements to the world, and that included no less a figure than the most powerful political figure of all. President Clinton had been elected on promises of social reform, and he intended to "borrow" money so as to fund his political program, all of which ran quite contrary to the proper way of doing things from the Californian Ideology perspective.

Fortunately, so far as its followers were concerned, they had a man in place who not only held a very powerful position in the world of finance and politics, but was also a member of the inner circle that had formed around Ayn Rand. If anyone could persuade the president of the folly of his plans, this was the man to do it.

But who was this person? It was the then head of the Federal Reserve Bank, Alan Greenspan. Once upon a time he had not been a believer in the philosophy of Objectivism, but rather another philosophy that was even more extreme in its commitment to rational thinking. This was Logical Positivism, which required its practitioners to question everything, to the point where logic reached absurd conclusions. So, for example, Greenspan's logical positivism led him to doubt in the fact of his own existence, even though Rene Descartes (1596-1650) had shown, as far back as the 17th century, that this was "reductio ad-Absurdum".

Then, Greenspan met one Nathaniel Branden (1930-2014) He was the leader of a small group who had formed around Rand as she worked on writing *Atlas Shrugged*. He was considered to be the second best exponent of Objectivist philosophy (the first being, of course, Ayn Rand herself). He successfully persuaded Greenspan that he could be certain of his own existence, and that he should abandon Logical Positivism for Objectivism. Rand's philosophy appealed to Greenspan so much that he joined that inner circle (in a fit of irony, they referred to the group as "the Collective") and even married one of the female members, Joan Michell. As a member of the Collective, Greenspan had the privilege of attending Saturday night sessions in which Ayn Rand herself read aloud the latest section of the manuscript for *Atlas Shrugged*.

It could be said, then, that Ayn Rand had an agent installed in the upper echelons of political office, in the form of Federal Reserve Chairman, Alan Greenspan. We've already covered the story of how this played out. To recap, Greenspan advised the President to cut government spending rather than increase it, since in doing so interest rates would be lowered, leaving market activity freer to work its magic. This resulted in a rise in share prices but, strangely, little change in productivity. At first Greenspan was concerned that this meant a speculative bubble was forming, but, having come under considerable pressure from powerful players in the financial sector, he decided that the contradictory combination of no productivity growth with record share price gains was the result of such radical new ways of engaging in economic activity that prior models were inadequate for explaining how wealth creation worked in this "new economy".

Certainly, things had changed thanks to the introduction of networked computing. For one thing, it meant businesses could now respond to each other's needs and to their customers' desires at lightning speed compared to what had been possible before. Not only that, but now there was the possibility of amassing vast amounts of data on economic activity and handing it over to software models that could predict risk and thus bring stability to the chaotic world of market activity, because a risk that can be predicted can be hedged against. Since risk had been reduced through cybernetic feedback, and market stability realised at last, the growing financial sector became more relaxed in who it deemed creditworthy, and banks started to lend money to people who they would previously not have lent to.

In the mid- to late-nineties, then, things seemed to be going very well for Ayn Rand's legacy. Californian ideologies had developed computer networks that allowed feedback loops to bring stability to markets, and one of her inner circle had persuaded the President to trust in market forces to fix the American economy, which was evidently what was happening.

As the boom continued, Times magazine reported that a sense of lethargy had come over the White House, like being President was a position that entailed not really doing anything, anymore.

## CHAPTER FORTY-SIX

The growth in information technology, which we talked about in the last chapter, has been nothing short of remarkable. It is a technological trend that is often used as a means of showing exponential growth in its most powerful and positive form.

There are two ways in which to present this rosy picture. One is to take a certain amount of money (£100, say) and then calculate how much of a certain computing performance that amount of money can buy.

In the case of processor performance (measured in millions of instructions per second or MIPS) that is said to have a doubling time of 1.8 years. In other words, 1.8 years from now, your £100 will buy you twice the MIPS it can currently buy. In another 1.8 years, it will be able to buy twice as much again. Remember the Pentium processor? The first such integrated circuit was clocked at 100 MIPS. By the time we had progressed to Pentium 4, the rate was approaching 10,000 MIPS.

The other way to think about this is to take a certain measure of performance, say, one terabyte of hard drive space, and then calculate how much it costs. When we take this perspective, we see not a 'doubling time' but a halving time. In other words, after a certain period of time, a one terabyte hard drive will be twice as cheap, and then twice as cheap again at the next doubling. And so on.

The effects of these trends are probably best appreciated by considering the consequences they have had for the power and portability of information/communications technology. Computing devices have gone from electro-mechanical devices that filled entire rooms, to silicon-chip based devices that were about the size of a fridge-freezer, to PCs with integrated circuits that could comfortably sit on a desk, to the modern smartphones that we carry around in our pockets. Not only are those smartphones a fraction of the size, they also deliver great performance at a fraction of the cost, relative to how expensive such computing power used to be.

It is indeed a marvellous thing to see a Third-World farmer using a smartphone that has orders of magnitude more processing power than the computers that helped land men on the Moon. But, there is another darker side to this exponential growth.

Often, when we talk about computers, we use terminology like 'virtual reality' and 'cloud computing' that give the impression that these are ephemeral, immaterial things that we are talking about. But, of course, they are not. They are physical devices that require real, material raw resources for their manufacture, and which consume energy every time we use them.

Obviously, a single smartphone, small enough to slip into one's pocket, requires far less material resources for its manufacture than one of those old, fridge-sized 'mini-computers'. I think somebody once calculated that, were you to construct a computer as powerful as a modern smartphone using only 80s-level computing technology, you would need an articulated lorry to carry around the behemoth such a computer would be. That all that storage and processing power can now fit into the palm of one's hand is held up as an example of "ephemeralisation", of doing more with less.

But, demand being what it is, we are turning out billions of smartphones, and each of these billions of devices require non-renewable resources. Moreover, the range of capabilities they place at our fingertips, such as the much-touted generative AI capabilities, comes not from the inner workings of the smartphones themselves (at least, not exclusively so) but from the fact that they offer remote access to sprawling data centres that consume prodigious amounts of raw materials and energy. None of this is possible without industrial practices on a scale to boggle the mind, and none of it is really sustainable if it puts too much strain on Earth's viability as a living planet.

Since the 1970s, there have been concerns that our current trajectories may not be at all sustainable, and that we are heading for an environmental crisis of global and near apocalyptic proportions. This impending calamity cannot be attributed to any single cause, but is instead a horrifyingly complex systemic effect that crosses national boundaries and involves the whole of Nature.

Indeed, when it was first outlined, in the 1970s, the complexity of what we were facing was so great, politicians really had no idea how to go about addressing it. The old hierarchies of power, and national governments, were just too ill-equipped to deal with the complexity of the situation.

So, what, the world was heading for disaster and there was nothing to be done about that? Well, that's not quite the conclusion that was drawn at the time. Global calamity was the probable outcome, yes, but not an inevitable one. If Politics and politicians were unable to handle the complexity of what we faced, then that was just one more reason for these old power games to get out of the way, and let the idea of the world as a self-regulating system take centre stage.

One person who was particularly prominent in advocating such a transition was our old friend and cybernetics pioneer, Jay Forrester. During the 1970s, he had developed his cybernetic theories into computer models of corporations and even whole cities. This work was published in a book called "Urban Dynamics", in which Forrester set out to show how statistical models could be used to simulate the relationship between a city's infrastructure and its residents. Such work had helped Forrester become a pretty powerful figure.

Meanwhile, during the same decade, a group of international businessmen and technocrats had formed a think tank for the purpose of trying to find some way of solving the impending environmental crises. They called themselves the 'Club of Rome', and Jay Forrester became very interested in the problems this 'Club' was set up to solve, because, so far as he could see, the only viable way to do so was to look at the world as one cybernetic system.

"Our problem is the big problem", he told the Club of Rome at a meeting in Switzerland. "Our problem is a hard one and you're not dealing with the hard problem".

The "hard problem" that the club was not dealing with was the sheer complexity of the modern world. On the way back from that meeting, Forrester began to sketch out a picture of the world as a system. It represented the world in terms of population, resources, investment in agriculture, and the accumulated pollution of the world, along with lines spread throughout the sketch, connecting this to that in a network that represented the many feedback loops that Forrester believed spread like invisible veins throughout the natural and industrial world.

Upon his return to the United States, Forrester set up a group within MIT to help turn that sketch into a computer model of the world. The team that did this was headed by Forrester's department assistant, Dennis Meadows (1941-2001) and his wife, Donnella (1941-2001) Forrester had already built a systems program called 'World 2', and the Meadows team used that as the starting point from which to build a brand new model, which became known as 'World 3'.

World 3 used five variables, those being Population, Food production, Industrial output, Pollution and Finite resources, and it simulated the interactions between these variables over the next one hundred years or so.

Once the model was built, the team took all known data about population growth, industrial production, food and agriculture, natural resources, and pollution, fed all that data into the model, and let it run to see what predictions it would come up with.

There were two results that were particularly eye-opening, and they both had something to do with exponential growth. One thing the model showed is that, although production per capita is increasing, it is not increasing the same way for all nations. Instead, industrialised nations were growing exponentially, but unindustrialised nations were growing linearly. Should those trends continue, then potentially that could result in the development of what are, essentially, two different worlds, more alien to each other than East versus West or, potentially, maybe even the Nobility and the Peasantry of feudal times.

Now, one might think that the obvious way to address that potential problem would be for all nations to become industrialised, so that they all grow exponentially. But that does not seem like such a great idea once you take into consideration the second, more pressing outcome predicted by 'World 3'.

When we last talked about exponential growth, we did so in the positive sense of it being able to make things possible, and affordable, far sooner than linear thinking would lead us to believe. Gene-sequencing is often used to highlight this difference. The plan to sequence the human genome began in the 1990s and, given the speed at which the genome could be scanned using the technologies then available, it would have taken thousands of years before the entire genome was mapped. Or so linear thinking would have had us believe. But, thanks to exponential growth in gene-sequencing tools, it only took slightly under fifteen years to complete the first draft of the human genome. During that time, the halving period for the cost of sequencing DNA base pairs halved every 1.9 years. So, whereas the cost was \$10 per finished base pair in 1990, by 2004 it had dropped to mere cents, opening up the potential of personalised medicine affordable for all.

But, exponential growth does not only deliver the good stuff far sooner we who think linearly expect, it also brings about problems and crises far sooner, too. Pressing concerns that once seemed many, many generations away are suddenly right around the corner.

Take the consumption of chromium, for example. Assuming we remained at the rate of consumption going on in 1972, this non-renewable resource would have run out eventually, but reserves would have lasted for another 420 years. It's kind of hard to be too concerned over an outcome that won't happen until like three hundred years after one's own generation is dead. But, once exponential growth is taken into account then, as the World 3 model shows, it's not 420 years before supplies of that material are depleted, but a mere 95 years, well within the lifetimes of a lot of us.

What's going on, then, in the standard run, is that the industrial capital stock grows to a level where the required input of resources needed to keep it going, quickly becomes truly enormous. The very process of that growth (exponential, not linear) depletes an ever-doubling fraction of available resource reserves. Since the sources from whence such materials are coming from are depleting ever more rapidly, more and more capital must be used to access what reserves are still available. But, that inevitably leaves less capital to be

invested for future growth until, finally, investment can no longer keep up with depreciation, resulting in the collapse of the industrial base.

As Forrester himself explained, running the World 3 Model “showed that in all likelihood, population would overshoot the carrying capacity of the world, and then you would have a collapse of population back to a lower level, and that the standard of living would decline through all that period in a serious way. The model based on current policies lead essentially to disaster”.

Having obtained these grim results, it fell upon the Club of Rome to spread word of the probable outcome that team Meadows’ model had arrived at. This they did by publishing a book, called “The Limits to Growth”, which went onto become a bestseller. As well as being a hit in a publishing sense, it also did a great deal to transform environmental debates. The reason why was all down to Forrester’s cybernetic approach, because his models offered a way of conceptualising the problem in a seemingly scientific- and therefore neutral- way. It was a vision of the world as one, interconnected system, and as such it called for a new approach to problem solving that transcended Politics and petty national interests. As a Club of Rome official said, at a conference held in Stockholm in 1972, “this is the beginning of a debate. Nobody’s decided what the limits are. One can question whether it’s 2010 when we all collapse or 2050 when we all collapse, but what is absolutely certain is, you cannot run a planetary society on the total irresponsible sovereignty of 120 different governments. It simply can’t be done”.

At this point, I think it would be worth explaining what it is that the standard run of the World 3 model predicts. Talk of “resource depletion” may make it seem like the problem involves totally running out of a particular, and vital, non-renewable resource. But, what is really being argued is that, over time, and more quickly than linear thinking would intuit, we approach and then pass the point where it is more economically expensive to extract that resource than the resource is worth.

Why should that matter, though? Surely, as that particular resource loses commercial viability, we would see increased investment going into researching and developing alternatives, thereby ensuring a viable replacement is ready to take over and keep the curve of exponential growth going? That’s what happened as each particular computing paradigm began to approach its limits, after all.

But, of course, if those alternatives are non-renewable too, that only amounts to a slight delay as the exponential consumption rate needed to feed the monster that the industrialised world has become, eats its way through those alternatives too. We reach a point where it is the case that the cost of extracting materials is not worth the value of those materials for multiple resources, most of which cannot easily be replaced with something more abundant.

Also, long before we reach that ultimate crisis point, other economic systems will have grown to be dependent on the level of output that the industrialised base is producing. Take modern agriculture, for example. So long as you have industrial outputs such as fertiliser, pesticides and- most especially- the energy for mechanisation- you can sustain a population of eight billion. But what if that industrial infrastructure collapses and we have to go back to Neolithic forms of farming? In that case, we could only support a global population a fraction of the



size it is today. And, with our ability to grow and distribute food becoming increasingly unviable, are we not likely to see wars over diminishing resources breaking out between the nations of the world?

Again, scenarios like these would seem to be nothing short of reasons for despair. We should remember, though, that such results come from inputting certain numbers into the five variables of the World 3 model. Being variables, you can input different numbers and maybe get different results.

Those different numbers would correspond to us adopting different behaviours; engaging in alternative practices. Faced with the impending disaster that resulted from plugging “business as usual” into the model, Forrester realised that some radical alterations were needed. Such changes would involve world governments abandoning the idea of continual growth. After all, Nature did not aim for growth, but for equilibrium.

“The idea of growth is in contrast to the idea of equilibrium”, Forrester reckoned, “where you’re maintaining a constant of equilibrium level of population and enough industrial activity to sustain that population...and live within the boundaries set by the world”.

In order to bring about this steady state, according to Forrester, the politicians’ dream of changing the world had to be abandoned. Henceforth, Politics should take on a management role, the aim of which would be to manage the existing system and hold it in equilibrium.

Given that Forrester’s dream was of a social system that emulated the feedback loop mechanisms that (as so many believed back then) kept natural environments in balance, one might be forgiven for supposing the environmental movement was fully on board with what Forrester proposed.

In actual fact, though, large sections of that movement opposed his idea, and they held protests outside the conference so as to voice their opposition.

But what was it about Forrester’s proposal that such groups opposed? To answer that question, we need to go back to 1935 and look at the philosophical ideas of one Field Marshall Jan Smuts (1870-1950). He was the autocratic ruler of South Africa at a time when the imperial power of Britain was waning and, just like Arthur Tansley, he used ecological ideas to develop a philosophical system which he called ‘Holism’.

In many ways, Holism was just like the system Forrester was proposing. It presented the whole world as one great organic system in which everything had its natural place. As Peter Anker, an historian of ecology, explained, “[according to Holism] every human being would have its place within society...and every other species- grass, grasshoppers, you name it- would have their place in the environment...It is an order of nature and an order of society that celebrates equilibrium...and Holism became a tool to make the British empire more stable”.

In brief, then, Holism said that everything would be fine so long as everyone and everything stayed in its proper place. In other words, it adopted that old concept of Reason that we

talked about earlier, one that sees it as a moral force that ought to constrain creativity and passion, keeping those potentially dangerous impulses in check.

Also, it is pretty obvious who benefits the most from systems that maintain the status quo—those in positions of power like Field Marshall Smuts. Just like the Club of Rome some forty years later, Smuts envisioned a new world order where artificial distinctions like nations would disappear. What would replace those obsolete concepts would be a world system modelled after the British empire. Naturally, the white European races would be the ones to manage it, since that was their natural place in the system.

When the philosophy of Holism came to the attention of Tansley, he derided it as “the abuse of vegetational concepts”. What he meant by this was that Smuts was using the belief that science is neutral in order to push through a political agenda.

As Todd Bjork, an environmental activist, explained, “the trick is claiming that...in nature you have this balance and we need a society to have the same balance...thus, you cannot change society, because society should be the same as nature...so, it’s a sort of intellectual trick. They needed this concept of the balanced nature to protect the elite and to protect the system”.

Fast forward to the 1970s and the solution presented by the Limits to Growth and we again find proposals to enforce the stability on the world that are no more neutral than Smuts’ Holism had been. As Peder Anker said, “the idea that ecosystem theories, theories of equilibrium etc, that these are neutral, is bogus. They are politically charged”.

That was the reason why a large section of the environmental movement were against Forrester’s proposal. While he presented it as the only way to save the world, they saw it as a ruse by those in power to control the world.

The main point of criticism for this group was that there were variables that Forrester and his team did not think to include in the World 3 model. It did not include any feedback loops for political change— the idea that, by changing their values and goals, future generations of humans might adapt to problems in such a way as to change the whole system.

That could not happen in the World 3 model, because what it represented was a machine vision of the world, and in this model human beings are only present as mechanistic nodes.

Recall here how Marx had opposed the enlightenment view of the Newtonian universe as being like a clockwork mechanism, because machines can only either carry on doing the job they were designed to do, or they malfunction. Marx was desiring of a dynamic world in which change is possible, not one in which self-regulation either maintains the status quo or self-destruction ensues. He believed revolutionary transformations were possible because human beings, unlike machines, could behave in ways they hadn’t before.

This was a possibility that Forrester’s model, with its machine-like representation of people, totally ignored, and so it seemed to present us with a stark, binary choice, between catastrophe or maintaining the existing system in a steady state.

So far as this group was concerned, though, it was not the role of the environmental movement to hold the world stable, but rather to fight for change. That a “balance of nature” argument was being put forward as a reason for stasis rather than change was proof, so they saw it, of their movement being hijacked by Right-wing think tanks and Cold War technocrats who were using the same trick as Smuts, that of disguising politically charged scenarios as neutral scientific theories. They wanted no part of it.

In the end, though, the protests did nothing to halt that agenda, mostly because the idea that Forrester presented, one of a cybernetic vision of the world as one interconnected system, was one that was about to really strike a chord in popular imagination. As ideas of this sort spread, what resulted was a profound shift that challenged the enlightenment idea that we humans are in control of our own destiny and, therefore, in a sense, separate from the rest of Nature.

From the 70s onwards, TV shows were promoting points of view such as “we’re all part of the web of life and the sooner man fully appreciates this, the better”, and when people on the street were asked what ‘ecology’ means, they would say things like “well, ecology is the balance of nature. It’s the relationship between you, me, the plants and animals, and the world in general”.

In all such perspectives there was an underlying view of human beings as mere components, nothing more than cogs in a system, tasked with the duty of maintaining its natural balance. Not very inspiring when put that way, it is true. But there was another aspect of this vision. By embracing the idea that everything in the world, ourselves included, were interwoven into complex webs and networks of feedback loops, we could imagine epic visions of connectivity and maybe realise them, even if, currently, they only existed as some utopian ideal. Such thinking would lead to the Californian Ideology that helped bring about the World Wide Web, ecological concepts like Gaia theory and representations of the global economic system as a self-regulating mechanism.

All these concepts were very appealing because popular imagination had largely come to agree with Forrester regarding what the “big problem” was and how to address it. As one commentator said, “now the problem is totally global, which is going to mean running the entire planet as a global system without upsetting the natural balances that are there”.

“The System” had to be maintained, managed, held in stasis. Change was out, since there was no third way. It was either stick with what we currently have (perhaps tinkering with it or reforming it, but revolutionary change was not possible) or going through collapse. And nobody save for nihilists wanted that. It was the fact that such ideas seemingly mirrored the natural world that made them seem so powerful, because that led to the perception that these were scientific ideas of how to organise ourselves and conduct our affairs. As such, they didn’t appear to be based on a political ideology, but rather on something far more neutral and unquestionable. After all, wasn’t it all based on the way Nature itself achieved equilibrium? Who were we to think we could do better than Nature?

By giving up on the idea of revolutionary change and embracing stasis, we did not think we were losing control but gaining it. We would become mechanistic nodes in a self-regulating network of feedback loops that would maintain a system that would function optimally well

forever, taking care of us for its own good as much as ours. The system promised far greater control and prosperity than we could ever have hoped to achieve as unconnected, isolated individuals.

That was the promise. But it was a false one based on a flawed understanding of ecosystems as self-regulating. It did not consider just how uncontrollable forces like Love and Power can be.

## CHAPTER FORTY-SEVEN

One person who learned just how uncontrollable a force love can be was Ayn Rand. When we last discussed her and her philosophy, we looked at her most famous work and why people either love it or hate it.

Among those who loved it was that inner circle of followers that formed around Rand, who ironically called themselves “the Collective”. They included Alan Greenspan, Nathaniel Branden and his wife, Barbara (1929-2013) and such was their love and admiration for their hero, Ayn Rand was elevated by this group from an extremely influential figure to an icon deserving of veneration and worship. Along the way, the ‘Collective’, even though it was formed around a figure that stood above all for rationality and “think-for-yourself” individualism, morphed into something that looked an awful lot like a cult.

Rand herself denied any such accusations. “My following is not a cult. I am not a cult figure”, she would assert during interviews. Meanwhile, the key members of her “Collective” were saying their group was not, actually, technically speaking, a cult...but perhaps it was understandable if some supposed it was. For example, we find the following in Barbara Branden’s biography, “The Passion of Ayn Rand”. “Although the objectivist movement clearly had many of the trappings of a cult- the aggrandisement of the person of Ayn Rand, the too ready acceptance of her personal opinions on a host of subjects, the incessant morality- it is nevertheless significant that the fundamental attraction of Objectivism...was the precise opposite of religious worship”.

So, the argument is that, since Rand was not literally worshipped as a god or considered as having some unique insight into the mind of a deity, and since, furthermore, she rejected religious thought as bad philosophy, therefore those who followed her highly rational worldview could not possibly be religious either, and therefore their group could not be a cult.

The problem with that kind of thinking is that we do have examples of non-religious groups that became a type of cult- a “Cult of Personality”. We can take the various characteristics of a cult and compare them to “the implicit premises to which everyone in our circle subscribed”, as recorded in Nathaniel Branden’s memoir, ‘Judgement Day’, to see whether or not accusations that Rand was the leader of a cult were justified.

One of the characteristics of a cult is that the leader of such a group is glorified by his or her followers, to the point of virtual sainthood or divinity. In other words, there is “Veneration of the Leader”. In his memoir, we find Branden asserting, “Ayn Rand is the greatest human

being who has ever lived” and “‘Atlas Shrugged’ is the greatest human achievement in the history of the world”.

There is also the belief, among those in cults, that the leader they follow cannot be wrong. This characteristic of cults is known as “Inerrancy of the Leader”. By Branden’s own admission, “No-one can be a fully consistent individualist who disagrees with Ayn Rand on any fundamental issue”.

Another tendency of cult followers is to treat their leader as though he or she has powers of omniscience. This they do by accepting whatever the cult figure says on all subjects from the most trivial to the most profoundly philosophical. According to Branden, “No one can be a good Objectivist who does not admire what Ayn Rand admires and condemns what Ayn Rand condemns”.

Given this belief, it should come as no surprise to learn that “Absolute Truth” is another characteristic feature of a cult. In other words, followers believe that they, through their leader, have discovered final knowledge on any number of subjects. According to Branden, “Ayn Rand, by virtue of her philosophical genius, is the supreme arbiter in any issue pertaining to what is rational, moral or appropriate to Man’s life on Earth”.

The reference to morality in that last quote leads us neatly to yet another defining feature of a cult. This is the belief that, through their leader, the members have developed a system of right and wrong that applies, not just to this particular group but to everyone everywhere at all times and places. To be included as a member, one must follow this strict code, and to err in any way leads to punishment or banishment from the group. In short, the leader/group possesses “Absolute Morality”. Branden reckoned, “once one is acquainted with Ayn Rand and/or her work, the measure of one’s virtue is intrinsically tied to the position one takes regarding her and/ or it”.

Having laid out those premises in his memoir, Branden then asserted, “but it is best not to say these things explicitly...one must always maintain that one arrives at one’s beliefs solely through Reason”. “Hidden Agendas”, obscuring or not fully disclosing the true nature of the group’s beliefs and plans, happens to be another one of those key characteristics that define a Cult of Personality.

In all, there are nine key characteristics that define a cult. Going by Branden’s own admission, it looks very much like “The Collective” had beliefs that more or less matched six of those characteristics.

But, what about the three that we have yet to outline, do they also align with the implicit premises of the Collective? Whereas the six characteristics already mentioned have a common theme in that they all concern themselves with Truth or Morality, the remaining characteristics have to do with pervasive techniques and deceit, particularly of a financial and/ or sexual nature. We’ve all heard stories of cult figures who bed all the starry-eyed hero worshippers they can, and who seem to be doing extremely well, materially speaking.

Now, I think it would be inappropriate to say Ayn Rand used fraud to become rich and famous. She certainly did not cheat anybody, she just wrote some novels that went on to be

great successes- phenomenally so in one case. Nathaniel Branden himself, the number two exponent of Objectivism, set up the Nathaniel Branden Institute in 1958, which sponsored lectures and courses in Objectivism, and as far as I know there is no reason to suppose that paying customers attended such events through any kind of coercion, but simply because the power of Ayn Rand's ideas really appealed to them and they wanted to learn more of her philosophy.

So, we'll give the Collective a pass when it comes to financial deceit/exploitation, since there's no evidence to support such accusations.

What about sexual exploitation, though? Ah, well, here we have to talk about the fall of Ayn Rand and the disintegration of the Collective. During the 1940s, Ayn Rand had married an actor by the name of Frank O' Conner (1897-1979) After her ideas met with some pretty brutal hostility, she sought comfort and found it- not in her husband's arms, but the arms of Nathaniel Branden.

This happened in 1953, by which time Branden himself was a married man, betrothed to Barbara. Nevertheless, despite the fact that both Ayn and Nathaniel had sworn oaths of monogamy to their spouses, she decided that she was in love with Nathaniel and that they should have a sexual affair.

Being Ayn Rand, she made no recourse to irrational passions of a "Love is a drug that's got its hook on me" or "can't help falling in love with you" kind. Instead, she confronted Nathaniel's wife, Barbara and, with her own husband present, rationalised the affair as the only appropriate course of action. "By the total logic of who we are- by the total logic of what love and sex mean- we had to love one another", she told them. "I know that you recognise the rationality of what we feel for one another".

In his memoir, "Judgement Day", the source that gave us strong hints that Rand was a cult leader, we find the following statement from Nathaniel Branden. "Since Ayn Rand has designated Nathaniel Branden as her "intellectual heir" and has repeatedly proclaimed him to be an ideal exponent of her philosophy, he is to be accorded only marginally less reverence than Ayn Rand herself".

So, anyone who became a member of the Collective had to recognise Ayn and Nathaniel as the world's two greatest intellects. Surely, philosophical Superwoman had to couple with philosophical Superman? Being such a charismatic and persuasive character in the eyes of her closest followers, Rand succeeded in getting the other spouses in this affair to agree that henceforth, once per week, she and Nathaniel should have an afternoon and evening of intimacy. As well as agreeing to that arrangement, the four also agreed that the Ayn/Nathaniel affair should be kept secret from everybody else in the Collective.

Was this deceit and sexual exploitation? That depends on whether or not you think it anyone else's business, other than the married couples directly involved, to know about any affairs they agree to have. As for sexual exploitation, does it make any difference if a charismatic leader beds a devotee by arguing "rationality and logic tells us we should", rather than "God tells us we should"?

Whatever the rights and wrongs of this arrangement, the love affair of Ayn and Nathaniel was not destined to be a happy secret ever after. They remained a part time, clandestine couple until 1958, and had an on and off affair for about a decade after that, but by 1968 the affair had long since dwindled.

In that same year, the spark of passion was re-ignited in Nathaniel Branden. Only, this time, his flame was not Ayn Rand herself but yet another member of the Collective.

Given that she had already rationalised that this married man should have affairs with other women, and given also that their own love affair was pretty much over at this point and, finally, given that her whole philosophy was based around the concept of Individualism, of oneself needing nobody else in order to live a worthwhile life, one would be forgiven for supposing that Ayn Rand accepted Nathaniel's latest affair in a calm, rational manner.

Not a bit of it. "Get that bastard down here, or I'll drag him here myself!", she is said to have screamed. Branden duly arrived at her apartment to face Judgement Day (the name of his memoir, as you will recall). "It's finished, your whole act", she yelled in a rant that lasted several minutes. "I'll destroy you as I created you! You won't have the career I gave you, or the name, or the wealth, or the prestige. You'll have nothing!".

With that, Branden was duly booted from the Collective with his former idol's final curse ("if you have an ounce of morality left in you...you'll be impotent for the next twenty years!") ringing in his ears and his cheeks burning from having been slapped in the face. Four times.

Given the clandestine nature of their affair, and the fact that nobody in the Collective was told the real reason why Nathaniel Branden- Rand's "intellectual heir" remember- was suddenly thrown out of the group, we can also include 'Deceit: Followers are not told everything that they should know about the leader...potentially embarrassing events or circumstances are covered up" to our list of ways in which Objectivism became a cult of personality.

What did she tell the group? Well, she issued a six-page letter which included the following. "Mrs Branden confessed that Mr Branden had been concealing from me certain ugly actions and irrational behaviour in his private life, which was grossly contradictory to Objectivist philosophy". No reason was given as to why his first affair was moral and rational whereas his second was not. Indeed, the exact nature of his transgression (falling in love with another woman) was never revealed. Does that mean we can add "Hidden Agenda: the true nature of the group's beliefs and plans is obscured from or not fully disclosed" to our list? You be the judge.

If you agree that all this smacks of deceit, sexual exploitation, hidden agendas and persuasive techniques, then Objectivist philosophy did indeed morph into something that meets all the criteria of a cult.

Whatever is the truth, this episode was the beginning of the downfall for Ayn Rand, the master of the absolute moral double standard. More and more members were ejected from the group following increasingly ferocious condemnations triggered by increasingly minor

transgressions, until, by the time of her death in 1982, Ayn Rand was left with only a handful of friends.

Now, a lesson we might learn from all this is that there are limits to Rationality and Morality. Taking the former first, Rand tried to justify her affair in purely rational terms, claiming she and Nathaniel had to become lovers “by the total logic of who we are- by the total logic of what love and sex mean”.

But is it really appropriate to say that pure logic determines who we couple with? It could be argued- as indeed it has- that dating takes place within a marketplace of sorts. The commodity on sale is companionship, and the currency by which it is bought is one’s value as a partner.

Logically speaking, what should a person be looking for when choosing a partner? The would-be spouse should be the most physically attractive, wealthiest, cleverest, humorous, kind, and psychologically well-adjusted person who would be prepared to couple with you. By and large people do tend to hold out for the most physically, emotionally and psychologically desirable person they can get, as evidenced by statistics that show, on average, that couples tend to be of more-or less equal desirability.

However, it’s when we look at individual cases rather than average results, and also the costs involved in staying single, that things get interesting. So, let’s follow such a logically-focused singleton as they enter the dating marketplace determined to couple with the most desirable partner who would accept them as their spouse.

Right away we hit our first problem. Mr/ Ms Dreamboat is one individual among a population of billions, a veritable needle in an enormous haystack. In all probability, our singleton will be searching for a long, long time before the absolute best partner they could get makes an appearance.

What to do in the meantime, stay single until that ideal partner finally shows up? The problem with that strategy is that you cannot stay single without incurring costs, such as loneliness, not to mention all the awkwardness of being in the dating market with all the promises and perils that entails.

If your ideal partner is taking too long to show up, then the next most logical thing to do would be to settle for the best person you have found so far. Now that you are together, you can both invest time and energy in developing that relationship.

But, such a relationship is vulnerable if one lets logic determine who one spends one’s life with. After all, if you are determined to partner with the absolute best you can get, and not just Mr/Ms “Good-enough”, then as soon as somebody slightly better comes along you would end the current relationship and move in with “Mr/Ms Bit-Better”.

If your current partner is logical too, they will calculate that this is what you will do, meaning whatever investment they may make in the relationship is vulnerable to being undone. This would obviously not be the case if that partner happened to be the most desirable person on Earth, scoring ten out of ten on every count, because if that was so nobody would ever want



to leave them. But, one is most probably not this perfect partner, so why should they commit themselves in the first place if the other person in the relationship would terminate the relationship as soon as a slightly better prospect comes along?

One way in which our singletons could alleviate such fears, would be to sign up to some kind of legal contract designed to make it difficult for either partner to just walk away at the first sign of a better alternative. That's what people do when they ask somebody to marry them.

According to the economist, Robert Frank, getting married serves the same purpose as tenants signing a lease. Just like with dating, landlords would, logically, prefer to put the best possible tenant in their apartment (but settle for the best they have found so far) while their tenants logically want the best place they could get (but settle for the best so far). Also, just as is the case with dating, there are risks and costs involved here. The tenant is at risk of being evicted the moment a better tenant comes along; the landlord potentially has the cost of an empty apartment should the current tenant leave it for some better place.

There is no problem if the best possible tenant is in the best possible apartment, as there would be no superior alternative that, logically, would end this arrangement. But, assuming that's not the case and what we have is, instead, a compromise of "the best I have found so far", then by signing a lease that restricts the landlord's freedom to evict and the tenant's freedom to leave, the partners in this relationship bring about a restriction on their freedoms that actually work to mutual advantage.

According to Frank, the same logic works with marriage. But, both marriage and tenancy involve some pretty sophisticated legal apparatus, and that's something we can hardly attribute to the way we evolved. After all, our ancestors, who lived for millions of years before the discovery of writing, could hardly have signed up to anything. How, then, could they have agreed to begin a relationship that came with no formal guarantee that their prospective partner would not terminate it once a better logical alternative came along?

The answer is pretty simple. Rather than accept a person who wanted to be with you for purely rational reasons, look instead for a partner committed to staying with you because of an emotion that they did not choose to have and, therefore, cannot choose not to have. Ideally, this emotion should not be triggered by anything objective but should strike in mysterious ways, and it should also entail genuine psychological costs in the event of separation, such as an aching heart, sleepless nights, and a profound longing for your absent sweetheart.

There is, of course, just such an emotion- the emotion of romantic love. You won't find many songs, poems and other declarations of love along the lines of "this person meets my minimal standards of acceptable levels of IQ, Beauty and Earning Potential" (even if, on average, such things do determine who we end up with). But you will find no end of romantic references to just how irrational, uncontrollable, and psychologically costly this emotion that one is feeling for somebody can be.

Having said that, we are not all swept off our feet the moment somebody comes along declaring "I can't sleep with you on my mind; you make my heart beat like crazy; no controlling this feeling that has come over me" etc, etc. There's a reason why most of us are

actually turned off by somebody who comes on too strong too early. It's because they are either desperate or prone to becoming infatuated all too easily. Either case should trigger some alarms.

For all these reasons and more, romantic love evolved to be not entirely rational but not entirely impulsive either. As experimental psychologist, Steven Pinker, (b. 1954) said, "the contradiction of courtship- flaunt your desire while playing hard to get- comes from the two parts of romantic love: Setting a minimal standard for candidates in the marketplace and capriciously committing body and soul to one of them".

Another way to put it would be to say that romantic love does not belong entirely in the sphere of value. You cannot really quantify and put an objective price on such an emotion. But, nor does it belong entirely in the sphere of values along with all those other priceless aspects of human existence either. It's not entirely inaccurate to think of the dating scene as a marketplace, after all.

In short, then, romantic love is one more example of just how complex and contradictory human life is and, therefore, not something that can be reduced to equations as economists often insist it should be. That said, provided they are aware of the limits of their field of inquiry, economists can give us some useful insights into human behaviour, as the deconstruction of romantic love shows. But when the limits of rationality are not taken into consideration, one may, as Ayn Rand found to her cost, end up constructing a perfectly rational philosophy that leads to disastrous results upon meeting real, messy, human behaviour.

Moving on to how to the moralistic part of her philosophy, the very name by which it is known- Objectivism- asserts that there are absolute standards of right and wrong that can be used to judge the morality of our actions. That being the case, it's pretty much as if such absolute moral standards exist in Nature, and it is up to us to get out there and 'discover' them.

But, really, saying we should go forth and 'discover' the One True Moral System is the same flawed thinking as saying we need to get out there and "find the money" before any project we may wish to embark on can be completed.

We can use the concept of 'Fashion' to illustrate the flawed thinking here. It is a crucial part of many of the commodities we produce, and particularly so with clothing. Now, obviously, before we can make clothes we must go forth and find the raw materials required to make our shirts, dresses, shoes, stockings and so on.

It would be wholly inaccurate, however, to suggest that, along with a search of such raw materials as cotton, linen or leather, we also have to get out there and find the 'Fashion' that makes, say, a certain brand of handbag so much more coveted than your average handbag. This is because, just like with 'Money' and 'Morality', 'Fashion' is not a material thing, not something one can obtain by fishing it from the sea or digging it out of the ground or harvesting it from crops. Fashion, like Money and Morality, is a relational and intersubjective concept. To the extent that it exists at all, it exists in our minds.

Now, to be fair to Ayn Rand, it needs to be said that she did understand that money is more relational than material. We have spoken before of the powerful ideas she included in her stories that have really inspired people, and one particularly notable example would be a long speech given in 'Atlas Shrugged' by a character called Francis D'anconia. He overhears one of the true villains of the story repeat the saying "money is the root of all evil", and it prompts him to ask if anyone knows what the root of money itself is.

"Money", he says, "is the material shape of the principle that men who wish to deal with one another must deal by trade and give value for value...when you accept money in payment of your effort, you do so only on the conviction that you will exchange it for the product of the effort of others... Try to grow a seed of wheat without the knowledge left to you by men who had to discover it for the first time...and you'll learn that man's mind is the root of all the goods produced and all of the wealth that has ever existed on Earth".

Ayn Rand, through the character of D'Anconia, goes onto say a lot more about the fundamentally inter-relational nature of money, but I think we get the gist of her argument here. To the extent that money exists and can serve its purpose, it takes the form of the measure of credence we can give to another's claim to be producing value (just as they are measuring our own claims). Credit/Money is that relationship that forms whenever people work together to the best of their ability and are justly compensated for the mental and physical efforts they make.

We might say, then, that there is a moral as well as a material aspect to money. It exists in the sphere of values as well as the sphere of value.

Now, in the fictional world in which Ayn Rand set her story, the 'Value' and 'Values' aspect of money can function perfectly well (were it not for the interference from those meddling governmental bureaucrats). You can tell who are those people who have discovered absolute moral standards because it is stamped onto their fine features and evident in the brightness of their eyes. Also, those moral supermen/ women can calculate, instantly, the value of everyone's capacity to work. If reality really worked like this, it would be relatively easy to maintain a monetary system that facilitated wealth creation and selected against fraudsters and cheats.

Also, while Rand was correct in saying money has its roots in relationships much more than anything material, she brushes over the other crucial aspect of money- debt- and how it really came to be. The details of this story must wait for future volumes, but basically debt is a peculiar kind of obligation. As Rand said, humans are social animals that have always been doing favours for each other and have (intentionally or accidentally) done ill towards their human family, too. In either case, we have this sense of imbalance, of a favour not yet reciprocated or a hurt left uncompensated, and justice demands balance be restored.

What is peculiar about debt is that it is quantifiable and impersonal, and this latter quality makes it transferable. The only important thing is that a debt is paid back. It matters not who actually pays back what is owed.

But most favours and obligations do not really work in this way. If somebody does us a good turn we normally settle for a vague sense of when that favour is returned, rather than bother

to precisely calculate what is owed. Indeed, there are many aspects of social life where to even attempt to make such a calculation would be considered offensive.

As for that impersonal/transferable aspect of debt, when we are wronged we might well think that some individual should repay the debt their guilt represents, and become exacting in just how much compensation is owed, but we would not call it 'Justice' if just anybody was fined or locked up. We'd call that scapegoating.

I think it's fair to say that most people would regard the ability to transfer guilt onto others and have them serve time rather than the actual perpetrator, as a travesty of justice. But, debt is not only a quantified obligation, in that we do bother to calculate precisely what is owed, it's also impersonal and therefore transferable. We have plenty of historical examples of, say, a Father ending up in debt and his daughters being made to work in the creditor's household until the father's debt is paid back, even though they themselves never borrowed any money.

What did it take to transform obligations and favours into something quantifiable, impersonal and transferable- in other words, into Debt, the root of money? It took a combination of mathematics and violence. Ayn Rand's essay on money's roots seem to be based more on the mythstake of money as something that evolved from friendly swaps of material commodities, but its actual roots were nothing like this but something far more sinister.

If money is to exist at all, it's necessary to carry out that quantification that calculates, precisely, what is owed. Now, Rand's Objectivist philosophy insists that we ought to be able to apply such calculations not only to the material aspects of our actions but the moral one's too. If that was indeed possible, then, in some sense, morals would exist in Nature, waiting for us to discover them.

But, as Michael Shermer (b. 1945) pointed out, that's not really true at all. Morals do not exist in nature, only actions do. Roughly speaking, there are three types of action- physical action, biological action and human action. None of them are, in and of themselves, "moral". It is true that, by engaging in such actions (or through avoiding them) we may increase or decrease our psychological well-being. We may end up happier or sadder. But these are subjective states and are therefore personal rather than objective. The actions that caused those subjective states become moral actions only when someone else judges them to be moral actions. In other words, there is no "morality" in nature for us to "discover". "Morality" is a human creation, as susceptible to cultural influences and social constructions as any other human creation, such as Art, Fashion and Religion.

Here we should recall just what it is that distinguishes anything properly belonging in the sphere of values from anything belonging in the sphere of value. A thing, whether material or not, has value if it can be compared precisely to any other thing. In other words, it has a price. Anything belonging in the sphere of values, though, is valuable precisely because it cannot be compared to anything else. That's why we say such values are "priceless". It's just silly to ask how many chocolate cheesecakes are equivalent to the crime of murdering a child or running into a burning building to save a puppy. Human life is full of good and bad actions that we do not bother to quantify because it would be absurd to do so.

One of the more obvious ways in which this is the case can be seen in the way you can take all the claims of what constitutes “right” and “wrong” actions that individuals and groups have made throughout history. It will be observed that, invariably, they all disagree to a greater or lesser extent. The only reasonable conclusion to be drawn from this messy complexity is that they cannot all be right.

Nor should we fall for the belief that all of them are wrong, save for one, which is absolutely right. As Shermer said, “just as there is no absolute right type of human music, there is no absolute right type of human action. The broad range of human action precludes pigeonholing into unambiguous rights and wrongs that political laws and moral codes tend to require”.

So, what, anything goes? No, of course not. We humans have always organised that which belongs in the sphere of values into hierarchies of goodness. Not all fashion is equally good. Some of it is priceless, a lot of it is rubbish, and we don’t all agree on what is rubbish and what deserves our eternal respect and admiration. All such hierarchies of likes/dislikes provide the standards by which we judge the consequences of our actions, and morality should be included among that which can be judged in this way. But, we should not forget that all such standards are, themselves, human creations. Ayn Rand forgot this, and so she couldn’t see that there was nothing “objective” about Objectivism, and that it was dangerous to suppose she had found absolute moral standards, or how to discover them.

Dangerous how? Well, because, as Michael Shermer puts it, “as long as it is understood that morality is a human construction influenced by human cultures, one can be more tolerant of other human belief systems and thus other humans. But as soon as one group sets itself up as the final moral arbiter of other people’s actions, especially when its members believe they have discovered absolute standards of right and wrong, it marks the beginning of the end of tolerance, and thus reason and rationality”.

That was not a lesson that Rand and her followers learned, and it was this failure to learn that, however necessary it may be to organise values into hierarchies of good and bad, there are no absolute standards in reality, that resulted in her rational philosophical movement transforming into a cult.

Ayn Rand herself died in 1982, by which time the cult that The Collective had become had already fallen apart. Her ideas, though, lived on, just as ready to bewitch those who failed to see the flaws that made them cultish. So we can add the philosophy of Ayn Rand to the flawed assumptions of the cyberneticians and ecologists; other flawed beliefs lurking in the foundations of the world we were creating.

## CHAPTER FORTY-EIGHT

A few chapters ago, we saw how the Californian Ideology set about networking computing devices, therefore laying down the foundations of what would become the world-wide web. By 1997 the Web was well and truly established, and the American political system was very much in the grip of financiers who had a vision of how the world ought to function.

This vision was one of the world as one giant economic system, and if it was to be a stable global system, it was clear to these ideologues what needed to happen: Nations should open themselves up to the free flow of capital. In order to convince the world that this was the right thing to do, a demonstration of the benefits that would result was needed. To bring about such a demonstration, it was necessary to find a kind of laboratory where such economic ideas could be tried out

Such a 'laboratory' was found, in the form of Southeast Asia. After having come under pressure from the USA, countries like Thailand and South Korea had given up all restrictions and Western capital began pouring into this part of the world. By 1997 this had had such a transformational effect, the result was proclaimed "the Asian Miracle".

But was it a positive outcome? It certainly looked that way. The public accounts of South Korea and Southeast Asian countries appeared to be in order, and there had been high levels of economic growth going on for years. Not only was economic growth high, so too were levels of saving and investment. Inflation, on the other hand, was not growing but kept under control.

All in all, then, it looked very much like there was no better place to do business than Southeast Asia in 1997. The major players in the world of finance and banking certainly thought so, because investment banks, commercial banks and hedge funds were all mightily keen to get in on the act and seize the opportunities that this "Asian Miracle" had opened up. As a result, there were enormous inflows of capital being registered year after year, which had nothing but a positive effect on the feeling of prosperity. The stock markets were on the rise, the price of real-estate assets were increasing in value, too, and there was enough money in the economy to fund all kinds of projects. Even the countries' governments had fiscal surpluses. In 1997, things could not have seemed better for the future of Southeast Asia.

And yet, despite all these apparent reasons for optimism, the models that underpinned this period of growth had flaws. Imbalances would develop and grow with too few people realising this was happening, and in 1997 the whole system would blow up in a major financial crisis.

The story of Southeast Asia's rapid rise and almighty fall really began in the early 90s, a time that was not all that good, economically speaking, for the USA. That decade started with a mild economic crisis in the USA, leading to a recession in 1991. This, you may recall, had prompted Alan Greenspan to persuade President Clinton to cut government spending. Something else it caused the Federal Reserve to do was to lower interest rates, and as a result those rates fell well below the rates that existed in southeast Asian countries.

The likes of Thailand and South Korea had already been registering high rates of economic growth, so once the interest rates changed in the way they did, that only increased the incentives for international capital to flow to this part of the world. As it did so, that capital became added to the savings reserves of these countries, which were very high to begin with.

The economies of Southeast Asia were definitely booming in the 1990s, but in 1997 it all came crashing down. Whenever a crash happens, a question inevitably arises: why did nobody see that the boom that preceded the crash was simply not sustainable?

In the case of the “Asian Miracle”, there actually was a group in the White House who did see that there was a financial bubble forming in Southeast Asia. They were the Council of Economic Advisers and they were led by Joseph Stiglitz (he, you may recall, was one of many economists who have peddled the “money from barter” mythstake).

The concern that this group had was that much of the money the west was pouring into Southeast Asia wasn't really being invested in anything sustainable or likely to really increase wealth, but was instead being used to grow a speculative bubble in property. Once it burst (as it surely would) the flow of capital would quickly reverse as investors rushed to get their money out of the country. That would spell disaster for the citizens of those countries.

So Stiglitz and the Council of Economic Advisers had a pretty sensible suggestion to put to President Clinton, which was to persuade him to put a stop to the more excessive short-term speculation. Unfortunately, the Council found it nigh on impossible to actually deliver their recommendations to the President. Stiglitz had a pretty strong suspicion as to what, or rather who, was frustrating their efforts.

In the Clinton Administration, the position of Secretary of the Treasury was held by Robert Rubin (b. 1938). As was typical in the age of Total Bureacratism/ marketisation, he had gone through the revolving door between the financial sector and the political sector, having previously headed the investment bank Goldman Sachs. During his time there, Goldman had created many of the computer models that underpinned the Asian Miracle.

What drove Rubin was a revolutionary vision of the world, one which saw it as one big system that was completely open to the free flow of capital. This meant he was the sort of person likely to prevent the warnings of Stiglitz from reaching the President. Rubin and the Treasury team were agents of the financial world, he believed, embedded in the heart of government, and thus perfectly placed to conspire to prevent anything from altering the course that the world economy was set on.

Joseph Stiglitz and the Council of Economic Advisers were not the only ones that were looking at the way things were developing and seeing reasons not to be unconditionally optimistic. Others, casting a critical eye over the way the Web was evolving, saw reasons to be cautious too. What the Californian Ideology had promised was a new kind of democracy. In ‘Atlas Shrugged’, the heroes of the tale had all escaped to a secret, hidden valley where they had been free to build a society with no interference from any government. The dream that the Californian Ideologues wanted to sell was that now, thanks to the Internet, such a place existed. It was Cyberspace.

This vision of Cyberspace as the new “land of the free and home of the brave” was perhaps best expressed by John Perry Barlow (1947-412) in his ‘Declaration of the Independence of Cyberspace’. “Governments of the world”, it began, “you are not welcome among us. You have no sovereignty where we gather”. A bit further on, Barlow insists that “we are forming

our own social contract. This governance will arise according to the conditions of our world, not yours. Our world is different”.

Different how? “Cyberspace consists of transactions, relationships and thought itself, arrayed like a standing wave in the web of our communications. Ours is a world both everywhere and nowhere. We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force or station of birth...where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity.

“Your legal concepts of property, expression, identity, movement and context do not apply to us”, the Declaration insisted. “They are all based on matter, and there is no matter here”.

That was the positive, Utopian view of the Web that existed in 1996 (the year the Declaration of the Independence of Cyberspace was posted online). Thanks to computer networks and the falling price of information- and communications technologies, a powerful way of distributing information and thus, of sharing ideas now existed, and that could only lead to a new kind of Democracy, greater than any that had come before.

But was the World Wide Web really a new and more perfect form of democracy or something else? Some of the computer utopians had growing doubts that everything was as rosy as Barlow was making it out to be. The global systems that the computer networks had enabled had actually done something other than distribute power and set all citizens of cyberspace free. Instead, these sceptics thought, the web had shifted power and allowed it to become more concentrated than ever before. What the optimists were celebrating as a new democracy and era of unprecedented freedom for the individual was, really, a system in which power was exercised over the individual.

One person who really spoke up for this cautionary view was ‘Humdog’. That was the online name of one Carmen Hermisolla. Hailing from the West coast of the USA where the Californian Ideology had been born, she had been one of the earliest believers in this idea of cyberspace as a new community of free individuals. So when she posted an attack on that very idea, it caused a sensation online.

Her argument was that it was not at all accurate to say that, in Cyberspace, one was free to express themselves in any way they wished and that it was a virtual space which allowed full and unfettered expressions of individuality. It might seem that this was what the web enabled but, she insisted, appearances were deceptive.

“I have seen many people spill out their emotions, their guts, online, and I did so myself, until I began to see I had commodified myself”, she wrote. In other words, what Cyberspace had actually enabled was not freedom at all, but a new form of commodification. In the 19th century it had been materials, energy and, above all, labour-power, that had been commodified. But now, by posting their inner thoughts to the likes of Compuserv or AOL, people were, effectively, commodifying their very selves.



“Cyberspace is a black hole”, she wrote. “It absorbs energy and personality and then re-presents it as an emotional spectacle. It is done by businesses that commodify human interaction and emotion. And we are getting lost in the spectacle”.

## CHAPTER FORTY-NINE

In the previous chapter, we saw how conditions came about that led to a tremendous boom in the economies of Southeast Asia. We also saw how, while most showed no concern over how sustainable such growth was, a few were noticing some flaws that could cause a lot of harm if left unaddressed.

This relatively small group of sceptics would no doubt have been very interested to learn that, by the 1990s, the ecological assumptions that modern society had been built on- the idea that natural systems maintain equilibrium through feedback and that market systems ought therefore to be capable of behaving in the same way- had been completely discredited. Nor was this a particularly new realisation. Such knowledge had in fact come to light in the mid-1970s and by the mid-80s the idea of a stable balance to Nature had been completely overturned.

Such a turn of events would have come to a shock to the ecological movement of the 70s and 80s, because this concept of the “balance of nature” was firmly entrenched. As the ecologist Stewart Pickett said, “ecologists really thought that we were dealing with a stable world...You didn’t question it at all”.

There may have been no doubt that a tendency toward equilibrium was the name of the game in ecology, but nevertheless ecologists were still getting out there and gathering evidence, so it’s not as if the scientific process had stopped entirely. One such ecologist was Daniel Botkin, who chose Ile Royal as his site of study. It was a remote island out in the Great Lakes, and it was home to a population of moose and wolves.

What Botkin had expected to find was a textbook example of equilibrium. A study of the populations of moose and wolves should have led to the conclusion that these two populations maintained a steady balance. “In theory the wolves controlled the moose, and the moose and the wolves and vegetation all lived together in this miraculous system”. The whole point of his field trip in Ile Royal was to figure out how this miraculous balance was actually being maintained.

But, once he got there and started to seriously study the natural history of the island, the results were not at all what was expected. “Everything was always changing”, he remarked, “it wasn’t what it was supposed to be. When you looked at the populations of the moose and wolves, you saw nothing but change”.

Now, what might somebody who really wants to believe in the “balance of nature” do when faced with results like that? One response would be to remind themselves that nature only tends toward balance, which is not to say that natural systems are always in equilibrium. So, figuring that the moose and wolf populations were in a temporary state of fluctuation due to who knew what, Botkin embarked on an even deeper study of Ile Royal’s natural history, examining the soil and vegetation for clues scientists with his expertise are trained to

recognise, and as a result of this work centuries of Ile Royal's history was uncovered. The results? The same as before: Nothing but change.

Nor was Dr Botkin alone in obtaining such contradictory results. His work encouraged a new generation of ecologists to undertake a deeper analysis of the world's ecosystems. According to the predominant theory, any disturbance caused by floods, fire, storms or whatever would result in feedback loop mechanisms kicking in, and returning those ecosystems to their original balanced state. But study after study was bringing in results that showed this just wasn't true.

As Dr Pickett explained, "you get a disturbance, the forest doesn't come back the way it was. Disturbance comes along and it resets the system to something new".

Such findings were a profound challenge to the ecology movement's most basic assumption, which was that natural systems were ruled by what Tansley had called "the great universal law of equilibrium". These latest studies were finding no evidence that such a law existed, and plenty that contradicted it. Given that the "balance of nature" had been a deeply held belief within the ecology movement, one might expect dismay to be felt as this idea fell apart. According to Dr Pickett, that's what happened.

"When people began to find out that [the "balance of nature"] might not be right, people were really almost viscerally upset....because it offended that very comfortable idea that Nature was stable".

Even scientists are prone to clinging to deeply held beliefs, especially when there seems to be reason to hope that, in the end, they'll turn out to have been true all along. And, as these results were coming in, there still was some hope for true believers in "the great universal law of equilibrium" to cling to.

This hope came in the form of one George Van Dyne (1933-1981), an ecologist who undertook the ambitious project to create a computer model of Colorado's vast grasslands. Just like Dr Botkin, Van Dyne and his team took on this project with the intention of showing how this ecosystem maintained stability.

In order to be able to do this, the necessary data first had to be gathered. To that end, Van Dyne hired dozens of researchers who were given the unenviable task of conducting painstakingly focused studies. One team's job was to push a vacuum cleaner-like contraption around hundreds of square miles of grassland, and then open up the insects and small mammals it hoovered up so as to determine exactly what they were eating. Another team member, equipped with a dictaphone, followed a pronghorn (a species of antelope) and recoded every bite of vegetation the animal took. "One bite of blue grama; six bites of kosha without flower..." The research team even went as far as putting a hole in the side of a bison, so they could reach in, pull out the contents of its stomach and examine it under a microscope.

Once enough data was gathered, Van Dyne used it to construct a vast and intricate computer model that simulated the interactions going on amongst the flora and fauna of Colorado's grasslands. As fellow Dr Dave Swift explained, "Every species had its own

sub-model that then was linked through feedback loops to other species and their sub-models. This grasshopper sub-model tells us what's going on with grasshoppers...there was another model for birds, for small mammals and other potential predators of grasshoppers...That sub-model then feeds that information to this sub-model...to predict the death rate of grasshopper eggs for that day".

All this vast, intricate and interconnected data was fed into Van Dyne's computer model, and it was then launched to see what results it would return. Again, it was not the outcome that was expected. No stable, underlying pattern emerged.

Still not ready to abandon the dream of a balance of nature, Van Dyne decided that the problem was lack of data, and so he and his team worked even harder, sometimes all through the night, feeding more and more information into the model. But that did not correct the problem; it just made it worse.

If we return to the work of Howard and Eugene Odum, it should become obvious why the "Colorado Experiment" could never have returned the expected results. They, you will recall, had written 'The Fundamentals of Ecology', the Bible of the movement, that apparently showed how natural systems stabilise themselves.

But they had begun with the assumption that natural systems had to tend toward equilibrium, and then had set about ruthlessly simplifying Nature so that it could fit their equations. In feeding great masses of data into his model, Van Dyne was not creating a fantasy of natural stability (as the Odums had actually done) but rather reproduced the chaotic instability that actually exists in Nature. Far from confirming that ecosystems, via feedback loops, follow "the great universal law of equilibrium", Van Dyne's efforts actually spelled the end of the systems theory that had reigned for some fifty years.

According to Dr Stewart Pickett, "the balance of nature is an illusion and we hold onto it so tightly in our culture. That is so completely counter to what contemporary ecology tells us...we live in a very dynamic world. We have to replace that assumption of the balance of nature. You have to discard the myth".

Perhaps he should have said, "you have to discard the mythstake", because by now the "balance of nature" idea had clearly suffered the same fate as the belief that money's origins lie in barter. In both cases, people went out into the real world with the intention of showing how such ideas worked in practice, and all they ended up doing was showing there was actually very little evidence backing such ideas, and a great deal of evidence showing they could not possibly be true. Nevertheless, such ideas, refuted though they were, continued to hold a dominant position in popular imagination. The dream of the self-organising system was just too appealing to let go, and so we clung to it and ignored the fact that the theory underlying it had been completely overturned.

Nor were these falsifying results restricted to ecosystems with the dream of self-correcting markets left untouched. For, as Harvard researcher Jonathon Scheffler explained:

"Beginning in the 1870s, theorists sought to build a model of the invisible hand. They wanted to show how market trading among individuals, pursuing self-interest, and firms maximising

profit, would lead an economy to a stable and optimal equilibrium. Those theorists never succeeded. Quite the contrary: in the early 1970s, after a century of work, they concluded that no mechanisms can be shown to lead decentralised markets toward equilibrium, unless you make assumptions that they themselves regarded as utterly implausible”.

So, by the 1970s and certainly by the 80s, the idea that ecosystems and markets should be self-correcting and capable of maintaining a balanced state had been exposed as total falsehoods. But the Asian Miracle had come about because powerful people still had faith in such concepts, and they were preventing those aware of the fundamental flaws from warning the President with the hope that would change current strategies. And so, the Southeast Asian bubble kept growing.

## CHAPTER FORTY-NINE

Let's now return to the 1990s and the rise of Southeast Asia's financial sector. What really started this ascendancy was the Thai government's response to all the capital that was flooding into the country in 1993. It was decided that the best thing to do would be to transform the capital, Bangkok, into an international financial centre capable of competing with Hong Kong and Singapore.

But how could such a transformation be brought about? Well, there was a tried and tested method for turning a capital into a finance-friendly environment, and the Thai government stuck to this formula. Regulations in the capital market were changed in a way bankers and financiers would like, tax incentives were introduced, and the government promoted the creation of a whole financial industry.

What resulted from all this was Bangkok's transformation into a financial centre that specialised in foreign lending operations, which basically involves borrowing capital, nominated in international currencies, and then channelling it into all manner of investment projects in local currency.

This specialisation turned Bangkok into one of the great gateways to the economies of Southeast Asia. But there were troubling signs right from the start, had anyone cared to look. What Bangkok actually had was a financial centre with little expertise in that field and, furthermore, this novice financier had ineffective regulations overseeing its operations.

And what those operations were doing, was taking the money that was pouring into the country and investing it (if that is the right word) in projects, many of which had little chance of ever being profitable.

This all seemed crystal clear after the crisis that was to come. Post collapse, the IMF found that between fifteen and twenty-four percent of loans were in what is known as an “erratic situation”. That means that not only did this “great financial centre” have trouble repaying its debts, it could not even keep up with the interest payments that came with those loans.

Now, default rates of twenty-four percent should have been high enough to cause serious concern, if not alarm, among analysts. So why weren't financial analysts sending out warnings before things got as bad as they did?

Well, as we know by now, banking and finance just loves to hide its scams through book fiddling and lack of transparency. The figures that would have raised alarms had they been in plain sight for all to see did not appear in the banks' annual accounts. A combination of weak financial rules, poor supervision and lack of experience resulted in loans in an irregular situation being refinanced without being classified as dubious, so on paper things looked good.

But what about the difficulty of repaying interest (let alone the debt itself)? Well, remember, that the big boys in Capitalism get to treat debt in ways that are different to the rest of us. They get to treat loans like gifts that are not seriously intended to be repaid. So, not only were the books fiddled to make it seem like lost interest payments had been accounted for, these companies that were getting deeper and deeper into financial trouble were lent even more money, not to invest in anything but just to pay off the interest they already owed on previous loans.

In other words, for a time, Thailand got to live the dream of the ultra-wealthy; of being able to treat debt as inconsequential. To live such a dream is to seem to have money for everything which, in a way, you do. After all, money is relational, a creation of interpersonal belief. Western capital was pouring into this region, the price of assets was going up and up, and all kinds of investments were being funded. But the export industry had created a huge overcapacity, and what that resulted in was a great deal of property investment and public works with scant chance of ever being profitable. But, so long as the capital kept coming and the books were suitably fiddled, the dream could continue.

Of course, like all bubbles, this one could not keep inflating forever. The dream started to dissolve away once the United States began to recover from its recession. Noticing recovery was happening, the then Federal Reserve chairman, Alan Greenspan, raised US interest rates. Since it was low interest rates that made Southeast Asia seem like such a great place to redirect capital, Greenspan's move meant the region looked a great deal less attractive.

Also, raising interest rates in the US led to an appreciation of the dollar. Not only did the dollar appreciate, so too, inevitably, did the currencies of all the Southeast Asian countries that were pegged to the dollar by a fixed exchange rate. That was not a bad arrangement per se. Indeed, this was what made these countries seem so attractive to foreign investors. But the appreciation of the dollar and of the currencies pegged to it with respect to other major currencies like the Yuen, meant places like Thailand lost their competitiveness.

Speaking of the Yuen, in 1994 China devalued its currency by more than thirty percent. This resulted in export growth to Southeast Asia dramatically slowing down. Consequently, the export sector, which suffered from overcapacity to begin with, became even more imbalanced, and what that did was to make projects of dubious quality seem even less viable.

And still that influx of capital kept coming. This, combined with the loss of export momentum, had a dire effect on Thailand's current account balance, namely the difference between income and payments to the world, registering huge deficit levels.

This growing deficit level had been financed through foreign debt. By 1996, that foreign debt had grown to 165% of the countries' GDP. That was a very precarious state to be in, like a Jenga Tower of bad debts that only needs a slight nudge to send it toppling. On the 2nd of July, 1997, that nudge happened.

During the Dreamtime, the dubious methods outlined above boosted on-paper profits, saw financial institutions distribute dividends and give away huge bonuses. They even managed to pay their taxes. A fun party, no doubt, but one that was financed with more and more debt. But that was OK, because Southeast Asia was in the elite club that gets to treat loans more like gifts than debts.

Until, that is, on July 1997, when Thailand was suddenly out of that club. Now, just like the rest of us, those loans were treated as debts, debts that the foreign investors now insisted had to be repaid. So, whereas before Thailand got to pretend like it all had all the money in the world, now it was obliged to behave like it had hardly any money at all. The country, which hitherto had specialised in raising capital from the rest of the world, now found, between, March and June 1997, that it had to secretly create money in its central bank so as to provide liquidity to the country's financial institutions at bargain interest rates.

That move could only last for as long as Thailand could pretend to have international reserves. But it could not keep up that pretence for much longer, and soon they had to pretend that those international reserves had been consumed.

Then, on the 2nd of July 1997, the Thai government was forced to make an announcement. The fixed parity of the Baht (Thailand's currency) would no longer be pegged to the dollar. Whereas before they got to pretend that Thailand's currency was backed by the currency of the most powerful nation on Earth, now they had to pretend that it was backed by nothing at all.

As you can imagine, all those hundreds of thousands of apartments and offices that had been built became completely unaffordable. Nobody wanted them, and so the developers went bust and defaulted on their loans. As a result, the thing that Stiglitz warned would happen did happen. Wild optimism among Western investors turned into panic, and they rushed to get their money out of the country.

In 'material' terms, bringing about the end of the association of the dollar was akin to removing a structurally vital component of the Jenga tower of debt that the Baht had become, and so the structure collapsed. In relational, interpersonal terms (that are, arguably, closer to money's true nature) a currency which was once imagined to have immense value was now imagined to have none at all.

However you care to think about the results, the consequences were the same. It did nothing to improve Thailand's situation; indeed, it had the opposite effect. The reason why was because, although the Baht was no longer pegged to the dollar, the banks that held what was now being treated as debt had taken out loans in dollars. To be more precise, its liability was denominated in dollars and its assets in local currency. The creditors to whom this debt was owed insisted on being repaid in dollars and certainly not in the now worthless Baht. But

the default was just too big and Thailand could no longer pretend it had the ways and means to cover its debts.

What happens in Vegas stays in Vegas, so the saying goes. But once the Thai financial bubble burst and the collapse began, the crisis did not stay confined to that one country. Rather, the panic spread. South Korea was the next country to be affected. Its citizens did what they could to prevent disaster. Korean housewives queued to give whatever spare dollars they had to the government in order to rescue the country. But, as you can imagine, this was a pathetic gesture, given the scale of the crisis that was unfolding.

Then, another creditor stepped in, offering assistance, one immensely more powerful than a collective of Korean housewives. It was the IMF. The organisation sent teams to South Korea and Southeast Asia, teams that brought enough dollars to rescue the countries and stabilise their stricken economies.

Not that they handed out this money without expecting something in return. That something was pretty much the conditions attached to the money the IMF had lent to Russia. South Korea was told that the crisis had happened because Asian countries were not Western enough. The loans would only be granted if those economies promised to turn themselves into models of the free market. This would involve cutting government spending and getting rid of nepotism and corruption among the countries' ruling elites.

Of course, corruption and nepotism are the sort of practices one would want a country to be rid of. But in this case the countries in question were made to take their medicine no matter what the cost. What happened in Indonesia is a prime example of what that meant.

At the time, Indonesia was under the rule of President Suharto (1921-2008). Actually, "Dictator" would have been a more appropriate title for him. He had led Indonesia as an authoritarian regime since 1967, and for thirty-one years he had headed what many considered as one of the most brutal regimes of the 20th century.

It was also a regime rife with corruption. President Suharto had surrounded himself with a clique of advisers and family members. Having transformed what began as an oligarchic military dictatorship into a personalisation authoritarian regime centred around him, Suharto might well have looked like one of those leaders who, unfortunately, is too well protected to ever be ejected from Office.

But then, he made a fatal error, which was to refuse to do what the IMF wanted. This refusal prompted the IMF to turn to Robert Rubin who, at that time, was the Secretary of the Treasury in the Clinton Administration. By now it was clear that a financial crisis was rapidly developing in Southeast Asia, and Rubin and the Treasury team believed it was a crisis that could not be solved unless Suharto was either forced to bend to the will of international financiers, or his regime was overturned.

We saw earlier how Ayn Rand's cult of personality had been undone (at least in part) by an affair. The Clinton Administration was no cult of personality, of course, but it too was brought down because its leader had an affair. With Clinton distracted by the crisis that was developing over his affair with Monika Lewinsky (b.1973), more and more power was being

passed to Rubin and the Treasury team, until it was effectively they who were running America's foreign policy. Above all, they judged everything by asking "does this constitute a threat to the global economic system?". In Suharto's case, it was decided the answer was "yes".

Western banks therefore decided to remove subsidies from Indonesia. As a result, prices in the country soared and, within a matter of months, economic output fell by 14% and 15% of the male workforce lost their jobs. It was a dire economic situation, one which forced Suharto to give in to the IMF's demands.

And so, in January 1998, while being watched over by its head, Michael Camdessus, Suharto signed the IMF's agreement. With that done, Indonesia received the massive loan which was intended to stabilise its troubled economy.

Did it succeed? Yes, but only for a moment. But then something happened which seemed very strange indeed. Indonesia's exchange rate underwent a disastrous crash, and this event resulted in its economy going into free fall.

A strange coincidence? Had it been only Indonesia that suffered this fate after having received a massive loan, one might believe so. But such a fate was not Indonesia's alone. Every country that the IMF bailed out suffered the same consequences: Momentary stability followed by a collapse of the exchange rate and a ruined economy.

Clearly it wasn't just a coincidence, as the same thing was happening again and again. But why? Rubin and the Treasury team had critics in the White House, and they believed the reason things turned out this way was because there was a greater agenda behind these bailouts.

Officially, the bailouts had been intended to bring about economic stability. The critics, though, argued that they were intended, above all else, to rescue the Western investors who had helped inflate the speculative bubble in Southeast Asia. Support for such an argument could be seen in the way many of those same dollars were immediately used to pay off Western investors who wanted to get their money out of the troubled countries.

The money was fleeing, but not the debt from which money is always created. Having bailed out Western investors, the unfortunate citizens of those countries were left even deeper in debt, because now the taxpayer of those crippled countries had to repay the IMF. That meant massive cuts to State funding and a catastrophic economic crash which, by 1998, had forced millions back into the poverty they hoped would never return.

Why had Clinton become President? Because he brought with him a vision, a vision of using political power to transform America. But, once he became President, he heeded advice from the likes of Rand's disciple, Alan Greenspan, and instead gave away much of that power to the financial markets.

It was not supposed to be a surrender, but rather a trade. The deal was that, with their new powers these markets would deliver a new form of stability and a new form of democracy, one free at last from the corruption of elite politics.



What happened in Southeast Asia should have been a warning, a dark foreshadowing of the 2008 crash. Why? Because it showed that, in reality, there had been no transformation of power, only a transference of power from one elite to another. We have seen again and again how easy it is to move back and forth between Total Marketisation and Total Bureaucratisation, and what happened during the time of the Southeast Asian bubble is another example, because political power was transferred to the financiers of Wall Street.

What did they do with that power when faced with a crisis? They used it to rescue themselves. Such a move hardly helped bring stability to the world; instead it was creating a more chaotic and unstable world. As far as the leaders of those Asian countries were concerned, the promise of a new kind of democracy built on market stability was, in actual fact, just as much a corruption of power as anything the likes of Suharto had been guilty of.

It's fair to say, then, that, by the late 90s, the scientific basis for the idea of the self-organising system was completely discredited. The theory behind equilibrium in Nature and self-correcting markets had been shown to be based on deeply flawed assumptions, and the dream of self-correcting markets had turned into a disaster for Russia and Southeast Asia.

But such failure did not seem to do much to prevent the growth of the idealistic vision of the self-organising system. It was one of those beliefs that appeals, regardless of whether or not there is any evidence to support it. As we have seen, there is in fact little credible evidence behind the theory, but the political and social situation of the time was one that encouraged its adoption. According to documentary maker Adam Curtis, "the reason was that, in an age of mass democracy where the individual was sacrosanct and politics discredited and distrusted, it offered the promise of a new egalitarian world order".

A promise, yes, but surely a false one? Hadn't the situation in Southeast Asia shown, yet again, that self-correcting markets could not work in the real world (at least, not without causing catastrophic social harm)?

But then, near the start of the next Century, events happened that seemed to give good cause for re-awakening dreams of self-organising networks. This began in 2003 with a wave of revolutions that swept through Asia and Europe. The capitals of such countries as Georgia, Kyrgyzstan and the Ukraine were flooded with angry crowds that forced the corrupt leadership from power.

Who, though, was leading these revolutionaries? When journalists looked into the causes behind such movements, they found that, in each case, there was no leader. What had happened instead was that the Internet had brought these people together. There was no guiding ideology uniting them, other than a desire for self-determination and freedom.

Soon a belief developed, one that saw these revolutionary moments as the realisation of the hope that Californian computer utopians had held since the 60s. They, you will recall, had been driven by the belief that, once personal computers were interconnected into a global network, the experimental communes could be expanded, thereby bringing about decentralised societies built on a global scale.

Now, finally, in the 21st century and the rise of social media and even more 'personal' devices in the form of smartphones, that vision seemed to be coming true. When, in 2009, Twitter and Facebook played a key role in organising protests, Al Gore (b. 1948), former vice-President of the USA, was convinced that it represented something exciting and new. "There was a lot of excitement in the ability of individuals in Iran to connect with a global audience and with their peers in Iran to build a political consciousness in support of democracy", he reckoned. "It represents the emergence of a completely new information ecosystem".

The dream of the self-organising network was alive once more. Would it finally deliver on its promise of a new and better form of democratic power? In 2008 the world got the answer to that question, and the way was paved for the strange world we now find ourselves in.

## CHAPTER FIFTY

What with Southeast Asia in economic ruin and the cult of Ayn Rand dwindled to pretty much nothing, one would be forgiven for thinking that neither would play much of a role in our story from now on.

But such thinking is wrong. In the late 20th/early 21st century, both Asia and Ayn Rand would, in one way or another, have big influences on the world.

Take Ayn Rand, for example. In a way, she had an influence on how the USA responded to one of the country's darkest days. On the eleventh of September, 2001, political Islamists driven by a hatred of the radical individualism that Western politics stood for, launched a series of assaults on the USA, the most dramatic of which was crashing passenger jets into the Twin Towers of the World Trade Centre.

A week later, American markets re-opened. It was an anxious time for Wall Street traders. How would markets react to global footage of one of Capitalism's most totemic monuments collapsing into ruin? The answer was not a positive one, because the markets suffered the largest fall in history. And more bad news was to follow because, just two weeks later, it was revealed that a vast corporate fraud, such as the Enron scandal, had been going on since the early 90s. Many major corporations had been behaving much like their Southeast Asian counterparts: Hiding their debts, faking their profits, and assisted in these scams by the major accounting firms.

With so much scandal and a very high-impact terrorist attack doing so much physical, social and psychological damage, it must have seemed like only a superhero could save the American economy from collapse. It turned out (at least, apparently so) that there was a heroic figure, ready to take risks that would, so people assumed, rescue the dire situation.

Who was this hero? It was none other than Ayn Rand's loyal disciple, Alan Greenspan. As chairman of the Federal Reserve, he took the dramatic step of repeatedly cutting interest rates. Why did he do that? Because he believed such action would encourage consumers to borrow and spend, and that such activity would stabilise the system.

But there was an enormous risk to this calculation, as economic history showed. Greenspan had cut interest rates to just shy of zero, and that had resulted in a flood of cheap money pouring into the country. Whenever that had happened in the past, it had led to inflation and dangerous instability. Why should this time be any different?

It turned out, though, that things were different this time. As he had hoped, Greenspan's actions led to a consumer boom, the likes of which had not been seen before. But everything remained stable and the dreaded inflation never occurred. Soon, it was being argued that this could only mean the best possible news for believers in free-market Capitalism. Finally, in the 21st century, we had built an economic system that could manage itself without direct political control.

But what was not understood was that direct political control was very much responsible for the stability, just not American politics. Thousands of miles away, there was a giant exercise of political power being run by a vast bureaucratic elite. Who were they? Why, none less than the Asian countries led by China. The Southeast Asian bubble had taught Asian rulers that modern corporate Capitalism could put their countries at the mercy of the West and its financial elites, and they were determined that such a fate would not befall them again. And so the Chinese Politburo set about finding a way to manage America.

The system they developed (with the help of the USA's corporate elites) was one that ended a policy that the USA had held since 1789. This was the insistence that essential goods and services should either be produced in America or, if multinationals wanted to offshore the production of critical goods, their operations would have to align with US interests.

All of which sounds like the sort of policy you would want to keep. But not everybody felt that way, because from 1993 onwards various deals were cut that wrecked this system.

Readers with good memories may recall that I said former economic/political practices never completely die out. We have already seen how a form of feudalism is in operation in the top tiers of banking and in the entertainment industry, for example. In between feudalism and capitalism we had mercantilism, which basically entails a breach of price-integrity with the expectation that this will change the way money and opportunity are flowing. This effect is achieved under mercantilism by interest groups within a nation rigging the country's own currency and tax code so that foreign investment is lured away from one's rival countries.

By 1994, China was evidently practicing a form of Mercantilism. For one thing, it had devalued its own currency (the Yuen) by about 60%. Because Chinese currency now had less than half its value, the effect that had on American-made products was to make them look more than twice as expensive the world over. Just as one hopes with mercantile practices, following the devaluation a flood of foreign investments and jobs arrived in China. Among those looking for opportunity in this Communist country (as the West loves to label China) were some of the USA's largest corporations and banks.

Devaluing its currency was not China's only strategy. This was the period in which China got into negotiations with the USA in order to win most favoured nation status. With that deal struck, the USA had to deal with China on the best possible terms. So, not only were there

huge tax and currency incentives luring American companies to China once they got there they could rest assured they would receive excellent treatment.

So that's all good? Well no, not exactly. What these policies did was to bring about a huge and unnatural price disparity between the two countries. When an American citizen bought a good made in China, the US government taxed that import at the rate of 2.5%. But what happened in the reverse case in which a Chinese customer bought something made in America? In that case, the Chinese government slapped a 25% tax on the product.

Since the Chinese government charged ten times the tax for American imports, many Chinese people found it made much more sense to choose domestic products over American imports. Also, because the taxes were so low, US companies saw it made much more sense to run their operations in China and sell the produce to America, rather than manufacture and sell everything within the USA's own borders. So, what US entrepreneurs were doing was investing in Chinese markets, creating jobs in the Chinese economy and stimulating Chinese growth.

With the Chinese currency held at a deliberately low rate, exports from this country were cheap and so a flood of Chinese goods were entering America (what also made the products cheap is that the Chinese deliberately turned whole cities into factories dedicated to turning out massive quantities of a particular product, and this ultra-mass production made these commodities very cheap indeed). In paying for these goods, American consumers were causing a flood of dollars to head in the opposite direction.

Now, it's what China did with all that money that explains the real reason for the stability in American markets following Greenspan's move. Rather than spend that money on its own population, what the Chinese politburo did was it immediately lend the money back to America, by buying government bonds. In short, this was a system intended to keep a flood of cheap goods and cheap money flowing into America, and all controlled by the Chinese politburo. That is what had really created the stability, rather than the magic of the market.

The downside of all this was that real jobs would continue to be lost as businesses opened up their factories in China. According to the US Bureau of Labour Statistics, whereas in 2000 some 17.1 million people worked in manufacturing in the US, by 2011 that number had dropped to 11.7 million. Whereas American workers thrown out of lost work were probably finding re-employment in more precarious gig work or maybe bullshit jobs (this likely leading to compensatory purchasing to make up for a loss of meaning in work) the Chinese manufacturing sector was growing enormously.

Still, for a while everyone was happy. Consumers were happy to get lower prices at Wal-mart, and corporations were happy making easy money while having to deal with far less workers' rights. As Stephen Pearlstein of the Washington Post put it, "Americans acquiesced to this off-shoring because it fattened corporate profits, lowered consumer prices, and fit neatly with a free-trade free-market consensus among the economic elite".

Eventually, when the negative aspects of this deal became clearer, accusations of China taking jobs from Americans were banded about. But such accusations were based on a

misunderstanding. The Chinese politburo had not stolen these jobs; those jobs had gone to China thanks to the choices made by multinational companies.

As Duncan L Hunter (b. 1948) explained, “for practical purposes, many of the multinational corporations have become Chinese corporations. They like the fact that they are subsidised by their new government, which is China, and that they are able to push American products that are made in the US off the shelves”.

Thanks to the manipulations of tariffs and the country’s currency, the Chinese politburo created a business environment in which having products manufactured in America was no longer the most profitable thing to do. No, the way to big bucks was to behave like a kind of trading pirate. Dylan Ratigan put it like this. “America gets the bragging rights for Apple, but China gets ten times the Apple jobs”.

Apple got something out of this arrangement too, which was the freedom to run its plants in a place where safety, labour, environmental and consumer protection laws resembled the West in the 19th century. At plants like Foxconn, the working day lasted twelve hours a day and there was no such thing as a weekend. Those long hours were spent doing dreadfully rote, repetitive tasks. The compensation for this work? 75 cents an hour.

US-based multinationals profited from such conditions in various ways and that gave rise to a phenomenon that seemed very appealing to the president of the Dallas Federal Reserve bank. What phenomenon was that? Disinflation. The big names in American industry- such as General Electric, John Deere and Caterpillar, were investing far more in China. The banks of America were lending capital to China, rather than lending to the American people who subsidised them. As the CEO of the Dow Chemical company observed, “US companies- run by patriotic people- are moving offshore at the fastest rate in history”.

The reason why the president of the Dallas federal reserve bank found this situation so appealing is because the more real jobs moved to China, where the pay was so low and worker-protection laws all but nonexistent, the more that created an environment in which American workers were weakened politically. After all, if there is a situation in which disgruntled workers would think twice before striking for better conditions and pay, it is one where it is difficult to find another job and where the choice comes down to accepting a pay-cut or reduction in benefits and everyone, workers and bosses alike, knows that’s the situation. As Dylan Ratigan (b. 1972) said, “not only do [those businesses] pay Chinese workers extremely low wages but they also build leverage to lower wages and limit the rights of their own employees”.

Bad news for workers, yes, but all good from the perspective of capitalists drunk on short-term profits. If more proof were needed that this was the form of globalisation they approved of, that came in March 2006. That was when the Chinese government proposed a new labour law that, if passed, would have led to a moderate improvement of working conditions. Since diverting money away from profit and toward investment in better conditions affected the bottom line in a way they did not like, US-based businesses like Wal-Mart and “do no evil” Google lobbied against the law, and issued threats to run their plants in Pakistan or Thailand (where, presumably, the exploitation could continue) should the hated law be passed.

So, that was the true nature of the global system that kept Western economies stable: One which saw real jobs disappearing as multinational companies took advantage of low wages and weak Union protection in China, and where cheap Chinese goods and money flooded into America. To all intents and purposes, this was much the same system that had led to the Southeast Asian bubble of the 1990s, only what existed in the early 21st century was the mirror image of that system. Just as before, what resulted was an orgy of lending, aided by that Gospel of Wealth message pumped out by corporations and megachurches, with credit-ratings redefined and redefined again until it seemed there was nobody banks would not lend money to. As in Southeast Asia, much of that borrowed money was used to speculate on property and so, once again, a property bubble began to grow and kept on growing. One economist reckoned, "it is as if a trillion dollars has been recycled to a 3rd world developing economy that exists within America's own borders".

For many people during these giddy times, houses were no longer to be seen as homes in which to raise one's family, but vehicles for investment, somewhat like an ATM machine that dispensed free money. Such attitudes were merely a reasonable response to the effects of Greenspan's move following 9/11. Interest rates had been lowered so that, whereas at the beginning of 2001 banks paid 6.25% interest on the money they borrowed, by the end of that year it was down to 1.75%.

This cut in interest rates had been undertaken because it was feared that the American economy faced collapse following 9/11 and the financial scandals such as Enron. But the economy did not really need propping up, as could be seen by the fact that, within two months of the Twin Towers collapsing, the stock exchange was back at a higher level. Nevertheless, fearful that higher interest rates might halt that rise, the Fed continued to cut interest rates until the benchmark rate was just 1%.

It stayed at 1% for a year, and even when the economy was booming, the interest rate only crept up by tiny amounts. What all this resulted in was a situation in which, for two and a half years, borrowers found that inflation reduced the value of their loans by more than the total cost of interest. No wonder so many people got suckered into property speculation; these were times when borrowing was not just free, you were effectively being paid to borrow. And while short-term loans stayed low, long-term rates, being affected by other factors, never dropped lower than 3.5%. Therefore, one found oneself in a particularly profitable position if one took out short-term loans and lent the money long-term.

Sure, it was a position that came with risks. The people who issued that short-term loan could have decided, all of a sudden, that they wanted their money back. They could also decide that, this time, they would not renew the short-term loan. Both scenarios would spell disaster for anyone who had passed that money on to others, promising no repayments would be necessary for a long time.

Unfortunately, a great many people had made such promises, lured into doing so by a belief that comes with every speculative bubble. That is, the belief that, this time, things are different. The system is stable and self-correcting and so the bubble will not pop, as happened with the flawed economic systems of the past.

And, yet again, this faith was to prove unfounded. In 2008 the bubble did burst.

## CHAPTER FIFTY-ONE

So far we have been discussing historical events and philosophical or political beliefs that, in one way or another, led to the financial crash of 2008. These included the mythstake of barter, which tells a false story of money's origins, one far simpler and sanitised compared to the messy, complex, and often brutal reality.

Related to the myth of barter we also have Arthur Tansley's idea of the 'ecosystem', said to be run according to the "universal law of equilibrium". Cybernetics took that concept, added "feedback loops", and then the Californian Ideology spread the belief that commercial markets should be self-correcting, just as ecosystems were imagined to be.

The belief that markets can be self-correcting have led to societies attempting to reduce state regulation, but the Iron Law shows, again and again, that this always leads to more government interference, not less, as has the fact that "deregulation" means "changing the regulatory structure in a way that suits us", which can actually mean a dramatic increase in the amount of rules, laws and regulations, even though common sense definitions of "deregulation" obviously sees it as a way of reducing red tape. Other features of our (anti)economy that defy common sense include the inverse correlation between the social utility of a job and how well it pays, the rise of bullshit jobs, and the fact that, while banking, financial and corporate elites say they believe in the "free market", they run their businesses more like they are feudal lords enriching themselves through a process that's far more political and extractive than commercial and productive. This last feature of our (anti)economy relates to what Graeber has called "Total Bureacratism/ Total Marketisation", or the way that, thanks to the revolving door between corporate capitalism and governmental positions, it makes no sense to distinguish between the business and the State.

Given that last point, we might expect to find that same entanglement of State and private concerns as we get into the main causes of the 2008 crash. As we will see, to a certain extent this is true. We shall soon learn about systems of lending that are neither state-owned nor private, but a hybrid of the two. However, if we dig right down to the bare essentials of the 2008 crash (what Mark Blyth called "the...elements that I believe you cannot remove counter factually and still explain the crisis") we will discover that all these essentials lie firmly in the private sector. So let's start digging.

The first thing that needs to be understood is that the 2008 crash had a 'Generator', something that triggered a wave of panic and loss of confidence in financial markets, but that, at first, this loss of confidence was confined to a more informal part of this sector. This first wave of panic could not have threatened to bring down the entire (anti)economy without an 'Amplifier' which meant that what began as a run on this informal sector spread and spread until the whole system was threatened with collapse. As we shall see, there was such an 'Amplifier'.

But lets let's start at the beginning with that "Generator". The bank run began in that informal part of financial operations known as the "shadow banking system". This is a term

that covers any financial intermediary that carries out much the same operations as banks- borrowing, lending, and asset-trading- but does so largely outside of the strict regulations that banks must adhere to. Included among “shadow banking” operations are pawnbrokers, payday lenders, investment banks and mobile payment systems. If they all have something in common (other than all falling under the term “shadow banking”) it is that they are all in the business of funnelling finance to finance. In other words, they are not in the business of increasing wealth through improvements to productivity; rather, they “make money” by moving money around financial markets.

One part of the shadow banking system that played an essential part in the 2008 crash was something known as the “repo market”. As everybody knows, businesses have to pay out wages and salaries, but how do they get the money to do that? Well, one way would be to get banks to send over enough cash to cover such costs.

However, that would be a very inconvenient way to go about paying one’s workers, particularly in the case of big businesses whose employee bill can run into thousands of millions. We would be talking about long convoys of armoured vehicles trucking in vast quantities of cash. Unsurprisingly, business found a far more convenient means of getting the money to pay wages and salaries, one which doesn’t involve the banks at all.

Instead of getting the money from their local bank, companies instead prefer to borrow and lend money to each other over very short periods at very low interest rates. This system of borrowing typically entails swapping assets for cash and then, the following day, those assets are repurchased for a fee. So, since this part of the shadow-banking system “makes money” through a system of sales and repurchases, its known as the “Repo Market”.

The ‘Repo Market’ emerged in the 1980s and was one result of a process known as “Disintermediation”. That term refers to a disruption to the traditional role that banks had played. According to this traditional and familiar view, banks are the ultimate middle-men. They act as intermediaries, sitting in the middle of somebody else’s business, and there they are positioned to connect borrowers and lenders and so help capital flow. In return for rendering this service, they get to charge a fee, which comes in the form of interest payments.

By the time we got to the 20th century, banks had fine-tuned their middle-man status, to the point where it was a safe, steady position to be in. More maverick speculators also derided it as dull, coining the term “3-6-3” banking. What banks did, according to this term, was borrow at 3 percent, lend at 6 percent, and by 3pm it was time to close up and enjoy a round of golf. Today there are sometimes complaints about automated banking services that delay the moment when one gets to talk to a real human being, but there was actually a time when banks were only open at times that made it almost impossible for anyone working 9-5 to use their services.

That safe, steady and dull position that banks were in was disrupted by the deregulations that swept through financial markets in the 1980s. Among other things, this change to the regulatory structure of finance meant that large corporations could bypass banks and lend those resources to one another directly. That is to say, they disintermediated.



As you can imagine, the effect that this disintermediation had was to put the squeeze on banks' profits. 3-6-3 banking was further squeezed by securitisation. Under the old 3-6-3 model, it was presumed that when a bank issued a loan to somebody, that loan stayed on its books until such time as both interest and principle were paid off.

But then a bright idea was formed, one which saw there was something else you could do, other than hold onto the liability of a loan and collect interest on it. Instead, you could separate out those loan payments and sell them onto somebody else. Certainly in the case of major banks, they had thousands and thousands of loans on their books. This new idea of securitisation recognised that you could take these many loans and bundle them together into packages that could be sold to anyone willing to accept the risk that came with them. In the case of mortgages, the process of bundling this type of loan together created a pool of mortgage payments. That was then sold to investors as a kind of income-generating contract known as "mortgage-backed securities".

Securitisation was a threat to the old ways of banking, but it also represented an opportunity. Above all, it appeared to be a way of reducing risk. After all, having packaged up and sold those loans on, they were no longer on the banks' books. So, since the risk associated with those loans had been offset by selling them on, the banks were in a position to borrow cheaper and make more loans. That, in turn, meant more people qualified for loans, since they were able to take advantage of the fact that securitisation enabled banks to dish out more loans at cheaper rates.

It seemed like a win-win situation. Banks were offsetting risk by bundling loans like mortgages into securities that were sold to the players in shadow-banking, and huge fees could be earned by those adept at this game of moving existing money around. Also, more and more people were able to get loans, including mortgages that gave them a shot at home ownership.

But there was also a problem which went largely unrecognised. Basically, risk offsetting was mistaken for risk reduction. The risks inherent to those loans had not really disappeared, though. Instead, they just got pushed elsewhere. More specifically, the process of selling on loans led to mortgage-backed securities concentrating their risk in short-term repo markets.

Why did they end up there, of all places? Well, that all had to do with one of the regulations that traditional banking has to follow. It is a peculiar practice of banking that the terminology used hardly ever matches common sense definitions. Take the word 'Deposit' for example. Common sense tells us that making a deposit means you are entrusting that bank to hold onto your money and keep it safe until such time as you wish it returned to you.

But what you are really doing, when you "deposit money", is loaning the bank that money. Once "deposited", that money is no longer legally yours. It belongs to the bank, and they may do whatever they want with it (so long as it's within regulations or they avoid getting caught if not). Your bank statement does not really tell you how much money you have in the bank; rather, it tells you what the bank owes you.

Now, lending money entails risk. Thankfully, when you or I “deposit” money, that loan is covered by a guarantee (in the USA its known as “Federal Deposit Insurance”) that means even if the bank should fail, you’ll still get your money back.

Things are different in shadow banking. This informal system escapes the onerous regulations that traditional banking must comply with. Among other things, this means that there is no deposit insurance in repo markets like there is in traditional banking.

How, then, do repo-market players protect their investments? This is done by receiving collateral equivalent to the money lent. So long as that collateral does not lose its value, the lender will still get her money back, even if the borrower goes bust.

The critical point, though, is that this guarantee works only if the collateral does not lose value. So, really, only high-quality collateral will do. The most obvious form of high-quality collateral to use was Treasury Bills, as that is backed by the full faith and power of the US government. Treasury bills were indeed used as collateral, but as the shadow banking sector grew and grew, that form of high-quality collateral was increasingly in short supply. Something else was needed instead.

That “something else” was AAA-rated mortgage debt securities, which explains how come mortgages ended up in the repo market. They seemed like the sort of high-quality collateral that could cover losses as well as Treasury Bills. After all, they came with a triple-A rating.

But then, in 2006, there was a decline in house prices. That decline hit the value of those mortgage-backed securities, and since they no longer counted as high-quality collateral, those holding them to offset risk were left with three options, none of which were all that viable given the situation that was unfolding.

One option was to find more collateral. But people were less willing to hold that collateral, so that was not easy to do. Another option was to seek higher-quality collateral. But if there were such alternative assets they were in very short supply. That left one more option, which was to take a discount on what you would get back. All of these options negatively affected the bottom line of shadow banking business.

This led to a situation in which players in this market found that the value of what they held and what they could offer had fallen, and as a result they had trouble posting collateral. Really big players, such as Bear Sterns and Lehman Brothers, were included among those who had such trouble, and it forced them to make an announcement that the big boys in banking never want to make.

What announcement? Well, as the value in mortgage securities fell, the company was forced to publicly say that it was not facing any problems. Over a century ago, one Walter Baghot (1826-1877) wrote a book called ‘Longbaird Street’, in which he pointed out that if a major financial firm has to publicly announce “don’t worry folks, we have no problems”, then investors should assume that there are problems and that the bank is no longer “money good”. At least, once such a public announcement is made, investors can no longer assume everything is fine, and so lending to that bank dries up as investors lose confidence.

The fall in house prices and increases in mortgage defaults resulted in Bear Sterns investments falling in value, and that meant its “collateral calls” (what lenders will accept to continue lending) rose. This all had a negative effect on Bear Sterns’ reputation, and as that fell so did the company’s capacity to borrow. This was a disastrous situation to be in, given how much debt the major players held, relative to their assets.

Banks have traditionally borrowed at short term. When you “deposit money”, remember, you are really lending the bank that money. You can redeem that loan on relatively short notice (this is what you do when you “withdraw” money from the bank). Now, when it comes to the loans they make, rather than the money they borrow from depositors, those loans almost always have a far longer maturity and it is harder to withdraw that money on short notice, as it is locked up in assets that are not so “liquid”.

Another thing that banks do is violate the sage advice of the Germans. They have a saying: “When you have two marks, spend one”. But fractional reserve banking is based on the principle that it’s possible to lend many more ‘marks’ (or whatever the currency is) than is actually held in the bank. The greater the ratio of assets (loans and investments out in the real world) relative to equities (the capital held in reserve as a cushion should hard times come along) is known as ‘Leverage’. The more levered up a financial firm is, the more debt it holds on its books, and the less of a ‘cushion’ it has.

During the run-up to the crisis, it was by no means uncommon for a major player like Bear Sterns to be running at thirty times leverage. With leverage that high, it only took a very small change in its asset values against its equity cushion to make the firm illiquid or even downright insolvent.

As securitised mortgages lost their value in 2006, that small decline became a reality. Those big banks that had been funding themselves through the shadow banking sector’s repo markets (this involved borrowing overnight and loaning that money out for much longer periods, practices that put huge amounts of leverage on their balance sheet) now found that their funding sources had disappeared. The repo markets were supposed to provide liquidity, but now, with things the way they were, it was hard if not impossible to find anyone who was willing to lend at normal rates, and so liquidity dried up. True, it’s not the case that all the banks’ funding dried up, but then it didn’t need to in order to cause serious harm, not when you consider how levered up those banks were.

Let’s return to that idea of fractional reserve banking that says you can loan out much more money than you actually have. This works so long as the bank’s customers behave normally, which means they only ever make partial withdrawals. If you think about your own behaviour and that of the people you know, you’ll see that this is indeed how we normally access the money entrusted to banks.

But, as ever, this rule comes with an exception. Sometimes a bank gets into trouble over its debts. There are two ways in which such trouble can come about. One is that the country’s creditors collectively refuse to roll over the bank’s short-term debts. The other is when depositors effectively refuse to roll over debt, which is what happens when they all try to withdraw all their money.

Sometimes, depositors do all try to withdraw their money at once. This is what happens when those depositors lose confidence in the creditworthiness of the bank (say, because it just publicly announced the bank is not in trouble). Then, a bank run ensues, as panicky depositors rush to withdraw their money.

Faced with its depositors trying to withdraw their money en mass, the bank now finds itself in a situation where it is liquidating assets under duress. Particularly in the case where the loans held by the bank are highly illiquid and idiosyncratic (a good example being money borrowed by local businesses about which the bank has better information compared to other investors) the prices received as it sells under duress will be fire-sale prices.

And now another problem tends to arise, one known as 'Contagion'. It's often the case that different banks hold broadly similar portfolios of assets. In normal times those assets may be relatively liquid, but unfortunately they can become highly illiquid, right at the time when the bank most needs them.

What happened in the shadow banking system is a good example of this unfortunate situation. All the players now found themselves with devaluing mortgage securities, and since they were all trying to cash out what were essentially similar assets, they were all attempting to use the same devaluing collateral in order to raise money. This inevitably led to a situation where some found they could not sell those mortgage-backed securities. But they still desperately needed to find the money somewhere, so they tried to sell anything else they could. That's what's meant by 'Contagion'. Having to liquidate at fire-sale prices can, given the conditions of a systemic banking crisis, lead to a far broader range of assets also being burned up in that "fire sale". In the case of the panic running through shadow banking, that included assets that had nothing to do with mortgages.

Sometimes a more appropriate term than "asset selling" is "asset dumping". When that occurs, when many investors are just trying to offload devaluing assets, the market may well find that it simply can't absorb the volume of assets being sold all at once. Once the market finds itself in a situation where that level of asset dumping is taking place, the fire-sale, which began as people rushed to avoid being the suckers who lost money during a time of uncertainty for the banks, turns the bank run and collapse into something like a self-fulfilling prophecy.

The more assets are dumped or sold at fire-sale prices, the more prices plummet, the more firms become too bogged down with illiquid assets and fold, which causes trust to diminish even further, which amplifies the panic to sell off assets at fire-sale prices. The weird thing is that, given how modern banking operates, it's always the case that there is not enough money to cover everybody's total deposits. But, normally, we don't let that reality drive us into a panic. No, we just assume that the money will be "there" as and when we need it.

The roots of economics lie in theology, and I would argue that we still have theological attitudes when it comes to banking, since the whole thing is built on a combination of mathematics and faith. We believe the money is there, and thus feel we have the right to invest, to build, and to consume. But, sometimes, our faith evaporates and, even though nothing material has really changed (the earth has the same resources as yesterday, and our capacity to work is unchanged) we believe that, since there is now "not enough money",

we cannot afford to invest, to build, to consume. Commodities remain on the shelves, now beyond the affordability even of people pushing wheelbarrows of money before them, and a belief forms in the mass consciousness of the populace that “the economy has collapsed”. Just such a situation happened in 2006, as faith in the shadow-banking sector evaporated.

At this point we should acknowledge that, so far, none of this can be blamed on the State. That some people do now blame the State for the debt stemming from this crisis shows confusion when it comes to cause and effect. I suppose you could accuse the State or other public regulatory bodies of not having the right regulations in place, but remember that private interests make plenty of donations to political campaigns in order to get those regulations passed (remember what “deregulation” really means). If politicians cave into the pressure lobbying puts them under, that’s hardly surprising given how relentless corporate Capitalism is at driving us towards Total Bureacratism/ Total Marketisation.

No, this crisis cannot be blamed on the State. Nor can the fault be said to lie entirely with a few “bad apples” (i.e, the moral failings of individual bankers). The multi-billion dollar panic that arose over defaulting mortgage-backed securities was a quintessentially private-sector crisis.

Having said all that, the story of the Great Recession is not yet fully told. The facts we have looked into so far are not sufficient if we are to explain how what began as a panic in shadow-banking turned into a global crisis. In order to understand how that happened, we need to talk about the ‘Amplifier’. That means we need to talk about the way the structure of those mortgage-backed securities combined with unbacked insurance policies called credit default swaps, and how all that led to something very bad indeed. That something was, according to Mark Blyth, “a correlation bomb that spread the repo market crisis into the global system”.

## CHAPTER FIFTY-THREE

The housing market is similar in some ways to the jobs market. How so? Well, for one thing, we find, across the political spectrum, an agreement that house building is a good thing, just as it is generally agreed that “more jobs” is a good thing. For the Left, reducing homelessness is seen as a way to reduce marginalisation and discrimination. The Right are in favour of home ownership because they see it as a way to build an ownership society and ensure employees have more of a stake in capitalism than would be the case for nomadic vagrants.

Also, just as is the case with jobs, there is a tension over how much property development there should be. This tension comes from two things. One is the two contradictory imperatives of Capitalism, which is to aim for infinite growth while ensuring scarcity never goes away. The other is the conflicting interests of buyers and sellers.

In the case of the jobs market, if you are a prospective employee trying to sell your wage-labour, you want the value of that wage labour to be high. It’s most likely to fetch a good price when there are plenty of jobs available and not enough people to fill them. That’s why those selling labour are not in favour of jobs disappearing overseas where labour laws are more lax, or high levels of immigration, as they both degrade the value of labour.

Conversely, for those buying labour, since they want it to be as cheap as possible, they do favour moving business to places where exploitation can be pushed further than other places with their frustrating laws protecting employees. They also favour a market with more unemployed people than jobs, and thus favour uncontrolled immigration. This is doubly the case if they happen to own property as well (which they always do) as demand from so many people entering the country and needing somewhere to live drives up the value of that property.

But, isn't the official position always one that sees "more jobs" as preferable? Yes but, paradoxically, that does not mean to say we all favour full employment. Some agree with Karl Marx that there should be a "reserve army of the unemployed" because, without that "reserve army", there would be too much upward pressure on wages and some of us don't like that.

The property market finds itself under similar conflicting interests. If you are looking for somewhere to live, it's in your interests for housing to be in plentiful supply, since if that is the case you're more likely to find affordable accommodation. But, if you are a property owner (and even more so if you own several properties, most of which are not somewhere for you to live, but a vehicle of investment) you are most likely not in favour of house building (at least not affordable house building), since a scarcity of affordable housing boosts the value of your property, puts more pressure on your employees who risk homelessness if they cannot keep up rent or mortgage repayments, and concreting over the countryside devalues your property and spoils your lovely view.

So, there is a tension, a conflict of interests, when it comes to housing. While there is agreement across the political spectrum that more people should get on the housing ladder, there is also, paradoxically, an attitude amongst some that property should be scarce enough to ensure the value of their property goes up. We all want more housing but we don't all want to end homelessness.

Regardless of whether the value of property is relatively low or high, it's nearly always the case that a home will be the most expensive purchase you ever make. Indeed, for most of us, it costs more than we can afford outright and so, if we are to get on the property ladder, we need financial assistance and maybe help from the government, too.

When World War II ended, all those civilians who did military service were able to return to their loved ones, and so eager were they to raise families in this new era of peace that soon there was talk of a "baby boomer generation". With so many returning soldiers wanting to start families, a huge demand for homes was created.

The challenge to build those homes was partially solved by the military itself. It had needed to provide housing for its servicemen and had developed high speed construction techniques in order for supply to meet that demand. After the war, a building firm called Levitt and Sons used those same construction techniques to build suburban rental homes.

However, more rapid construction techniques only partly solved the problem. In order to build enough homes, companies like Levitt and Sons needed access to enough capital to

purchase the land and building materials necessary to get the job done, but they had insufficient capital and so house building was not as rapid as it needed to be.

At this point, the government stepped in and offered assistance. Through the Federal Housing Authority or FHA, the builders were provided with the money needed to expand production. The FHA also insured 30-year mortgages up to 90 percent. Thanks to the FHA, now all it took to become a home owner was a small down payment. Yes, you had to repay that mortgage, but monthly repayments were \$58, which was pretty much what you had to pay in rent.

Since the residents of what became known as 'Levittown' paid back their mortgages, and the builders who provided these homes paid back their production advances, the State was not being charitable in its assistance. A more appropriate way to think of the government's role would be to compare it to the bank in the game 'Monopoly'. If nobody had any money when the game started it would be impossible to play, and so the money is just "there" to be handed out so play can commence. In the case of the FHA, they used taxpayers' money to make "commitments" to companies building those homes and, by insuring them, the state helped the banking system serve the overall economy with aligned interests. Thanks to this combination of rapid building techniques developed by the military, financial support from the banks and further assistance from the State, construction and purchasing of homes could carry on without delay.

Now, the key phrase in all that is "aligned interests", as that is essential to mortgages working to serve rather than defraud us. A bank is basically making a bet when it approves a loan such as a mortgage, which is that whoever is loaned that money will have sufficient creditworthiness to repay it, plus interest. With the right government support, the level of creditworthiness can be lowered so that more of us get a chance to get a foot on the property ladder, but banks still find it's in their self-interest to ensure loans, property and businesses are priced correctly. As for the person who took out that mortgage so as to purchase the house now rather than wait (maybe) years before they have the funds to buy it outright, since that home is put up as collateral and therefore they could lose it if they fall behind on repayments, it's in their self-interest to show they are worthy of the credit that the state/banks thought they had when approving the mortgage. According to Dylan Ratigan, "the banking system helped align the self-interests of all sides to ensure the productive movement of capital through the economy; this was a key to American prosperity".

State support in home ownership did not begin post-War. Rather, it was during the Great Depression of the 1930s that the first government projects to increase home ownership began. Back then, savings and loans associations couldn't develop a national market for mortgages as a way to spread risk, because they were not allowed to expand across state boundaries. So the President (who, at that time, was Franklin D. Roosevelt (1882-1945) ) founded 'Fannie Mae' or the 'Federal National Mortgage Association', in 1938. Thirty-two years later, congress established the 'Federal Home Loan Mortgage Association', which is usually known as Freddie Mac.

Both Fannie and Freddie operate in the conventional secondary mortgage market. They are not there to lend money to home buyers, that's still the role that banks play. Instead, once a bank has loaned money, players in the conventional secondary mortgage market, like

Fannie Mae, buy that loan. Since the bank has now sold that loan, its liability is no longer on its books and, since the bank has got its money back already, it can lend even more to other homebuyers seeking a mortgage.

Also, Fannie and Freddie would bundle mortgages and other loans into packages that would be sold to other investors, and in so doing more resources were freed up, meaning Fannie and Freddie could buy even more mortgages.

But Fannie and Freddie did not only come with the money to buy other people's debts, they also provided a guarantee to the investors: they would repay not only the interest but the principle too, should the borrowers be unable to repay. That was certainly a generous insurance, but, again, it wasn't exactly charity. Actually, Fannie Mae and Freddie Mac profited greatly from the fees they charged for providing that guarantee.

Now, when it comes to the part that Fannie and Freddie played in allowing the mortgage market to grow a speculative bubble, it's interesting to note that they appear to be different kinds of enterprises, depending on one's political bias. To the Right, Fannie and Freddie appear to be government corporations, and thus more proof that State interference in the workings of the market leads to no good. But to the Left, Fannie and Freddie are private businesses, and thus one more example of how such interests don't necessarily align with the best interests of society as a whole.

The reason why Fannie and Freddie seem like government corporations to some, and private businesses to others, is because, actually, they are both at the same time. They are prime examples of how, in this era of Total Bureacratism/ Total Marketisation, and the revolving door between Politics and Business, it's pointless trying to distinguish between the two. In the case of Fannie and Freddie, they are a hybrid of public and private, the technical term for which is a 'Government-Sponsored Enterprise' or GSE. Basically, that means they are privately owned, but come with an implicit Federal guarantee in case they should fail. That means Fannie and Freddie are the kind of enterprise that allow private owners to take on risks, pocket the profits if the gamble turns out well, but count on taxpayers to cover any losses.

Not surprisingly, then, some see GSEs as, potentially, a particularly dangerous sort of enterprise. But without them, plus a vast network of supporting financial institutions subject to federal deposit insurance and, finally, the fact that mortgage interest is tax deductible, the housing sector couldn't have existed on the scale it reached by the 90s.

By 1983, that network saw the introduction of the 'Collateralised Mortgage Obligation'. It had been invented by an investment banking team led by Larry Fink (b. 1952) at First Boston. This was the first of those mortgage-backed securities. The idea behind the CMO was that you could take many loans (by 'many' I mean several thousands) and bundle them all together into a single package to be sold on to investors. Right away, risk looks like it's been reduced, because so many households are included and while some may not pay back their loans, that risk is hedged by the others that will. As for the scenario in which so many default on their mortgages that the whole security is threatened, well that could be ruled out because, after all, who doesn't keep up on mortgage repayment if it's at all possible to do so?



Still, there was some risks involved in such securities, so Fink and his team came up with one more innovation to manage that risk. These CMOs were sliced into several distinct classes or 'Tranches', and then those tranches were given different ratings and yields, depending on how risky/secure they were.

At the 'bottom', and therefore carrying the most risk, you had securities with a Caa and Ca rating. In other words, pure junk. Of course, investors would expect something in return for holding such risky investments, and those returns came in the form of a far larger share of payments when the going is good.

Securities with a Ba or B rating were still in the "more risky than secure" range, but those with a Baa rating had an average risky/safe ratio. After that, you come to the 'top' securities that are deemed to have low risk. They get an A or, even better, an AAA rating. They were so safe, not only because those borrowers who took out such loans were so creditworthy (things like Treasury Bills got the AAA rating) but also thanks to the design of Fink's CMOs.

The easiest way to see how this works is to compare all the interest payments coming in to water from an irrigation canal. The further your crops are from the source of that water, the more risk you have of getting insufficient water, should the canal start to run dry. In the case of those mortgage-backed securities, even if a lot of households defaulted, the interest payments coming in would still be passed onto those holding AAA-rated securities (so, in our canal analogy, it's like having crops really close to the source feeding the canal). Holding AAA securities meant you would lose nothing until all the other investors lost their money (i.e, the canal runs completely dry). But, since the risk was so low, holders of AAA securities got a much lower return when the going was good.

The demand for these CMOs was high, and by the mid 1990s mortgage-backed securities had changed the whole structure of housing finance. People began to work as 'mortgage brokers'. Their job was to source deals for a new group of 'Mortgage Banks'. Having bought those loans from the brokers, the mortgage banks only had to wait long enough to have enough loans for Wall Street to securitise.

It was also during the mid-1990s that Fannie and Freddie changed focus. Whereas before they had focused on reducing the housing costs of the middle classes, during the Clinton Administration Fannie and Freddie shifted to low-income earners. So, in 1994, Fannie promised a "trillion dollar commitment toward providing 10 million low-income citizens with housing". The following year saw a tightening of the 'Community Re-investment act'. First introduced in 1974, the CRA was first enacted to reduce minority discrimination in the housing market. The CRA meant any institution covered by Federal Insurance (such as banks) had to provide mortgage loans throughout its entire region of operation, including poor areas. By 1995, any bank wishing to avoid a low CRA rating had to show they were issuing a certain number of loans to households earning less than 80 percent of the medium income. Banks were keen not to let their CRA rating fall too low because of another change that also occurred in 1995. In that year, banks became free to merge with banks in any other state. But since scoring a low CRA rating could prevent such mergers, and by now we were well into the era of mergers and acquisitions, banks had lots of incentives to obtain decent

CRA ratings. It was imperative, then, to show willingness to meet the needs of low-income earners, and the way to do that was to buy the loans granted to them.

Something else the amendment allowed for was the securitisation of CRA mortgages. This began in 1997, with Bear Sterns being the first to do so. As ever, the idea was that you gather lots of CRA mortgages together, and then sell those 'packages' to investors as securities based on the risk each investor wanted to take on. Freddie Mac guaranteed these mortgages, which were given a AAA rating. That, remember, meant they were ultra-safe and secure. But, actually, these securities included risky loans.

Now, while all this was going on, the Internet was spreading its web of connected information technologies and disruption existing businesses in the process. In the case of banks, that disruption came in the shape of better informed customers, because now people could easily go online and there find ways of comparing rates on loans or credit cards, and speed through applications like never before.

Banks were not the only entities to face disruption in this new, interconnected era. Millions of people also faced uncertain futures, given all the disruptive technologies developing around them, and mergers and acquisitions making their current positions precarious indeed. In most cases, people had insufficient political influence to do much about the changes going on.

With banks, though, it was different. They did wield enough political influence to avoid such changes, if they chose to. They need not have exercised that choice. The banks could have chosen instead to adapt to the changes wrought by the Internet, in ways that might have increased price integrity and led to more simplicity and visibility in financial markets.

But by now readers will know that this was not the option that banks went with. Instead, they took advantage of the fact that some of the technologies now available could, when coupled with their influence over governments, bring about the sort of 'deregulation' banks prefer, which is to say, an increase in the amount of rules and a reduction in the visibility, price integrity and choice. So long as such changes led to the banks making more profit, they were deemed changes worth pursuing.

During this time, financial innovators came up a new kind of digital bond, which was something known as a Consolidated Debt Obligation or CDO. Thanks to the CDO, there was now a way for banks to sell bets to investors looking to gamble on whether people could meet all their obligations to pay. CDOs were, like mortgage bonds, a way of getting around the problem of trapped capital. Rather than wait years and years for a customer to repay a mortgage, mortgage bonds turned a loan into a loan of a loan, because whereas the bank issued loans to home buyers in return for a greater payment over time, now investment banks buying mortgage bonds could provide all that money in one sum, in return for those same payments expected over time.

And now that CDOs had come along, all the capital that was trapped in obligations to repay could be sold immediately. It was no longer the case that transactions needed to be held up for want of funds. Now, thanks to mortgage bonds and CDOs, the risks could be transferred to investors who stumped up the money today. According to Dylan Ratigan, "the hope was

that the economy would now run like a perfectly oiled machine, that such amazing computer-age oil, there would be no friction at all”.

And then mortgage bonds were joined by another bond known as an Asset-Backed Security. Whereas the former type of bond meant you owned the right to collect money for the repayment of home loans, the Asset-Backed Security allowed investors to buy the rights to collect on any debt payment you can think of, be it car loans, credit cards or whatever. As more and more of these bonds found their way onto the market, an idea developed, which was that financial markets could use the incredible data storage and processing power of computer networks and create CDO monster bonds.

A rough analogy for these monster bonds would be to imagine a food blender. Only, what goes into that blender is not fruit or veg, but any commitment to repay money on a regular schedule. So, in go mortgages, credit card payments, car loans, gym memberships, college loans, until the blender contains trillions of dollars worth of loans. Then, once this statistical blender has mixed them all up and created a smoothie of debt, you can sell portions of that smoothie as investments.

But who was buying these ‘smoothies’? Well, what the investment banks wanted to do was to sell CDO monster bonds to the wealthiest buyers on financial markets. That included the state pension managers whose job it was to look after people’s investments and retirement money. Since these managers could not touch any investment that rated less than AAA, it was essential that these monster bonds qualified for the highest rating possible. Getting a AAA rating depended on the overall rating of each debtor whose loan was included in that ‘smoothie’. Since the monster bonds were indeed getting AAA ratings, that had to mean, at the very least, that there were enough reliable debtors who could be guaranteed to repay their loans, to hedge against the riskier lenders whose debt might also be blended into the mix.

Unfortunately, as time passed and we approached the mid-noughties, this was no longer really the case. Those ratings agencies were no longer carefully ascertaining the creditworthiness of these investments; instead they were rubber-stamping everything with a AAA rating. Everything- including outright junk.

## CHAPTER FIFTY THREE

When banks run commercials advertising their business, those adverts tend to play on the traditional role that banks have played in society. The message that such commercials always want to get across is that we, the public, can have faith in the bank’s reputation. Slogans like “By Your Side” and “We’re There For You”, remind us of banks’ traditional role as dependable middle-man, there to take care of our money and to help put capital to good use.

But such adverts could not be said to accurately portray the relationship between banks and their customers in the runup to the 2008 crash. Instead, it would be closer to the truth to say that this cozy view of the banks as paternalistic middle-men had been corrupted by several major developments.

The securitisation food-chain, which we discussed in the last chapter, was one such development. One thing it resulted in was mortgage lenders who no longer cared if those mortgages would ever be repaid. Why should they care? As soon as a mortgage was arranged, it was sold on to investment banks and so the liability of that loan was their problem.

As for those investment banks, they in turn sold the mortgage-backed securities to various Structured Investment Vehicles or SIVs (more on these later) so, again, an attitude of “it’s off our hands now, and therefore not our problem” took hold.

As well as treating debt like a hot potato, passing it down the securitisation food-chain as soon as possible, lenders also began paying what were, in effect, bribes to mortgage brokers so that they would push borrowers into taking out the most expensive loans possible. That way, the lenders could be sure to generate loans with higher sales prices. As ever, banking terminology chose not to call a spade a spade, and so these were not actually called ‘bribes’. Rather, they were known as “yield spread premiums”.

Whatever term was applied to such practices, the fact was that, increasingly, investment banks were selling trash to their customers. This of course raises the question of why they didn’t care that this was what they were doing.

There were three main reasons for this lack of care. The first is that we should not think of these banks as operating according to the former model of relationship banking, regardless of how much high street banks promote themselves as caring and dependable.

The second reason was that since the banks and bankers would not share in any subsequent losses in the event of their customers being suckers lured into raw deals, the fee structures themselves came with zero penalties for selling junk. And thirdly, we have bankers’ compensation. What dominated that compensation, by a very large margin, were annual bonuses driven by that year’s transaction revenues. Since that was the case, traders and salesmen had little incentive to care about what happened later.

Meanwhile, the ratings process- the means by which those securities received a rating of AAA downwards, was itself corrupted by three factors, namely personal turnover, a change from the policy of paying buyers to rate those securities to paying sellers to do so, and, finally, the rise in something known as “ratings consulting”.

Imagine if the securities backed by B-rated mortgages had never risen past a B-rating themselves. Had that been the case, we can rest assured that the market for such securities would not have become as big as it did. One major reason it grew into such a big market was because the agencies in charge of those ratings were too generous with the AAA stamp. Pretty much all investors swore by these ratings, so as the securities backed by B-rated mortgages were stamped with a shiny AAA, it felt like junk mortgages had been transformed into high-quality securities- the financial equivalent of turning base metals into gold.

But base metals were not really being transformed into gold. As various incidents showed, there were huge concerns regarding the reliability and independent nature of those ratings agencies.

One such incident involved one of those agencies (Moody's) and the Dutch bank ABN AMRO. The bank had developed a "Constant-Proportion Debt Obligation" or CPDO. Imagine if you could take the credit risks of hundreds of companies and then bet on the overall risk. That's pretty much what a CPDO was. But, there was more to them than that, because the CPDO came with a special twist. In the event of the CPDO losing money, it spends even more trying to win it back.

Anyway, how the CPDO worked is less interesting than how it was rated. Investigations into this matter revealed an uncomfortable truth, which is that, sometimes, the agency first decides what the rating should be, and then its computers are programmed to obtain that rating.

What that means is that the ratings agencies are not really, truly independent. Rather, there is a sense in which those agencies and their customers collaborate in building products like CPDOs. And, in the event of one agency not delivering the sort of service the customer wanted, well, that customer could always go to one of the other agencies and get a second opinion.

In the case of the CPDO, both Moody's and their main competitor, Standard and Poor, gave it the highest possible grade. But as for the third major competitor, Fitch, when they ran it through their models, the results showed that, actually, the CPDO was little better than junk. Although their assessment was the accurate one, not a single bank came to Fitch to have its CPDO rated. No, they all went to those agencies that would rate it in such a way as to make it seem like base metals had been transformed into gold. So what if it was really fool's gold? There were more than enough fools who would buy it, mistaking it for the real thing.

Perhaps it is not all that surprising that city spivs who give places like Wall Street such a controversial reputation should have behaved in this way. But the ratings agencies themselves are another matter. Once upon a time, they had a reputation as the most conscientious, inscrutable and grumpy bean counters imaginable, and therefore the last people one would think would become eager participants in ratings inflation. So, how did that happen?

This brings us to another one of those previously mentioned factors. Up until the 1970s, ratings agencies were paid by the buyers of the securities they rated. This was a sensible way of doing things, as can be appreciated if you think about the incentives involved in buying/ selling a house. Here, too, the buyer of the property pays to have it valued, for one simple reason: It's hard to trust an appraiser paid by the seller of the house, since their motive may well not be to sell it at its true value, but rather to be paid as much as they can possibly get.

But, in the case of securities, certain changes meant a switch had to be made, one in which the ratings agencies were paid by the very investors creating and selling securities. Due to the growing complexity of those bonds and derivatives, and also their sheer volume, it

became far too impractical for the agencies to value them all. Maybe they could have with a much, much larger organisation. But instead of going for that option, a decision was made to charge potential sellers instead.

By the year 2000, then, Fitch, Moody's and Standard and Poor, were all being paid to rate new securities almost entirely by the large investment banks that issued them. That's one reason why those ratings agencies became so cooperative that the result was ratings inflation. There were only a handful of those issuers, and the ratings agencies were loathe to turn away the few customers they could deal with, following certain regulatory changes imposed by the SEC.

That was not all. A further conflict of interest rose from the fact that the ratings agencies also rated the debt of the banks themselves. But, while in the run-up to the 2008 crash there was certainly cases where a bank's rating should have been downgraded, in actual fact this was something the agencies never did, since they knew such a move would infuriate a major customer. So instead of rating banks' debts and investment banks' bonds and securities honestly, those agencies instead got involved in that aforementioned 'consulting', whereby they received enormous fees for advising their handful of customers about how to go about constructing a security that would receive a high rating, and fiddling their models to ensure that was the case.

Those computer models had been designed with the following expectation in mind- that the banks involved had vetted most of the loans blended to create the new bonds, and that the likelihood of being paid back was average. But, as ratings inflation took off, the investment banks found that if they mixed low-risk loans (say, the credit cards of wealthy people) with high-risk loans (say, mortgages held by NINJAs, or folk with no income, job, or assets) the credit score produced by that mix of high- and low-risk loans came out the same as when securities and bonds were a mix of high- and medium-risk loans. And, as one player got away with including more junk in the bond and still receiving a AAA rating from those ultra-compliment agencies, that only incentivised competitors to raise the stakes too. After all, there was a huge amount of short-term gains to be had, as the email which read "let's hope we're all rich and retired before this house of cards collapses" made clear.

True, more cautious investors might have found it rather worrying that the safe loans in the blender offered zero protection to the seriously risky ones. But not these guys.

## CHAPTER FIFTY-FOUR

The way our discussion concerning the essential causes of the 2008 crash has gone so far may have given the impression that things seemed fine right up until that fateful year. But actually, it was in the early 90s that collateralised mortgage obligations first showed that they could produce a crisis. It is true that this crisis was very small in comparison to what was to come. Losses were estimated at \$55 billion, whereas the 2008 losses would go way beyond a trillion dollars. But, nevertheless, it was a warning of the sort of damage that could be done by a perversely incented financial system that was not properly regulated.

It was also during the 90s that we saw the introduction of something else that could have served as a warning that trouble was brewing. Back then, housing finance saw the entry of

such things as 'Household Finance', and 'Beneficial Finance'. While they sound like friendly, homely services these were, in fact, hard money lenders who specialised in high-risk, high-yield lending. They were also particularly aggressive in going after defaulting borrowers. At this time, riskier house lending amounted to a small fraction of the market, but thanks to certain incentives it was growing and would be enormous by the next decade.

Those incentives were not exactly the sort of motives that conferred nothing but benefits on society. The reason why players became attracted to high-risk mortgages was because, since they carried high fees and interest rates, one could make huge profits from them. Such an outcome was even more likely if the risks involved could be disguised.

Furthermore, by the 90s it had been found that when house prices are rising, it was possible to pay off any loan by flipping houses. Another option made possible by this situation was to take out additional home equity loans, based on the property's supposed appreciation. Both options opened up the possibility of temporarily concealing fraud with a ponzi-like bubble.

Back then, in the 90s, the rise in high-risk lending was gradual in comparison to what was to come. But it could have served as a warning sign had enough of the people who mattered been inclined to look. This was the point at which securitisation's fatal flaw began to be exploited. When it comes to gambling, it is essential that there is a link between the decisions one takes and the consequences that result. There's a reason why a big roll of the dice is known as "going for broke". It's because the gambler risks losing everything if the stakes are high enough.

But the securitisation food-chain severed that essential link. This did nothing to prevent trouble from eventually following bad decisions, but what it did do was ensure such consequences would be someone else's problem. Had the financial sector done something like require those selling loans to accept a fraction of subsequent losses, the potential harm that could be caused by this severance of the link between credit decisions and subsequent credit risk and consequences could have been accounted for. But this was not a step anybody took. Instead, people began turning out bad loans just to sell them, knowing full well that when the losses came in, somebody else would be the sucker shouldering the debts generated by those bad deals.

As securitisation spread, riskier loans became included in those 'packages'. In the case of mortgages, that meant securitisation spread from high-quality mortgages to those that were classified as 'sub-prime'. As well as mortgages, the 90s saw many other kinds of loans being fed into the securitisation machine. In went student tuition loans, car loans, the portfolios of credit card receivables, and the bank loans that were being used to finance leveraged corporate buyouts. And, in each case, it was the same old story: at first, only high-quality loans were used, but over time there was a steady decline in quality.

As this decline in quality was going on, the securitisation was growing in complexity and opaqueness. These, unfortunately, were ideal conditions for bringing about a gradual and disguised rise in leverage and risk on a system-wide scale. This rise manifested itself in the way that many of the buyers of these risky securitised products were highly leveraged and unregulated "shadow banking" entities such as hedge funds. Those securitised mortgage products were "insured" via credit default swaps.

This brings us to the point where we should talk about the 'Amplifier' that spread the crisis from the shadow banking sector into the whole (anti)economy. That amplifier came in the guise of a particular kind of 'derivative'. But what is a derivative? Well, traditionally, banks had acted as middle-men, there to link together people who wished to buy and sell assets (in other words, property, or a claim on property or income). But then, an idea came about, one which saw there was a way to trade in things such as movements in interest rates, that were not assets in any normal sense. The way to do that was to arrange bets on how a particular asset would perform over a certain period, and write that up as a contract. That contract was a 'derivative'.

Now, there are four main types of derivative, but only one kind need concern us here. As financial markets got more into selling consolidated debt obligations, the risks involved in such activity did cause some concern. After all, if the borrowers who made up the original loans could not keep up their payments, that would have spelled big trouble for the banks packaging those loans into CDOs.

Or rather, it would spell trouble unless the banks found a way to protect themselves. To do that, they needed to take out insurance policies against defaulting on CDOs.

However, traditional insurance would not do, because it had capital requirements. That meant traditional insurance policies were subject to careful government regulation, the purpose of which was to ensure that insurers held onto enough money to pay claims against them. Since they didn't want to have to pay the expense of all the regulations that came with insurance, the investment banks decided not to call their protection 'insurance'. Instead, they referred to it as "credit default swaps".

Now, if we are to get to the bottom of how derivatives like credit default swaps amplified the crisis that began in the repo market, we need to know a little about how there is sometimes a correlation between assets. A particularly noteworthy example would be a "negative correlation". This comes about when, if asset A increases in value, then asset B reliably drops in value. Thanks to such negative correlations, investors have ways in which they can hedge their bets.

But just how reliable are these correlations? Unfortunately, the answer is: Not completely reliable. While it is true to say, for example, that the Euro is negatively correlated to the Dollar (one tends to go down when the other goes up) and that this can be used to hedge bets, sometimes that correlation breaks down, and if you relied on them working as expected, that breakdown can leave you very exposed. Supposedly, credit default swaps were the way to overcome this problem of correlation, but ultimately they amplified it.

The story of derivatives and how they became the amplifiers of the repo market crisis began in the mid-1990s. At this time, investors were really getting into gambling over the potential value of Web-based companies, and the stocks and shares that make up the world's equity markets were poised to inflate the dot-com bubble.



Since risky investments were involved, those investors needed uncorrelated assets that they could use as hedges in the event of their equities falling in value. It soon became obvious that real-estate was the asset to use.

Why real-estate? The reason why was because, not only was this an asset that was uncorrelated to equities, real-estate was also known to be “uncorrelated within their class”. That meant that, should houses fall in value in one part of the country, that should have no impact on house or apartment prices in other parts of the country. That made real-estate assets safe bets in their own right.

Even better, a way was found to increase the safety of these already safe investments, and all while enhancing returns. We’ve already covered how this was done. It was achieved by “tranching the security” and thereby turning relatively simple mortgage-based securities into CDOs. Thanks to this method, you could now combine the mortgage payments of many bits of real-estate (a bit of Manhattan property here, a smidge of Arizona suburb there, a bit of Baltimore waterfront) put them all in the same security, but then keep them separate thanks to those ‘tranches’, which allowed you to sell different parts of the security to different people, paying different interest rates depending on the risks they took on.

So, you began with real-estate markets, which were already known to be “uncorrelated within their class”. If those different real-estate markets were then cut up and re-combined, that (so the thinking went) made them super-uncorrelated. Yes, if the borrowers with the riskiest mortgages and loans defaulted, that would wipe out the equity tranche holders. But those holding safer investments need not worry, because the structure of the CDO meant they were isolated from that loss.

That meant these CDOs seemed to promise the best of both worlds, since they not only enhanced the safety of mortgage-backed securities, they also promised much greater returns for those willing to hold the greater risk. As house prices in the US nearly doubled from 1997 to 2008, so great was the demand for these securities, their sales exploded. This fervour for CDOs showed that they had become more than simple equity hedges. They had become objects of investors’ desire in their own right.

Now, securities like CDOs could be sold with an attached credit default swap. Both the purchaser and the issuer of the credit default swap got something out of this arrangement. In the former case, it meant you were insured against the default of the bond on which the credit default swap was written. As for the issuer, what they got was a regular stream of income from those who purchased credit default swaps, sort of like how those who sell insurance can expect to receive customers’ insurance premiums.

However, where traditional insurance is concerned, it’s typically the case that issuers use actuarial tables and other such means so as to calculate the risks of the cover they provide. They need to do this because, as sure as night follows day, some of their customers will cash in their policies, and so insurance companies need to keep sufficient money to hand in order to cover for that. It’s also essential to build up cash reserves to be paid out when, inevitably, policy claims are made against the firm.

How much of a cushion should you set aside, though? That depended on the probability of default. As the housing bubble inflated, credit default swaps were being written on entities whose anticipated losses were essentially zero. The idea that such giants of the financial world as Bear Sterns and Lehman Brothers could default was considered well beyond the boundaries of extreme possibility. Since no losses were anticipated, those writing credit default swaps on such entities kept very little capital in reserve.

The decade from 1997 to 2008 was one in which house price increases told everyone that property values would only keep going up. Thanks to CDOs, what had been a small correlation problem to begin with had now, seemingly, been eliminated and, even better, it was insurable with a credit default swap. Thanks to all these factors, it seemed like these assets amounted to what bankers call a “free option”. In other words, an asset whose upside is potentially unlimited, while there are zero downsides. As you can imagine, demand for these “free option” securities was very high indeed. What pushed that demand even further was the fact that these assets got AAA ratings. It is a legal requirement of many investment funds that they hold a specific proportion of their assets as AAA securities, and this requirement really pumped up demand.

Indeed, by the mid-2000s, the market demand for these securities was so great, the banks and brokers writing these mortgages just didn’t have enough good borrowers to lend to. But, with demand pumped up like it was, and the financial sector focused on short-term gains, they didn’t let the lack of good borrowers stop them. No, they just turned out securities packed with more and more risky debts, which somehow still earned that AAA rating.

Now, earlier it was said that credit default swaps worked a bit like insurance against a borrower defaulting on their loan. But, as demand for these derivatives grew, credit default swaps became something else, something closer to their true nature. They became more like gambling instruments- ways to bet on somebody else being able to repay their debts.

There are, of course, two main ways in which one can bet. You either bet that somebody is going to win, or that they will lose. In the case of credit-default swaps, the equivalent to betting on a win was to bet that a borrower would not default on their debts. In that case, the credit default swap worked more like insurance, in that the hope was that the borrower would successfully repay what was owed, but the insurance was there just in case.

But things were different with so-called “naked credit default swaps”, which were essentially bets on somebody losing. In this case, that meant you hoped the borrower would default, because only when that happens do you get to collect your winnings. There is no vested interest in the credit-taking party being able to pay. Quite the opposite, in fact. The more they lose, the more you gain.

The best way to see what that meant is to look at an actual example. The hedge fund Paulson and co, headed by Paul Johnson, had a list of 123 securities. They were backed by mortgages in Arizona, California, Florida and Nevada. All these mortgages had something in common, that being overheated house prices and, consequently, an expected rise in default rates.

Those 123 securities were presented to Goldman Sachs. What Goldman then did was to create a CDO monster bond out of those funds. This monster bond was known as 'Abacus'. Although it was expected to fail, Abacus was engineered to qualify for a AAA rating, which meant it looked like a really safe bet.

Then, two things happened. One was that Goldman sold shares of Abacus to investors—investors who could not tell that what they were buying was really poor quality because, as was typical with CDO monster bonds, the complexity and opaqueness of Abacus made it way too hard to judge its quality, and these investors just trusted in the assurance of that AAA stamp.

But both Goldman and Paulson knew Abacus had been designed to fail, and while Goldman was selling shares of Abacus to investors, Paulson bought a naked credit default swap from American International Group or AIG, thereby giving his hedge fund protection against Abacus's inevitable failure. When the inevitable happened, those investors, who thought they were buying securities as safe as safe could be, lost over \$1 billion. Thanks to the naked credit default swap, their loss was a gain for Paulson and co. They made \$1 billion in profit when they collected insurance money from AIG that taxpayers paid in the form of bailouts. And things were none too shabby for Goldman, either, since they kept around \$25 million in fees.

We have seen how the way credit default swaps were handled was less of an insurance policy, and more like a betting parlour. Wall Street itself has sometimes been compared to a gigantic casino too. But I would argue that it is worse than a casino for at least two reasons.

The first is that real casinos are a good deal fairer. The odds involved in every bet are presented for all to see, so all those involved know full well what kind of risk they are taking. Furthermore, the dice are not loaded, nor are the cards marked. There is no doubt some truth in that saying "the House always wins". The odds do tend to be stacked against the gambler. But at least you know what the odds are and the games are not fixed.

But, in the case of credit insurance, it has always been sold in a private market, and so there was no legal right to see how many deals are being made or at what price. In the case of credit default swaps, that led to such tactics as insuring the same debt over and over and over again, with the banks collecting commissions every time this increasing debt moved around the banking system.

So it's a low-visibility, high commission business. And what sort of people are running this business? As this quote shows, not the sort of people you can rely on to try and make the system as fair, transparent and impartial as it can be.

"I meet a lot of these people on Wall Street on a regular basis...And I am going to put it very bluntly. I regard the moral environment as pathological. [These people] have no responsibility to pay taxes; they have no responsibility to their clients; they have no responsibility to counter parties in transactions...they have gamed the system to a remarkable extent. They genuinely believe they have a God-given right to take as much money as they possibly can in any way they can get it, legal or otherwise".

Now some readers might be supposing that some hard-left Marxist was being quoted there. Far from it. These were the words of Jeffrey Sachs, who was one of the architects of the 'Shock Therapy' free market experiment that led to Oligarchy in Russia.

As we saw in the case of Abacus, "gaming the system" included disguising junk loans as AAA rated securities, the equivalent of loading the dice or fiddling the roulette wheel in such a way as to lure punters into laying down large sums of money you secretly know beyond all doubt that they will lose.

The second way in which the sort of gambling going on in Wall Street is unlike a traditional casino, has to do with whose money it is that is being gambled with.

In the case of places like Las Vegas, people gamble with their own money. But that's not how things were done on Wall Street in the runup to the 2008 crash. In 1999, certain changes were made to the rules and regulations surrounding banking and finance. Those changes affected a rule that had been in place ever since the stock market crash of 1929. What this rule did was forbid any one company from being a traditional bank, an investment firm, and an insurance company all at the same time.

The Financial Services Modernisation Act of 1999 overturned this rule, opening the way for businesses in the financial sector to grow in the era of mergers and acquisitions and become mega-businesses that were a combination of all three. That meant you could have one giant bank that could take depositors' money, but then, rather than keep it safe it could use that money as collateral to fund investments in high-risk securities, while also insuring itself against losses.

Since the taxpayer ultimately stumped up the money for this insurance (and the sociopaths running this system hide the money they have taken from society in tax havens) it's the equivalent of a Casino where high-stakes gamblers are going for broke using other people's money, pocketing the winnings as private profit, but socialising the losses by having ordinary people who are not allowed into this exclusive club pay up when the deals go bad.

So, what these changes succeeded in doing was to turn the banking/ financial sector into a vast system where risk was not so much handled as turned into something transferable- a veritable hot potato of debt. There were no longer rules for capital requirements (or, if there were, they were insufficient) and that meant there was nothing to hold back those who regarded every loan as an opportunity to sell profit by selling insurance on something so big it would be a systemic threat to the system and so necessitate the socialisation of the consequences of flooding the (anti)economy with toxic debts, through government bailouts.

This all begs the question as to why something wasn't done about this situation before things got that bad. But one only need refer back to some of the things we have discussed in order to see why no appropriate action was taken.

For a start there were the outcomes of banks' definition of 'Deregulation', the drive towards 'Total Bureacratism/Total Marketisation', and Capitalism's need to commodify everything it possibly can. The only reason why that commodification should not include legal and political systems is a moral one, but Capitalism knows no morality and so the drive towards Total

Bureaucratization/ Marketization created an environment in which financial power could easily be converted into political power, and vice versa. Since the banking/ financial sector kept on making political donations and other bribes disguised as 'lobbying', the political class was doing very well out of this situation. And, in any case, the move towards Financialization had seen the political class relinquish much of its control to 'Market Forces'. They were there to provide minimal management, not to change the structure in any meaningful way.

But what about the Public? They had grown up in environments that pushed the New Thought ideology which said that reality is not fixed but something the human will can manipulate. The only thing between an individual and great wealth was personal determination. If you wanted to be rich and successful, and believed you could be with sufficient fervour, then you would become rich. This message was amplified by the mega-churches whose 'pastorpreneurs' encouraged people never to voice any negativity and to act as if they were already rich. In the runup to the 2008 crash there were plenty of opportunities to live out the delusion that one had plenty of disposable income. This, after all, was a time when houses could be treated like ATMs, pre-approved credit card applications appeared in the mail box, and car loans offered zero percent financing. With so much cheap credit to hand, people were too busy spending to worry about banks luring pension funds into purchasing toxic bonds and other shenanigans that was bound to cause immense societal damage at some point.

So nobody really cared to notice what was going on. And what was going on was a transition, from a system dealing with high-risk investments in the gray areas of legality, to a system of outright fraud that was a bizarre combination of formidably complex mathematical models and stupid, short-term behaviour. The incentives of the system, which was arguably aligned with societal interests in the time of Levittown, were aligned no longer. Where there was once price integrity, now there was misinformation. Where there was once a search for long-term value, now there was simply a scramble for short-term gain. The savings of ordinary Americans were no longer being directed towards the sort of productive investments that led to a future that was wealthier for all; instead they were being funnelled into that weird casino we talked about earlier. As Dylan Ratigan said, "Banking, which had once served the economy, had become a vampire extracting the lifeblood of American Capitalism".

Very attentive readers may recall a brief mention of something called a 'Structured Investment Vehicle' ('SIV'). This would be a good time to go into more detail.

The players who were issuing the toxic debts disguised as high-quality securities were well aware of the dubious quality of such loans. We can tell this was the case from the way they were loathe to hold any of that seriously dubious risk on their own books.

This is where those SIVs came in. Since they wanted to get that toxic debt off their books, CDO issuers set up a system that enabled them to move their issuance and funding to separately created companies. These were those SIVs. The SIVs were isolated from the parent company's balance sheet, and they served one purpose. They were there just to collect the income streams coming in from mortgages and credit-default swaps, paying out this money to the different investors (such as pension funds, German regional banks and small Norwegian towns) that held them.

It seems obvious now that a Ponzi scheme that treated debt like a hot potato, where toxic debts were disguised as high-quality securities and insured with naked credit default swaps which actively encouraged huge losses so the holders of those swaps would gain enormously, would eventually just blow up like all speculative bubbles do. But at the time, people just didn't think that could happen. After all, why should it? Risk was hedged, yields were attractive, the bonds were insured and they had that quasi-governmental AAA stamp of approval. Prices were rising, and would continue to rise, thanks to self-correcting markets.

Of course, this turned out to be wishful thinking yet again. The credit markets, which were already tight before September 2008, froze in that month. This led to the price of securities collapsing. The effect that had was to restrict credit even further, until what had been going on in the repo market for the past few months was amplified into a general, panicked search for liquidity. The banks, which by now all held similar assets and liability, more or less simultaneously tried to dump those assets, and since the market simply couldn't handle the sheer volume of toxic assets being dumped, prices for those once highly coveted assets fell through the floor.

But hang on, weren't those securities designed in such a way as to lessen correlation and isolate the prudent investor from the reckless gambler? Well yes, that was the idea behind CDOs and credit default swaps. But it turned out that, actually, the design of those derivatives was the amplifier that boosted correlation, rather than lessen it.

Let's recall what the basic idea was. The CDO was designed to have different tranches. Those tranches were isolated from each other, and if they went bad they did so in reverse order, because the most secure bonds would keep on receiving incomes from the rest, only running out of that income stream if the whole system went bad.

But the whole system could not go bad (the thinking went) because different people held different parts of the bond, and the underlying markets were uncorrelated. Indeed, more than that, thanks to the structure of those CDOs, they were super-uncorrelated.

That was the fatal assumption. Remember the example given earlier, in which a CDO was created by blending a bit of Arizona suburb, a bit of Baltimore waterfront, and a bit of Manhattan property? Well, it turned out that adding Manhattan to Arizona and Baltimore in a single security made them correlated.

The reason why was the sheer volume of cash that was being invested in real-estate. What that did was to create one huge market in real-estate across the world. This one big market was one that became increasingly correlated to equities, above all the equities of the banks that were trading real estate.

When the least creditworthy debtors like those aforementioned NINJAs walked away from their debts, the income streams from the riskiest parts of the bond dried up. This triggered a search for liquidity among the investors up in the more secure tranches, which turned into a panic-fuelled asset dump driven by a general search for liquidity.

With more and more securities defaulting, those credit default swaps insurance policies kicked in, and that only made matters worse. The reason why was because, if enough of these claims happened at once, that lead to the insolvency of the entire (anti)economic system. Either that, or the system would be declared “too big to fail”, and bailed out.

So, let's sum up what happened with the subprime mortgage bubble. It all came about thanks to a web of risks between the 'normal' banking system and the much less regulated shadow banking system. That web was created through unseen links between mortgage bonds and CDOs that had the effect of amplifying the grossly underestimated correlation between assets.

This 'web' combined with the mergers and acquisition drive to disregard the old rule that high street banking, investment banking and insurance should be kept separate, to produce a strange kind of casino.

In this casino, poor families were sold mortgages that were way beyond their means, but the fact that they would have to default was hidden by disguising those toxic debts as securities with a AAA rating. But, really, those securities were structured in such a way as to make defaults inevitable. While this was going on, the banks were getting involved in credit default swaps which began as a kind of insurance, but then evolved into bets on how long those inevitable defaults would take to happen. Both mortgage and bets were then packaged together, and those packages were sold on to institutional investors who passed them around the financial system like they were money, increasing debt with every movement, and ultimately the responsibility for paying off that debt fell to a giant insurance conglomerate that would have to be bailed out when, as it inevitably did, it looked ready to sink under the sheer weight of its resulting debts.

The result of all this was the subprime mortgage bubble, the 2008 crash and the austerity which followed. Once again, we see that none of the essential components of this bubble and crash can be blamed either on the state or individual morality. The most that can be said, regarding the state's involvement in all this, was that it failed to properly regulate the derivatives market. But then, why should we expect anything else, given what 'Deregulation' has come to mean, in the age of Total Bureaucratisation/ Total Marketisation?

As for individual behaviour, while there were obviously bad actors, we cannot really reduce the whole system to sum of these parts. The behaviour of the whole was not reducible in this way. Those complex assets, that were supposed to reduce correlation, ended up amplifying the liquidity crunch that began in the repo market. As Mark Blyth said, “too big to fail was the inevitable result of highly leveraged institutions discovering that all the liquidity in the world really could all dry up at once”.

What we have done in this chapter is to dig right down to find the essential causes of the 2008 crash. We saw how the crisis began in the repo market and how derivatives amplified it, but it could be argued that we are not yet clear as to how a crisis of this magnitude could unfold with no mechanisms in place to prevent it from growing into a systemic threat. In order to gain such an understanding, we need to look at a third quintessential factor which, once again, was a private-sector failing, rather than something that can be blamed on the State. This third factor was the Monetarist economic theory.

## CHAPTER FIFTY-FIVE

In the last chapter, our discussion ended by saying we should look to Monetarism if we are to complete our understanding of how and why the Great Recession happened. But, really, if we are to properly understand why the events of the noughties happened, we must first go back to the 1950s and look at the findings of an economist who worked decades before 'Monetarism' existed.

The economist in question was one Alban William Philips (1914-1975). In the late 50s, A.W Philips embarked on a study of one hundred years of Britain's economy, and what this study revealed was an inverse relationship between the rate of increases of money wages and the level of unemployment. In other words, if you had high unemployment levels, wages increased slowly, and when there was low unemployment, wages increased at a faster rate.

Being an economist, A.W Philips reduced the human behaviour driving all this to a statistical relationship, one that had notable implications for the economic orthodoxy of the time. What Philips came up with was a graph that became known as the 'Philips Curve'. What this graph shows is that, over a long period of time, the relationship between the rate of change in price and wages is statistically stable. This finding had implications for policy makers, because it showed that a given rate of inflation corresponded to a given level of employment. That being the case, people would have to settle for a trade-off between levels of inflation and unemployment. More importantly, the statistical relationship revealed by the Philips Curve implied that policy makers could use active fiscal management to get the economy to a point on the graph that corresponded to an acceptable trade-off of X inflation with Y unemployment.

So, by the late 1960s, Keynesian macroeconomics had been reduced to a statistical relationship called the Philips Curve. But then, as the next decade dawned, the economy behaved in a way which necessitated a very peculiar redrawing of the Philips Curve. The whole curve had to move both up and to the right of the graph.

The reason why was because, in the 70s, the trade-off of inflation for employment was replaced with an economy in which unemployment and inflation both rose together. This became known as 'Stagflation'.

An economy which seemed to trade in inflation with unemployment dealt a serious blow to what was then economic orthodoxy. According to Keynesian theory, it is extremely unlikely such a co-existence could happen but here we were, experiencing economic conditions of Stagflation where unemployment and inflation rose together. That was certainly bad news for some- after all, a co-existence of high inflation and high unemployment does sound like the worst of both worlds. But, there was a minority who saw positivity in the fact that Keynesian macroeconomics had resulted in stagflation.

This minority was the marginalised economists who had never subscribed to Keynesian theory. To them, Stagflation was good in the sense that it revealed serious flaws in Keynesian macroeconomics. Therefore, the current economic orthodoxy should be thrown out and replaced with a rival view of market society that was more to their liking.



What was it about Keynesian theory that made it so objectionable to this minority group of economists? Well, basically, they did not approve of it, because Keynesian theory focuses on aggregates rather than individuals. Since it focuses on the macro world of aggregates (in other words, things like income and consumption) in a Keynesian world the true heroes of the economy are the Consumers rather than the Investors. After all, according to Keynesian theory, it is consumers' demands that determine what investors supply. There would be no supply of investment if there was no demand.

How, then, should policy makers ensure that necessary demand took place? According to Keynesian theory, if there are to be tax cuts, it should be the poor who benefitted. It would mean more money was left in their pockets, enabling them to go out now and consume, thereby boosting demand and supply of investment.

This minority of economists thought this was all wrong. To them, the focus should not be on the macro world of aggregates, but rather on the microlevel supply side of the economy. This shift in focus meant that, in contrast to the Keynesian way of looking at things, it was investors who were the heroes, not the consumers. This was because savings led to investment, and investment led to employment, and employment led to wages, and wages led to a consumption of the products workers were making, consumption that led to profits reinvested in the firm. If there was no supply of investment, there would be no demand, and no consumption. Forget about giving a tax break to the poor; give it to the Rich so that they can invest that money wisely.

Now, the way this minority group thought the economy should work was not really a radically new one. Rather, it was similar in many ways to the classical liberal economic theory that had existed prior to Keynes. For that reason, the theory that this minority came up with, and went onto become orthodoxy after 'Stagflation' discredited Keynesian theory, became known as 'Neoclassical' economics.

The core beliefs underlying neoclassical (or neoliberal economics as it is more popularly known) would become formalised as EMH and RATEX. That is, the 'Efficient Markets Hypothesis' and the 'Rational Expectations Hypothesis'. Neoliberal economic theory arrived at these formulations because of its two main assumptions, those being that economies are made up, fundamentally, of self-interested agents who maximise the pursuit of those interests, and that all prices, including that of labour, adjust in such a way as to equate supply and demand. Or, in other words, that "markets clear".

Who (or what) are those 'agents'? Well, the neoliberal approach to economics distrusted anything bigger than the individual, but that does not necessarily mean individual human beings. It can also mean individual firms, individual corporations, individual funds, that themselves are organisations comprised of many people. But the point is that any account of the behaviours of 'aggregates' such as financial markets have to be based (in this way of thinking) in prior accounts of the behaviour of those aforementioned 'individuals'.

Neoliberal theory insisted that its EMH and RATEX formalisations led to a bold conclusion: Systematic mistakes by markets are impossible. But how can that be, when we all know human beings are fallible creatures prone to making mistakes? Well, neoliberal theory does

not deny that random individuals can and do make mistakes. But if, as the theory suggests, individuals do invest in being correct, then the market would eliminate error-prone individuals, until you end up with a world in which we all share the same true model of the economy. As Mark Blyth said, “left alone with common and accurate information, such individuals’ expectations about possible future states will converge and promote a stable and self-enforcing equilibrium”.

In short, according to neoliberal theory, the market is (or will inevitably become) the reflection of individual optimal choices that together produce the “right price”, meaning a price that corresponds to the true value of the asset in question. That is what is meant by “systematic mistakes by markets are impossible”.

They may have been impossible according to neoliberal theory, but nevertheless systematic mistakes kept happening. The Neoliberals thought they knew why. It was because real markets were not as pure as their model of the economy. In real markets, the State kept screwing things up by getting in the way instead of leaving the market alone to find its own natural equilibrium.

Since, according to Neoliberal theory, the State really shouldn’t do much at all apart from get out of the way, it hardly featured at all in this account of how the economy should work. Nor was the State the only thing missing. Also nowhere to be seen was financial regulation, the business cycle, booms, slumps and unemployment.

If such things existed in the real world, the neoliberals saw that as the result of Keynesianism having run the economy incorrectly, or because people looked at things the wrong way. Whereas Keynesian theory said that government should interfere to manipulate the level of demand, the neoliberal approach said it should not interfere. Whereas, according to Keynesian orthodoxy, a little inflation was acceptable to maintain full employment, it was not acceptable to the neoliberals.

As for unemployment, yes, that obviously existed. But from the Monetarist/Neoliberal perspective there was no such thing as involuntary unemployment. No, those who were out of work chose to be out of work, because anyone who wanted a job could always get one. It was just a matter of accepting the wage dictated by ‘market forces’.

Not only should market forces and individual choice be seen as the true causes of unemployment, they should also, according to neoliberal theory, be seen as the forces driving financial markets. When taken together, EMH and RATEX led to a view in which free and integrated markets were the only way in which financial markets should be organised. As for the State, its role should be to do nothing. Well, not literally ‘nothing’, since it should still provide courts, standards of weights and measures, and defence goods. But it should stop interfering in the economy and leave the free market alone to work its magic.

This was a very appealing idea so far as those working on Wall St were concerned, because it looked very much like a justification to let the financial system do what it liked. And why not? After all, hadn’t EMH and RATEX proved, theoretically, that finance could do no wrong, by definition? Ok, in reality, such things as deliberate fraud and insider trading were problems that came along from time to time. But they would surely be weeded out in time.

'The Market' was, after all, made up of self-interested agents, and whether those agents were individuals or financial firms, they would, when acting in an efficient market, make optimal trading decisions, with such outcomes improving everyone's welfare.

So there was no need to regulate financial markets? No, not quite. The neoliberal stance was not that banking should operate absent of any regulation whatsoever. We've already seen how that would be impossible. Rather, the job of deciding what regulation there should be, should be left up to the banks themselves. For, as Mark Blyth reckoned, "since they are the ones with 'skin in the game', anything they get into is good for everyone".

This view of how financial regulation should work resulted, when combined with the idea that risk is individual, in a market that was thought to work in a way that meant risk could be commodified. That is to say, it could be turned into something that could be calculated, sliced into 'portions', traded and (ideally) held by rational investors who knew what they were buying.

As has already been said, Neoliberal theory looked at the economy from a micro level perspective. From this point of view, it seemed obvious that if you made the parts safe, then the safety of the whole system would naturally result. And the parts had been made safe. What, after all, was the 'shadow banking' system doing? It was serving real banks by augmenting liquidity and assisting risk transfer. As well as that, you had those derivatives, opening up the possibility of packaging risks and selling it onto investors- investors who, by virtue of wanting to hold that risk, were best suited to hold it. That was another level of safety.

Finally, there were the banks themselves. They were the ones ascertaining the level of risk, using models they designed themselves, and who could be better suited to judge that risk than the banks who, after all, had "skin in the game"?

So, all the parts of the financial system were imagined to be safe- mortgage bonds, credit default swaps, bank risk models- all of it. Looking at the economy from the micro-level neoliberal perspective with its EMH and RATES hypotheses, led to an attitude that the only thing that could arise out of the trading decisions of super smart agents would be financial markets that are efficient and in equilibrium. There was no considering any possibility of crisis, apart from those arising from moral hazard (the fraud and insider trading mentioned earlier) or a state-induced political shock.

But the 2008 crisis cannot be blamed just on the ill-meaning actions of a few bad actors. Much more than that, it was the result of something that seemed impossible to a Neoliberal/Monetarist perspective, namely the fact that, when you meshed together elements that were intended to make the world safe, what you end up with, sometimes, is a world that is incredibly less safe than it was before all those 'safe' components were integrated into one big system of risk manipulation. So, the logical flaw was the supposition that the whole could not be different from the component parts. As Mark Blyth said, "it turned out that the whole was quite different from the sum of its parts, because the interaction of the parts produced outcomes that were miles from...expectations".

That was not the only flawed assumption, for we should also acknowledge the obvious flaw in the whole idea that, since the banks had “skin in the game”, they were therefore the best people to judge the risks they were taking using models they themselves designed. Actually, as we have seen, they did not have “skin in the game”, because those risks were not being held on their books but rather moved into SIVs.

So there we have it. The State really had very little to do with the essential causes of the 2008 financial crash. After all, did the State start the run on the repo market? No. Did the State design the derivatives that amplified the crash into a systemic threat? No. And, finally, what was the orthodox economic theory operating at the time of the bubble and crash, designed to do? It was designed to keep the State as far away from market forces as possible; to write it into irrelevance beyond maintaining legal systems, standards of weights and measurements, and defence goods. As for the regulations guiding behaviour in the financial sector, the State’s duty was just to sign off on whatever “deregulation” suited the biggest players in the weird casino that Wall St and its equivalents in other cities had become (and we know by now that “deregulation” does not necessarily mean fewer regulations).

As we have seen, all this actually entailed a thorough entanglement of private, military and state bureaucracies. But it was presented as the workings of a “free market” that supposedly wanted as little state interference into our lives as possible. Really, though, the ‘freedom’ being practiced was the ‘freedom’ of the minority that get to treat debt like it does not matter, to impose costs on the rest of us who are not in that exclusive club.

## CHAPTER FIFTY-SIX

When the likes of Mary Baker Eddy and Phineas Parkhurst Quimby sought to create a positive alternative to the grim outlook of Calvinism, they imagined the universe to consist of nothing but an all-nurturing, all-supplying benevolent spirit. Humanity, as part of this maximally-beneficial entity, had but to exercise their powers of positive thinking, banish all negative thoughts, and everything would turn out all right.

The 2008 crash showed what sort of consequences could come from acting on such principles. For, as Ehrenreich asked, “what was market fundamentalism other than runaway positive thinking? In the ideology of the Bush administration and, to a lesser extent, the Clinton administration before it, there was no need for vigilance or anxiety about America’s financial institutions because ‘the market’ would take care of everything. It achieved the status of a deity, this market”.

All the sciences have to make simplifying assumptions and Economics is no exception. According to Mark Braund and Ross Ascroft (1977-2014), “neo-classical economics looks only at the factors influencing the investment and consumption decisions of individuals and firms. It focuses on how things would look in an imaginary world where all participants shared full and equal knowledge, not only in the market but also of the consequences of their decisions. It also assumes that everyone faces the same choices in life”.

These are dubious claims, to say the least. Take, for example, the claim that participants share full and equal knowledge. That being the case, we would expect every individual to be

privity to all information, whether it be good news or bad. But this can hardly be said to apply in a corporate environment where celebrity CEOs floated high above the concerns of ordinary citizens in a bubble of luxury, surrounded by subordinates conditioned to bring them nothing but good news. “I’m the most lied to man in the world”, was how one CEO explained his situation.

Nor could it be said to apply to ordinary Americans, those folk who, if they wanted to keep their jobs, were obliged to attend seminars and read material by so-called experts armed with a pseudoscientific mix of economics, quantum physics and mysticism. As one life coach insisted, “with quantum physics, science is leaving behind the notion that human beings are powerless victims and moving toward an understanding that we are fully empowered creators of our lives and of our world”. Assuming this was how reality worked resulted in the creation of working environments where the entrenched cult of optimism made it advisable to conform lest you be targeted for “releases of resources” or whatever euphemism for layoffs the company used.

Outside of work, the American citizen was preached to by TV evangelists broadcasting their ‘prosperity gospel’ that God wanted true believers in optimism to have it all (a situation that inspired a 2008 Time article called ‘Maybe We Should Blame God For The Subprime Mortgage Mess’). They were advised by (in Ehrenreich’s words) “professional optimists [who] dominated the world of economic commentary...Escalating house prices were pumping the entire economy by encouraging people to use their homes like ATMs...taking out home equity loans to finance surging consumptions and housing prices were believed to be permanently resistant to gravity”.

According to Washington Post columnist Steve Pearlstein, “at the heart of any economic financial mania is an epidemic of self-delusion that infects not only large numbers of sophisticated investors but also many of the smartest, most experienced and sophisticated executives and bankers”.

An economy infected with an epidemic of self-delusion and where pressure is on to conform to a ‘yes-man’ culture of positive thinking is hardly conducive to bringing about the neo-classical concept of human beings as perfectly informed and rational agents.

Now let’s move on to the other fundamental assumption of neoliberalism, that being that we all face the same choices in life. Here, I will just ask the reader to take a person living paycheck to paycheck, working in a corporate environment whose advice to those facing unprecedented levels of ‘restructuring’ and ‘career-change opportunities’ (more euphemisms for layoffs) is “deal with it, you big babies!”, and compare their situation to the likes of Jack Welch (1935-2020), the CEO who laid off over a hundred thousand workers, who retired with a monthly income of \$2.1 million, was given an \$800,000-a-month Manhattan apartment, a Boeing 737 (also courtesy of the company) and free security guards for his many homes. Does anyone seriously believe that we are talking about two people with exactly the same choices?

When we make references to the ‘free market’, what, exactly, is this ‘freedom’ that we are referring to? The neoliberal ideologue would no doubt claim that it refers to the freedom to

partake in voluntary exchange, echoing Ayn Rand's words, "an honest man is one who knows that he cannot consume more than he has produced".

But if that is the case, then it is difficult to imagine how all those toxic assets could have been accumulating in the financial sector, or how 'borrowing' could have pushed the national debt beyond ten trillion dollars. I think a more apt description would be "the free market is a competitive environment in which players strive to achieve disproportionate material and political advantage over others, via whatever methods they can get away with". This definition leaves open the possibility that some will try to get ahead through the spreading of false information intended to exploit human vulnerabilities in a profitable way, actions which, while obviously immoral, would also not be opposed in a purely Capitalist world, for the simple reason that Capitalism is amoral and therefore incapable of telling the difference between legitimate and illegitimate forms of pursuing profit.

All Capitalism cares about is whether a profit-making scheme works or not. It cares nothing for the underlying honesty or morality of such actions. All it can do, absent of any outside moral, regulatory structure, is to make those illegitimate forms of profit making fail, while promoting the more honest forms that appeal to the best in us in order to sell well-made products we genuinely need to live happy, wealthy lives. "Getting away with it" depends on how clued up and vigilant the other players are to whatever deceptions the cheats dream up, and whatever regulatory structures are in place to curb such behaviour. But, in Nature, parasites respond to the environmental pressure to defend against them by evolving ways to evade such defences or even to alter the minds of their victims so the latter work to support and nurture them rather than fight off those bloodsuckers. Market competition imposes the same evolutionary results on human behaviour.

Gillian Tett (b. 1967) of the Financial Times has commented on how an elite "try to stay in power, and the way they stay in power is not merely by controlling the means of production but by controlling the cognitive map, the way we think. And what really matters in that regard is...what is left unstated, unsaid".

In a corporate environment amidst a consumerist world feeding off of New Thought ideology, there was quite a lot being left unsaid. As Adam Michelson, senior Vice President of Countrywide said, "these are the times when that one person who might respond with a negative comment or a cautious appraisal might be the first to be ostracised. There is a great risk to nonconformity in any feverishly frothy environment like that".

Indeed, America in the early 21st Century was riding high on optimism. Communism had been defeated, and the turbulent world of financial capitalism was sold to the public as a rising tide that lifts all boats. According to Robert Reich (1946), "optimism...explains why we spend so much and save so little...our willingness to go into debt is intimately related to our optimism".

This optimism has three roots. First of all, there is the mythstake of barter, which led us to believe in a fantasy beginning to 'money' in which it somehow evolved out of friendly swaps in a world absent of debt and States (when in fact, for the past five thousand years, commercial markets have been the creation of states, and before that human economies had little to do with the commodification of stuff that typifies 'markets' as we understand

them) and that therefore we should be able to run modern markets with little to no State intervention; the Calvinist religion that helped the founders of the USA tame the Wild West, and the New Thought ideology that attempted to undo the mental damage such a punitive religion could impose, but actually ended up being just as harsh on 'inappropriate thought' as the Puritanism that preceded it. The only difference was that it was negative thinking, rather than pleasure seeking, that was regarded as sinful.

As Ehrenreich explained, "for centuries, or at least since the Protestant Reformation, Western economic elites have flattered themselves with the idea that poverty is a voluntary condition. The Calvinist saw it as a result of sloth and other bad habits; the positive thinker blamed it on a wilful failure to embrace abundance. This victim-blaming approach meshed neatly with the prevailing economic determinism of the past two decades. Welfare recipients were pushed into low-wage jobs, supposedly in part to boost their self-esteem; laid off and soon to be laid off workers were subjected to motivational speakers and exercises. But the economic meltdown should have undone, once and for all, the idea of poverty as a personal shortcoming...the lines at the unemployment offices and churches offering free food include strivers as well as slackers".

## CHAPTER FIFTY-SEVEN

At the end of the last chapter, we completed the case for blaming the private sector, rather than 'the State', or just 'personal irresponsibility', for the essential causes of the 2008 crash. Before moving on to discuss the aftermath, we should acknowledge that not everybody agrees that the private sector was to blame. Republican conservatives would rather cast Liberal Democrats in Congress as the villains, rather than Wall St financiers and bankers (from whom they receive massive financial support). The Republican finger of blame also points to a US law known as the 'Community Reinvestment Act', which set targets for mortgage lending to disadvantaged neighbourhoods.

In short, the counter-argument to the one laid out in the last few chapters is that, actually, the housing boom was caused by too much government regulation. What all those rules and regulations did was force Fannie and Freddie to subsidise dodgy lending to the sort of people who would never qualify for those mortgages under genuine 'free-market' conditions- you know, poor people, immigrants, minorities, people like that.

That's the argument, but there is little evidence to support it. The bubble was driven by the private sector, particularly its least regulated components (i.e., 'shadow banking'), not by Fannie and Freddie.

If you want some justification for that assertion, just seek the answer to the following question: Which had the higher default rates, loans created and packaged by mortgage lenders and Wall St, or the loans that were bought and guaranteed by Government-Sponsored Enterprises like Fannie and Freddie? It's actually the former that was dishing out loans with a higher default rate.

Now, it is true that Fannie and Freddie guaranteed the mortgages of increasingly uncreditworthy borrowers. But why did they do this? The Republican explanation is that this was something they were forced into by overregulation. But, did Fannie and Freddie's

regulator really force them to inflate a housing bubble? If anything, the regulator had the effect of slightly reducing the damage GSEs did. The regulator accomplished this by stopping the massive accounts frauds, which were one of the ways GSEs had been gaming the system.

Moreover, it was not really things like regulations or affordable housing goals that caused Fannie and Freddie to behave recklessly, but rather a scramble for annual bonuses and stock options. In other words, decidedly private-sector incentives.

As for the accusation that GSEs caused the bubble after having come under liberal democratic pressure, we can lay that argument to rest by remembering when the worst behaviour occurred, which was a time when the Republicans controlled the White House and both houses of Congress.

Then there were the eventual losses. Why did GSEs suffer those losses? Was it because they had been loan buyers, insurers or securitisers? No. The losses happened (or, at least, half of them did) because Fannie and Freddie had behaved like investors driven by the same toxic incentives as the wolves of Wall St. After all, why did Fannie and Freddie buy and guarantee all those securities? It wasn't liberal political pressure, or a sense of leftist social responsibility that drove this behaviour; it was driven by their executives and traders seeking investments based on short-term performance, with no 'clawbacks' in the event of things going bad later on. In other words, the same toxic incentives that was driving speculators in the private sector. We can look to the same reasons in order to understand why they started buying higher-yield mortgages after the bubble was underway.

So, what are we to learn from all this? Is it the case that the Republicans are scapegoating the government by blaming the 2008 bubble on overregulation and leftist social policies?

I think 'scapegoating' would not be the appropriate term to use. It is properly used when fault is attributed to some person, group etc who are entirely blameless. This is not really the case when it comes to the government's part in the subprime mortgage bubble. Nobody can deny that political pressure played a small role in influencing the purchases GSEs were making, and it's also fair to say that Fannie and Freddie were major participants.

However, political pressure was not the primary factor behind the purchasing decisions of GSEs- those all came firmly from the private sector. And, while they may have been major participants, Fannie and Freddie were not the major beneficiaries of spiralling property values, and nor did they start that bubble. They did cause a lot of damage due to their size, and they are not blameless by any means. But, really, they were minor players and the bulk of the blame is properly attributed to private sector forces.

Another thing we should avoid would be to blame the Republican Party for all this. It is true that this was the Party that controlled both the White House and both houses of Congress. But, really, would things have been different had the Democrats enjoyed that control when the bubble happened?

I think not, for the following reasons. Firstly, we have already seen that both the Left and the Right want to see home ownership increased (they just have different motivations for doing



so). Also, the Democrats would have faced the same globalist incentives, such as China's policy of flooding Western markets with cheap goods and cheap money, that led to those who happened to have control to bring about a situation in which homes were treated like ATMs. So, the Democrats would most likely have done the same had they been able to exercise the control that the Republicans enjoyed.

We should also remember what Globalisation and Total Bureaucratisation/ Total Marketisation actually brought about. It was a thorough entanglement of private, military and state bureaucracies, not a partial entanglement that only affected the Republicans and left the Democrats untouched. What needs to be understood is that, thanks to a combination of Globalisation, American economic decline, and the commodification of political and legal systems, there has been a profound realignment of American politics. Whereas, for much of the 20th century, the Republican Party was reliably the party that put business interests first, whereas the Democrats were on the side of the Blue Collar worker, Unions and the poor, now (at least when it comes to their funding sources) there's really nothing to distinguish them, and we should really speak of the 'Demopublicans' as a single duopoly whose top priority is, by far, protecting America's economic oligarchy.

If it seems strange, even absurd, to assert that there is no difference between the Republicans and the Democrats, that's because there are differences, and major ones at that. But all such fierce and partisan conflicts are very much within the sphere of 'values' and social issues- things like abortion, gun control, gay marriage, more versus less socialised healthcare. These are all social and 'values' issues that are important to the popular bases of the two parties and, therefore, when it comes to campaigning to control the political system, each party can legitimately claim defeat will mean painful losses.

But, while it really does seem absurd to say the two major parties are colluding and under the influence of a single oligarchy when we consider how they represent themselves in the 'sphere of values', we get a very different outcome when we move over to the 'sphere of value'. When we do, we see that, when it comes to issues of critical concern to the financial sector and America's economic oligarchy, the actions taken by the two parties are so similar we can truly say that America's politics is dominated by a cartel, or a political duopoly formed by the two parties, and the top priority of this duopoly is to ensure political, financial and legal systems put the interests of big business and political and financial elites way, way before the interests of the rest of society.

We saw earlier how, in Medieval times, the Aristocracy dealt with the danger of the minor nobility forming collectives with the peasantry and overthrowing the current ruling class via organised strength, by providing an elaborate hierarchy of titles and other tokens to squabble over.

I would say the Demopublican Party has adopted a similar strategy. The only difference is that, rather than distract the middle and lower classes with hereditary titles and popular festivals, they are instead distracted and divided by social and 'values' conflicts. What would happen if the people were not distracted over 'woke' or 'politically correct' hot button topics? It does not seem too ridiculous to suggest that, absent of such distractions, the feeling that the 'free market' really means socialism for the super-rich and the harshest form of individual responsibility for the poor, would grow and grow until all those who are not in that exclusive

club who get to treat debt more like a gift than anything seriously expected to be repaid, would organise themselves into an overwhelmingly powerful revolutionary force.

But, those distracting 'values' issues are in place, and they take attention away from the fact that, as the power of the financial sector grew, that resulted in a shift of the entire political spectrum toward the ultra-wealthy on economic issues. When it comes to where they stand on the regulation of Wall St and other concentrated and regulated industries, there is now virtually no difference between the two Parties. As one US senator once put it, "does the government regulate Wall St, or does Wall St, with their billions and billions of dollars, regulate the government through lobbying and campaign financing?".

Behind that rhetorical question there lies a sad truth. The various forces we have been uncovering in this volume, 'Managerial Feudalism', 'Total Bureacratism/ Total Marketisation, Globalism, Neoliberalism, Financialisation, have succeeded in rendering all forms of in-system activism more or less impotent. There's no point in voting because the Demopublican duopoly will always get into Power and set up a government aligned with the interests of the financial elites. There's also no point in the sort of protests that wouldn't meet with violent oppression from those weaponised bureaucrats known as the Police, because what power or influence can waving signs and chanting slogans have, when there are something like 28 officially registered lobbyists in Washington for every single member of Congress, and each one of them has pockets vastly deeper than yours?

No legitimate form of protest would have changed the events of the mid-2000. Vote however you like, write whatever you want on protest banners, it would have made no difference. The Demopublican party would still have won and the same mostly private incentives that caused the bubble would have inflated it, until it burst.

And burst it did. That bursting of the subprime mortgage bubble marked the end of a dream, a fantasy. The reality was that it was actually the Chinese politburo's system of exporting cheap goods and cheap money that fed the boom and kept inflation low, but at the time very few experts credited a foreign 'communist' state for having brought stability to the markets. Instead, they let their faith in IT systems lure them into believing the stability came about thanks to computer systems running mathematical models that bundled and tranced masses of loans into commodifiable securities, and then hedged and balanced those securities in a way that maximised returns while eliminating risk. As we can tell by former Prime Minister Gordon Brown's (b. 1951) bold declaration that there would no more boom and bust, they were pretty confident that the system would find its own equilibrium. The neoliberals had promised they would create a new kind of market democracy that would be stable, and they had delivered.

But such promises had been made elsewhere, most notably in Southeast Asia and Russia. Time and again, what had actually resulted was chaos and instability, the very opposite of the 'new democracy' that had been promised.

Now that chaos had struck the very heart of the West. The debt that the enormous wave of speculation was based on had never really been hedged and balanced; it had been hidden and allowed to grow until there was enough toxicity to threaten the integrity of the entire global economic system. At that point, the banking/financial elites took the same action they

had taken when the Southeast Asian bubble burst, which was to mobilise political power to rescue themselves.

In 'The Big Short', the film's anti-heroes spend most of the movie wondering how those working in financial markets can be capable of developing such formidably complex mathematical models, and yet at the same time be pursuing short-term gains that are so blatantly stupid. How can anyone be such a genius and such a moron at the same time? But when the bailout happens, they have to cast the situation in a new light.

"They knew. They knew the taxpayers would bail them out. They weren't being stupid. They just didn't care".

Now, one would have to assume that there would be riots on the streets if Wall St spivs just got the government to conjure up \$13 trillion out of thin air, with no justification beyond wanting to save financial and political elites from a mess they themselves chiefly created. There had to be some kind of further justification that was used to sell the idea of the bailout to the larger community.

311 million people live in the USA. 158 million of those people have jobs. A very large percentage of working people- 72 percent- exist in a state of perpetual financial anxiety. Even though they may well be working at least two full-time jobs, they have little to no savings, and very little in the way of social safety nets (since that kind of support is anathema to the fanatically pro-Capitalist USA). The only thing between them and financial calamity is their paycheck, and they don't need to miss many of them before they get into very deep trouble indeed. They live paycheck to paycheck, and would struggle to raise \$2000 on short notice.

This is, of course, all perfectly consistent with Capitalism. That, after all, is an (anti)economic system designed to relentlessly concentrate wealth, so of course you end up with a few oligarchs who 'earn' a year's salary in an hour, and retire with much more wealth than most families could ever earn in several lifetimes, while a much, much larger majority find themselves barely able to raise themselves above the poverty line, or if they do so raise themselves, it's done by living off credit cards and payday loans.

The problem is, there are something like 70 million handguns in the USA, and we've all seen from harrowing footage of 'spree killings' that disgruntled citizens have access to high-calibre assault rifles that put military levels of personal combat into their hands. In short, the 'right to bare arms' has placed an enormous amount of firepower in the hands of the American people. Now imagine that all 72 percent of that populace, kept on the breadline by Capitalism, woke up one day to find the ATMS no longer have any money in them and their wages are no longer being paid. How much damage could they inflict if they got angry enough to grab their guns and assault rifles and go out and riot?

That was the fear and the justification behind the Bailout: Not just the cost of letting the whole system meltdown (that cost would have been the sum of those bank assets, which amounted to 61% of GDP) but also secondary costs like millions of job losses, a reduction in output, and the damage that 70 million handguns can inflict.

Was it worth paying \$13 trillion to save a system deemed “too big to fail”? I guess we’ll never really know what the costs would have been if the (anti)economic system had been allowed to fail. But one thing we do know for sure, and that is that there was nothing fair or socially just about that bailout.

At the very least, you would expect two conditionalities to come with a state handout of \$13 trillion. Firstly, that the costs would be shared according to both ability to pay and responsibility for the bust and, secondly, that massive restructuring and reforms or, even better, a radical revolution in the way economies and societies are structured, would be implemented.

But nothing like this actually happened. Instead, the elites took the money that the State (and, ultimately, the American people) gave them, and instead of doing any restructuring they used that money to pay themselves huge bonuses and lobby congress to kill big reform. Meanwhile, the state’s bailout meant that all that toxic and, in many cases, fraudulent private debt was turned into a public liability that imposed crippling austerity on the masses.

In ‘The Big Short’, Mark Baum expresses his concern over how the bailout will affect society. “I have a feeling that in a few years people are gonna be doing what they always do when the economy tanks. They will be blaming immigrants and poor people”.

He was partly right. What actually happened was that the blame for the crash was pinned on the government, yet another example of elites in the banking/ financial sector taking advantage of the fact that most people think ‘Bureaucrat’ means government official or civil servant, an attitude that entails ignoring the fact that it is a term that applies just as much to corporate and military paper-pushers, and, even more than that, the fact that even when the State part of Total Bureaucratisation/ Marketisation only plays a minor role in some sort of crisis, Populism is always ready to condemn it, as though it were the only culprit and if only we could reduce its reach or, better still, eliminate it altogether, these sort of things just wouldn’t happen (and we have seen how such attempts to limit the reach of the state actually end up massively increasing the amount of rules and regulations, as per the ‘Iron Law of Liberalism’).

As well as the usual “blame the government” tactic, we also saw the rise of populist leaders. Either these guys really were idiots, or they pretended to be. Whatever was really the case, their antics turned them into targets of ridicule for the liberal elite, who found they got great ratings boosts when they gave clowns like Trump media exposure. It probably seemed like a great strategy: Knock all other candidates out of the race for leadership, leaving the electorate with a choice between a multi-bankrupted moron with zero political experience and a seasoned politician from a family that had already held the highest office in the land. How could the Democrats possibly lose?

Unfortunately, the liberal elite who helped bring about this binary choice between a moron and a very experienced politician failed to factor in two crucial points. The first was that Trump actually did not look like a moron to many of his voters, because he perfectly fitted the less intelligent person’s idea of a rich, successful, and smart man. But, more importantly, a great many ordinary Americans had come to possess such a profound dislike of those they thought of as the ‘Liberal Elite’, and the more Trump was mocked by that class, the more he

seemed like “one of our own” in a “the enemy of my enemy is my friend” kind of way. People flocked to his political rallies, where they were told half truths such as “the elites are to blame for the hard times you have endured” (true) “but we will fix the system and make America great again” (false). And, of course, populist resentment against immigrants and poor people was whipped up, just as Mark Baum foresaw.

## CHAPTER FIFTY-EIGHT

At the end of the last chapter we saw how it is appropriate to think of the United States’ two main rival political parties as having such similar beliefs, the political system of that country is best thought of as a single duopoly. For various reasons, all forms of legitimate protest have very little influence, because Total Bureaucratisation/ Marketisation has a great many ways to neuter their effects.

That’s not to say that such protests never achieve anything at all. It’s just that what positive changes they have wrought have been far too modest in comparison to the radicalism needed to rescue us from the (anti)economy we have built, and those modest changes tend to be eroded over time, until we are right back in a situation just like the one that predominated when this or that protection or right did not exist.

I think it’s fair to say that many people agree with that old cynical view of politics that is encapsulated in the saying “If voting really did change anything, it would be abolished”, and have taken to either disengaging from the entire process, or casting protest votes for populist leaders.

Now, to be fair, it should be acknowledged that not all votes for populist leaders/ policies have nihilistic intent. In other words, not everybody who votes this way does so just because they want to see the world burn. Some no doubt believe that such a leader will build a better, wealthier, more secure future. One thing that seems to back up such a belief is the way the Populist leader/ Party is the only one speaking up about issues of critical importance. No other would-be leader or Party does this, since they are cowed into silence by the Cancel Culture mentality of the Other. Brave Mr/Ms Populist, though, stands up against this oppressive force, so just think what wrongs we could right and what freedoms we could regain if only such free-thinking leaders could be handed a clear mandate of authority.

That’s the belief that drives many to vote in favour of Populism, and it is flawed for at least two reasons. Firstly, the idea that these are people who have had the ability to express their opinions suppressed is blatantly ridiculous. In actual fact, they have tended to control the most effective means of broadcasting propaganda. From being the owners of major newspapers in the 20th century, to having control over social media in the 21st century, these people who always complain about a conspiracy to silence certain opinions, expressions and thoughts have no problem voicing exactly those opinions, expressions and thoughts at full volume all the time.

No doubt they would say that, while they do have the power to speak their mind, there are plenty of folk who are cowed into silence, and that that they speak up for this ‘silent majority’.

There is some truth in that. It is not entirely incorrect to say that there are those who would rather certain views were never expressed and certain beliefs never practiced, and they are prepared to use various methods of intimidation to force the rest of us into conforming. When people talk of a 'Cancel Culture' that's not just an empty phrase. People have been shouted down, or suffered worse threats, for saying or being something less tolerant people did not want to hear, see, or know.

But while Populist leaders/ parties are prepared to speak up about such issues, they never really fully embrace Populism itself. Yes, they are perfectly happy to speak out all the time about issues to do with 'Cultural Populism', which is to say issues like gay marriage, the legal voting age, how many genders we should recognise, and things like that. But they have no interest whatsoever in discussing 'Economic Populism', and indeed a major reason why they are so keen to promote hot-topic cultural issues, is because that makes a convenient distraction from the awkward topic of Economic Populism.

The reason why is because the implementation of Economic Populism would be something of an existential threat for any Populist figure who can come anywhere close to obtaining High Office in a 1st-world nation. After all, what does Economic Populism oppose? Well, first of all, it opposes full equality. Most people believe that this is neither feasible nor desirable, and that some people do deserve to receive greater rewards than others.

But (and this is the crucial point) most people also don't wish to live in a world where extreme inequality happens, either. The popular opinion is that no individual or group should be able to put themselves in a position where they gain so much there is no choice but for others to have too little. Economic Populism, in other words, seeks to rid the world of paupers and billionaires, but rather live in a distributive system that can recognise the disproportionate value some contribute, while leaving enough for everybody else such that nobody need live in a state of financial anxiety.

But, of course, newspaper moguls, business executives of major corporations and leaders of the most popular social media platforms are always in the upper echelons of the monied elites, and they rarely do anything that might possibly undermine the immense financial/ political power they wield. Therefore, they never implement full Populism, but rather a limited form that conveniently serves to keep them gaining at the expense of the very people they pretend to be serving.

Some may still refuse to believe that the situation is as hopeless as I am making it out to be. Surely, there has to be some way of making revolutionary and transformative change a reality? In fact, did we not briefly mention just such a possibility at the end of chapter fifty?

To recap, we learned how, in the early decades of the 21st century, mobile devices capable of accessing social media platforms enabled revolutionary groups to form in a way that was far more spontaneous and decentralised than anything we had seen before. In places like Georgia, Kyrgyzstan and the Ukraine, individuals with no guiding ideology save for a desire for greater self-determination and freedom used social media and highly mobile devices to begin realising the dreams of the network utopians who had originated the Californian Ideology.

This group had always maintained that, if computers became sufficiently personal and networked, then the experimental communes that formed on a small scale in the 60s could be massively expanded, until we had a global civilisation running far superior forms of democracy, group dynamics and personal freedom. The uprisings mentioned earlier were seen as the beginnings of this grand and uplifting process.

There is, however, one obvious problem with this idea that those social media-fuelled uprisings marked the beginning of a whole new zeitgeist that would change all the world. And the problem is that, in each case, the optimistic sense of freedom powering those revolutions lasted for only a brief time.

Take Georgia for example. At the time of the revolution, the country was 73rd on the world index of press freedom. But rather than things improving post-revolution, Georgia's position actually fell down to 99th place.

Kyrgyzstan did not fare much better. Not long after having been installed in Office, enough accusations of corruption led to the new president fleeing, leaving behind a country torn apart by ethnic clashes.

As for Ukraine, yes, Viktor Yanukovich (b. 1950) was ousted from power, but he soon regained it and set about dismantling democratic institutions. The Ukrainian people ended up so disillusioned and cynical about the state of politics, they voted for somebody who was not a politician but rather a comedic actor who had starred in a political satire lampooning the Ukrainian government- the equivalent of US voters making Kevin Spacey president, purely on the basis that he starred in 'House of Cards', or making some reality TV celebrity president (which, come to think of it, they did). At least in this case that president, Volodymyr Zelenskyy (b.1978, turned out to be a great figure who has stood up against Russian aggression. But he was voted into power for the most cynical of reasons and, just like everywhere else, the revolutionary moment in Ukraine never led to anything of lasting and positive change.

Nor were any of these failures in any way contrasting or opposed to what actually happened in those communes that so inspired the Californian Ideology. Not one of those communes succeeded in creating a stable, self-sustaining community. Instead, most of them failed after three or four years, and some failed after only six months. What was it that caused those experimental communes to fail? Nothing less than the very force the cybernetic principles they were based on had supposedly banished- power.

As former Synergia member, Molly Hollenbach, explained, "the original idea was very positive indeed. It was to create an egalitarian society in which everyone would both be free to be themselves, and also be able to contribute to the group in a really positive way".

This, remember, was enabled by basically forbidding any groups, coalitions or alliances among members, leaving only one-to-one dialogue as a means of resolving issues. What that did, though, was to bring about a situation all too similar to that famous slogan from George Orwell's (1903-1957) 'Animal Farm'- "all animals are equal, but some animals are more equal than others".

Normally, when it comes to social groups, it's not actually the biggest, strongest and meanest bully who gets to be leader. While the ability to project strength is obviously advantageous for those in a position of leadership, absolute tyrants who have no friends or allies are in a weaker position compared to those who don't just throw their weight around and intimidate everyone, but rather act at least somewhat diplomatically, and so form alliances, the combined strength of which is more than a match for the lone bully.

Of course, such groups cannot be guaranteed not to behave in a way that enables them to get ahead at the expense of everybody else, but at least the possibility of teaming up does provide a way for those who are not strong individually to stand up against those who are.

But, because of the way those rules were set up in Synergia, that kind of defence against the lone bully was not possible.

As Molly Hollenbach explained, "the very rules that kind of set up this egalitarian group resulted in the opposite of the dream. They resulted in creating a hierarchical structure in which some could be dominant over others, because not everyone is equally powerful in their voice against one other person".

You will recall that each member of Synergia was only permitted to raise issues with one other person. While these were supposed to be negotiations between two equal members united, ultimately, by mutual respect, the more domineering nature of some members meant such dialogues turned into bullying, and there was nothing the others could do about it.

According to Randall Gibson, "in practice these would be 20 and 30 minute hazing sessions that were quite awful to experience and usually met by silence from the rest of one's peers. So there wasn't any 'hey, lay off he's an OK guy' or anything like that. There were no supportive comments".

So, both the communes and the revolutions failed because of what they had in common. Firstly, both had been built on a flawed assumption that they were based on the underlying order of Nature. Both the hippies and dropouts that formed those communes, and the tech entrepreneurs who built the social media devices and platforms, had taken the ideas of Arthur Tansley and the Odum Brothers, and attempted to build self-organising social systems based on those same principles of feedback.

But actually, as we have seen, these ideas had never really come from 'Nature' at all, but came instead from the cold and logical world of the machine. Both the tech entrepreneurs and the hippies were disillusioned with Politics and thought that, since their networked societies were based on the underlying order of Nature, then surely they would enable superior forms of democracy. But, in actual fact, the way both the communes and the revolutions failed revealed the limitations of a self-organising model built on machine-like principles. It results in a system that is not able to deal with politics and power, those two central dynamic forces of human society.

Being in a highly individualistic society can certainly be a liberating experience. After all, who has not dreamed of living in a world with no authority limiting your freedom of self-expression and personal development? But the downside is that, when it turns out that you alone are



not sufficient to overcome some problem, issue or whatever, you have no other support to call upon. Far from democratising power, these self-organising systems, by removing the collective constraints against the aggressive and acquisitive individual or group, led instead to oligarchical hierarchies, endlessly amplifying the wealth and power of those that already possessed such things, at the expense of those without.

## CHAPTER FIFTY-NINE

In 1959 a famous debate known as the 'Kitchen Debate' took place. The participants of this particular debate were the then president of the United States, Richard Nixon (1913-1994) and the then Soviet leader, Nikita Krushchev (1894-1971). During this debate, Krushchev made a comment that, amazingly, did not meet with gales of derisive laughter. He admitted that, yes, the USA was currently the strongest economy in the world. But the USSR held the number two position, and within seven years the living standards of those in the Soviet Union would surpass those of the United States.

Remember, that this was 'Communist Russia' he was talking about. Today, when we think about the economy of that country, what springs to mind is a basket case system that foolishly tried to replace market dynamics with something more rational and managerial, and ended up with a broken society with needless surpluses stockpiling unwanted goods, and shelves empty of the produce people actually did want. So, yes, one would expect a comment that this society would soon beat the United States and become the world's strongest economy, to be dismissed as obviously wrong.

But that's not what happened. Instead, when Krushchev predicted that his country would soon surpass the USA economically, many Americans feared that might actually be the case.

If you think about how these two countries stood in relation to each other, you'll see why such a claim sounded all too plausible. The decades of the 50s and 60s were ones in which two superpowers were locked in a contest of economic, political, and military supremacy known as the Cold War and the Space Race.

With some further thought, it should be obvious that Russia should never have been able to rival the USA in either case if the narrative we now like to tell ourselves was really true. The 'Cold War' of course refers to that delicate balance of power between rival countries equipped with enough firepower to destroy world civilisation.

That terrifying destructive capability came in the form of a stockpile of intercontinental ballistic missiles carrying thermonuclear weapons. Such a weapon is hardly the sort of thing a bunch of disorganised halfwits can just cobble together in some rundown factory. It requires handling some incredibly dangerous materials like plutonium and the triggering mechanism was described by John von Neumann (1903-1957) as the most complex mechanism humankind had ever assembled (although, he was actually talking about the far simpler fission bomb, not the even more sophisticated hydrogen bombs that were the strategic 'defence' both the USA and USSR were equipping themselves with).

Furthermore, it was not enough to construct a device whose purpose is basically to give birth to a star (albeit one with a lifespan measured in seconds rather than billions of years). That

device also needed a delivery vehicle that could hit enemy targets on the other side of the world. That added yet more complexity to an already technologically-advanced machine. Finally, it was not sufficient to build one such weapon, but to have the means of stockpiling so many, any would-be aggressor could be in no doubt that a hostile act really could be an apocalyptically costly move.

Now, you can question whether or not it was a good thing that so much scientific knowledge and engineering skill was coordinated and utilised to make something that could destroy the world should some country with one kind of economic/political ideology refuse to accept the rival system of another country. But one thing is for sure, and that is that building the infrastructure of the Cold War required a staggering amount of resource gathering, engineering and logistics. It was a challenge that the USSR was equal to. Certainly the West thought so, as nobody doubted that the USSR was the United States' rival superpower.

And yet, we're supposed to believe that this is the same country whose economic system was so shoddy and broken, figuring out a way to keep shelves stocked with everyday goods was a challenge beyond the capabilities of its people.

We arrive at much the same paradox if we consider the 'Space Race'. Calling this tentative step beyond the confines of our planet a 'race' gives the impression that the USA thought Russia was a serious rival in the quest to conquer space. You would after all, feel very relaxed about a country that is hopelessly behind you, technologically and economically speaking. Again, it's by no means easy to build a machine that can launch equipment and people into space and then return them safely to Earth. Just ask Elon Musk, whose own rockets are just as likely to explode rather than complete their intended job. And yet the Russians, you know, those guys who cannot build a TV set that doesn't just explode, not only managed to build working rockets, but pioneered humanity's steps into space, with the first artificial satellite (Sputnik) and the first man in space (Yuri Gagarin (1903-1950) ) as Soviet bragging rights.

There were indeed staggeringly sophisticated technological achievements associated with the Cold War and the Space Race, and you do have to wonder how the USSR did as well as it did, given the narrative that is so familiar today, of any 'Communist country' being a basket case where nothing works and is left far behind by Capitalist countries with their incomparable superiority.

Well, there's actually a pretty simple answer to that. It was only after 'Communism' was defeated that the narrative became one of the USSR being the exemplar of a dysfunctional society. Go back to the 30s, though, and things looked very different. In that decade, the United States was suffering from the Great Depression after Capitalism caused the greatest financial crisis the world has ever seen. But as for the Soviet Union, its people were enjoying economic growth rates of an unprecedented yearly rate of 10- 12 percent. No wonder, then, that, in the 50s and 60s, many in the West took the claims that Russia would become the most powerful country in the world, and maybe even the first to colonise space, very seriously indeed.

And so, the United States got involved in a 'Space Race' against its Cold War rival. Both the Cold War and the Space Race had an interesting effect on how the United States' productive

processes were popularly perceived. The truth was that, by the fifties and sixties, factories had experienced a slowdown in the pace of technological innovation. But, thanks largely to side effects of rivalry with the Soviets, that slowdown was disguised. The Space Race required an enormous input of industrial processes, and the 'threat of Communism' incentivised US industrial planning to find ways of using what technologies were at hand to create a general feeling that everybody stood to achieve prosperity under the guaranteed progress that Capitalism would provide. Had there never been a credible-seeming alternative coming from radical working-class politics, it's highly doubtful that Capitalists would have put so much effort into presenting an economic system that is fundamentally designed to increase power and exclusion as something that could be universally beneficial.

Meanwhile the Soviets had their own grand dreams. So far as many of the West are concerned, having got pretty much all of their understanding of 'Communism' from propaganda that opposed it, the Communists only had one major ambition, and that was world domination. Once that was achieved, we would be forever trapped in a grey and uninspiring world run by faceless bureaucrats whose love of rules and regulations would suppress all creativity.

It was of course true that the Socialist system was run by bureaucrats, but the representation of such people as dull, unimaginative types bent on stamping out creativity and entrepreneurship once and for all, falls apart once you take into consideration what Bureaucracy is for, according to the Lefist vision of Utopia. To recap, this was a vision of a world in which we have successfully built bureaucratic and administrative structures that automate the necessity to take care of the dull, dirty and dangerous aspects of human life, and in so doing set the human spirits free to realise its full individual, collaborative and creative potential.

To that end, the Soviet bureaucrats dreamed up some pretty big dreams as it set about devising plans to solve the big problems humanity faced. To give one example, there was a plan to solve the problem of world hunger by breeding *Spirulina* (it's a type of edible bacteria) in lakes and oceans.

It is said that the road to Hell is paved with good intentions, and many of those grandiose plans had unintended negative effects. Some were so grandiose they had no chance of getting off the ground, which just wasted time and manpower that could have been put to more practical use. Worse still, sometimes those dreams of making the world a better place were put into effect, only for the result to be an ecological or social disaster.

But, at least they genuinely tried to solve problems once and for all, and devised many grand and peaceful projects to achieve such goals. This they could do because Communism is in no way motivated to perpetuate the profit motive, and so it makes no sense to keep on servicing a problem when it could be solved once and for all.

In contrast, the Capitalist system is very incentivised to perpetuate the profit motive, because there is no 'Capitalism' without it. So, ironically for a system always promoted as being synonymous with 'freedom', we end up with a world in which nothing is free but commodified and priced, and where it's always better to service an ongoing problem rather than eliminate it once and for all. Given these contrasting motives, it's little wonder that, even in the 80s, the

Soviets were still dreaming of grandiose and peaceful plans, whereas the only grand plan the USA poured resources into was a military project- 'Star Wars'- designed to sink the Soviet Union.

Or, consider the potential of the factory system. Karl Marx and Friedrich Engels certainly had some negative things to say about Industrial Capitalism. So much so in fact that they became known as its most famous detractors. But they did realise that this was a system that had ushered in an era of unprecedented scientific advance and technological innovation and that this process, if allowed to continue under the coercive laws of competition as laid out by classical economists, would bring about the collapse of the Capitalist system while setting up the infrastructure for Communism.

It could be said, then, that in such works as 'Das Kapital', Marx, the philosopher whose big idea was that we live in a world of our own creation and could just as easily build a different reality, published an escape plan to get us out of the Capitalist system.

Now, imagine if prisoners had published a book called 'How to Escape from Colditz', which details all the flaws and weak points in the prison that would-be escapees could exploit and win back their freedom. Furthermore, imagine that such a book became widely published. In that case, not only could prisoners learn how it might be possible to escape, but those holding them captive could also learn about those possible escape routes and do something about it, such that those weak points are no longer there to be exploited, and escape from Colditz is not possible.

It could be argued that something like this analogy happened with Capitalism, which would explain the direction it took, particularly after the 'Space Race' was won.

Now, if there was one thing that was fundamental to Marx's vision of a revolution that brought about an end to Capitalism, it was the belief that only human labour can create value. Therefore, whenever you add a new tool, instrument or machine to augment human labour, such tools, instruments and machines do not, in and of themselves, create value. Instead, they have value from human labour crystallised in them, and that value is transferred to the commodity being made, until the tool etc is completely worn out and no more value can be extracted from it.

It is certainly true that, if a business leads the way in further mechanising production, they get to reduce labour costs and so gain a profit advantage over rival businesses. But this is only a short-term advantage, because once rivals adopt that further mechanisation too, the average socially-necessary labour time goes down, meaning that, overall, the rate of profit goes down as automaton ramps up, because you are reducing the only source of value creation, which is human labour power.

Being a 19th-century philosopher, Marx was writing long before the term 'Artificial General Intelligence' entered the lexicon. While a combine harvester or a weaving loom cannot create value, one has to wonder why it should be that a robot with full general intelligence, meaning it is as capable as solving problems, adapting to changing circumstances, and of doing creativity as well as any human, could not be said to create value if it replaced human

labour. If such machines can exist, then Marx's assumption is wrong. If we can realise the full potential of AGI, then we could have a fully automated economy without killing profit.

But, such an outcome would only be realised if everyone involved in Capitalism- workers, managers, executives and owners- were all 'Pure Capitalists'. It is obvious, though, that very few are 'Pure Capitalists'. After all, what would a 'Pure Capitalist' insist upon? Such a person would insist that as much revenue being generated by business practices is re-invested back into that business so as to keep on increasing its profitability as much as possible. Therefore, all such 'Pure Capitalists' would only accept the minimum possible wage/salary. Nobody would pay themselves six-figure sums; nobody would waste investable funds on conspicuous luxury, and everybody would be eager to make their own position in the business obsolete as soon as technological advance enabled that.

But, as we are all only too aware, it is particularly true of upper managers and executives that, while they are keen to impose a minimum wage and technological unemployment on the blue-collar workforce, they are not at all keen to accept a minimum wage/salary, a frugal lifestyle, or technological obsolescence for themselves. No, they expect to extract riches from the system, to parasitise off it rather than serve it in the 'pure capitalist' sense.

If either of these suggestions are correct, then I would argue that we have identified the reason why technological and social development has not been allowed to go in a 'Star Trek'-style utopia.

Such a statement may seem odd, given what we have seen on the news in recent years. After all, aren't tech entrepreneurs building rockets and talking about colonising Mars? And haven't we all heard of those new generations of AI that are rapidly closing the gap between what humans can do and what machines can do? Therefore, surely we are heading in the direction of a 'Star Trek' style utopia?

Thing is, though, if you look more closely at where technological advances have really been focused, you end up with a much more dystopian picture.

Take taxation for one thing. The Neoliberals would have us believe that the lower taxes are, the higher productivity and innovation will be. After all, lower taxes means more money in the hands of the private sector, the only sector in which entrepreneurialism exists. Certainly, the last thing we should do is give away more money than is absolutely necessary to the State, whose bureaucrats know nothing about entrepreneurialism and just get in the way of progress.

But, actually, it is higher taxation that promotes the positive kind of research and development, as can be seen by considering the motives of companies like Bell Labs during the 50s and 60s. Back then, profits were highly taxed and so, if those profits were simply pocketed the Taxman would simply take a large chunk of it away.

That eventuality just didn't seem as attractive as alternative uses such money could be put to. Such as? Well, such as using that money to pay higher wages to employees, an option which appealed to businesses based on a paternalistic mindset looking to inspire loyalty in a workforce that might otherwise seek a Marxist revolution.

Another option that seemed more appealing than money being appropriated by the Taxman, was investing in research and development. Again, the mindset of such companies played a part too. Up until the 80s, businesses like Bell Labs saw the primary purpose of corporations as the duty to make things, rather than simply to 'make money'. Higher taxes therefore incentivised companies to invest more money in R+D that could lead to overall improvements for society.

But then, following the lowering of taxes and the financial reforms of the 80s onwards, we did see innovation of a kind, but it was innovation in Financialisation not productivity. The days when revenue was used to hire more useful workers, raise wage levels and increase the size of research budgets was over, and we instead entered the era of mergers and acquisitions, stock buybacks, and 'Greenmailing' (this refers to the tactic of simply threatening to launch a hostile takeover, in the expectation that the targeted business's current executives will pay out enormous sums of money to make the raiders go away). 'Innovations' such as these proved to be very useful for boosting the value of executives' portfolios and dumping large amounts of debt onto the rest of society. But they did no good at all for promoting the kind of R+D that could lead to a Star Trek future.

And then there was the research and development into Robotics. One would have thought that, if the main purpose of Capitalism was to automate and mechanise as much labour as possible, then this would be the one branch of sci-tech that would receive the greatest focus. Reality, though, turned out to be quite different. What actually happened is that many industrial-line workers went on strike, not for better pay necessarily, but rather to replace current forms of drudge assembly work with mechanisation. Meanwhile the owners and executives of those factories chose not to invest much at all in robotics, but rather to close down those factories and open up more labour-intensive, low-tech facilities in the global south.

Of course, increased mechanisation could have a detrimental effect on worker welfare too. Throughout the 19th century and early 20th century, the dominant energy source had been coal. Both the need to mine the coal and to have factories powered by it required gathering large amounts of people into localised spaces, and so we ended up with whole towns built around the extraction and burning of coal. With so many workers concentrated into one area, and the supply of the energy source powering the wealth of the country so obviously dependent on their labour, when these workers unionised they were able to exert considerable pressure that forced their bosses to implement improved safety and better rates of pay.

But, with entire towns built around the extraction of coal, and whole communities built around that industry, generations of families built their lives around coal, and in doing so they put down very deep roots. This made it almost impossible for them to move on once coal's dominance as the main fuel source came to an end.

So, once machines came along that replaced human labour, it was like the coal left those towns, hauled away by trains, and the people were left behind without jobs, in environments that turned from thriving communities into decaying rust belts whose inhabitants scraped by on whatever state handouts they could get.

But the greater change to affect collectivised power happened in the 20th century, when coal's dominance was usurped by another fossil fuel- oil. As Western oil drilling companies set up their refineries in places like Saudi Arabia, once more managed communities sprang up around the practice of extracting and burning a fossil fuel.

These managed communities, though, were different from the coal towns. Whereas they had been towns built and managed by paternalistic owners so as to provide a decent place for their workers, the managed communities built in places like the Middle East were not for the workers, but rather the managers. They got to live out a dreamlike existence in towns that sprang up in the middle of the desert, some of which would grow into cities that were playgrounds for the super-rich.

As for the workers drilling for that oil, the executives and managers putting such people to work had no cause to be concerned about collective action for two good reasons. Firstly, much of the oil was being drilled in countries run by authoritarian governments who ruthlessly stamped down on anything like unionisation. Secondly (and, perhaps, more importantly) whereas the extraction of coal had required large numbers of people to be concentrated in certain areas, and their strength of numbers plus the undeniable value of their labour in extracting the coal, all worked in favour of unionisation and worker-focused politics, drilling for and refining oil created an industry that was more like a scattered, diffuse network. In other words, unlike coal oil just didn't lend itself to supporting unionisation, because there was never enough workers coming together to create that critical mass, out of which came collective action.

There was a further reason why oil pretty much undid the collective power that had developed out of the coal industry. A century before, the coal industry had brought millions of people into the cities, and all that labour power had helped make the men who owned the mines and factories incredibly rich. With that concentrated wealth came the seeming ability to control everything, including the political system.

But, in concentrating so many vital workers in certain places, the Capitalists were inadvertently creating a challenge to their power, in the form of mass democracy. As the workers formed unions and other forms of collective power, the role that governments played changed too. It was no longer the case that those charged with creating and enforcing the law of the land looked after the interests of the rich and powerful at the expense of the masses, at least not necessarily so. Instead, the working classes could vote for left-wing governments that represented the masses against the Powerful, and Capitalism was forced to raise living standards in general and to concede to things like paid vacations, weekends, and pension funds.

Oil, though, undermined the idea of mass democracy. Even more than coal, the world (and particularly 1st-world nations) became addicted to oil as it was the lifeblood of the global economy. That put enormous power into the hands of those in charge of supplying thirsty industries with the fuel they needed.

But, whereas with coal that power was really in the hands of the miners who dug it up, and they could bring everything to a halt by going on strike, with oil it was the rich owners who

controlled the taps that could halt everything whenever they wanted to remind the world who was really boss, as the OPEC oil crisis proved.

Since it was obviously where vast wealth was to be found, money poured into the Arab world, until the oil-rich, despotic countries had more foreign currency than Japan, Germany and the USA combined. Indeed, so much money was pouring into the Arab countries, the authoritarian governments like Saudi Arabia didn't know what to do with it all, and so they turned to Western banks for help.

The western banks and financiers knew what to do. They saw that the money based around extracting and supplying oil could be used to create a new kind of currency- the 'Petro Dollar'- that could be traded and used for speculative purposes that freed this currency from governmental control.

As the nations's politicians from all around the world came to the new headquarters of western banks to take part in elaborate signing ceremonies, the many billions of petro dollars they borrowed helped turn the global financial system into a giant force. Not only did most ordinary people feel like it was a force that held their destiny in its hands as they watched speculators muck around with the cost of the energy they were so dependent on, but the politicians also increasingly felt they had no control, either, and that 'Market Forces' should be in charge. But, not in any true laissez faire way that separated the State and the Market, but rather in a way that let money take charge of politics, as it had done before collective power had led to mass democracy.

In other words, oil became one more reason why a certain uneasy and pessimistic mood came to dominate Western society, namely the feeling of being surrounded by natural and man-made global systems that are so complex and unpredictable, neither we nor the governments that represent us can ever really control them.

Again, one can't help but think of the contrasting attitudes that had to do with the long-term effect automation pushed to its logical endpoint would have. On the one hand, the blue-collar workers were thinking, "yes, in the short- and medium-term improved automaton means fewer workers, which could therefore threaten my job; but the end result would be a fully-automated economy outputting such an abundance of products there will be no need for hierarchies based on disproportionate material access any longer". On the other hand, the owners/ executives were seeing the short- and medium-term increase of their own power and influence, but the complete collapse of the scarcity-based hierarchy upon which it was founded, happening in the long-term. Since they could do something to delay or even prevent that eventuality, they took such action.

There is another, more obvious reason why we saw a lack of robotic research that could have led to a Star Trek-style future. It was because some 95 percent of research funding into Robotics was channelled through the Pentagon. Are the armed forces much interested in devoting R+D to the creation of autonomous machines that can pick crops, stack shelves, and keep our streets and homes clean and tidy? Not nearly as keen as they are to R+D unmanned drones, tanks, and other weapons of war.



The military-industrial complex has other uses, besides preparing for and waging armed conflict. Recall how the United States has been able to make use of Soviet-style industrial planning, while hiding this fact from the populace by claiming this is all necessary for military preparedness. Most of the projects taken on by the Pentagon have been related, one way or another, to “security-related concerns”, meaning more weapons, and superior forms of surveillance and communications technologies.

Talk of the later immediately makes one think of the Internet. This would be one example of something that began as a State-funded military project that ended up as a civilian spinoff in the form of the Web we all use today. One can easily make a long list of the conveniences, entertainment and educational opportunities quick access to the world’s information has put at our fingertips, but we should also bear in mind that the Web could just as easily be cast in an altogether darker light, as just one more technology that is useful for those who seek to maintain and increase work discipline, surveillance and social control.

The technologies that put the world’s information within easy access, and the ability to communicate with anyone who can get online, also provided our bosses with the means to keep us under constant surveillance and to start invading those moments we used to have to ourselves. Now you can get a waterproof smartphone so you can amuse yourself on social media while showering, how fun is that? But, it also means you have no excuse not to answer that ‘urgent’ works email while in the shower, or queuing in the pouring rain, or while taking a bath.

Also, the same technologies that provide us with access to the world’s information can also provide our bosses with unprecedented discrete ways of gathering information about how we operate in a world where the distinction between ‘work life’ and ‘home life’ is increasingly blurry. Not only do you have no excuse not to be working or available for your superiors at a moment’s notice if it is possible to set up an office environment anywhere, but by installing various forms of ‘spyware’ that monitors such things as mouse-movements and key strokes, one’s superiors can monitor exactly who is working, when they are working, and how much they are getting done. Meanwhile the flexibility and portability of this sort of tech makes it so much more convenient to create ‘Flexible’ work regimes that underscore the feeling of vulnerability that comes with being regarded as just one more commodity to be moved around as financial assets are bought, broken up, remerged and sold on again.

It’s enough to drive anyone potty. If only there was a means to vent one’s frustration. Of course, the Web does provide such platforms, but the way the Web evolved has made such problems far more like a method of social control than a means of facilitating revolutionary change.

When companies like Google were founded, the young entrepreneurs working in their garage startups were inspired by grand visions that really fitted a ‘Star Trek’-style future.

In order to understand that vision, we should go back to the 1950s. During that decade, there was a famous exhibition known as ‘The Family of Man’. Central to this art exhibition was a mass of photographic images. Its designer was Herbert Bayer (1900-1985). He was a refugee who had fled from Nazi Germany, and his art installation represented a new kind of propaganda.

In the past, the Powerful had controlled the narrative, telling grand and dramatic stories that overwhelmed the people and kept them in a controllable state. But the whole point of Bayer's big collection of photographs of people in all their diversity was that there was no particular order to them. Instead, every individual was free to view the images in any order they pleased, and to form their own story around them.

To explain the concept, Bayer provided an illustration. At the centre of this image was a person with a giant eye for a head. This central figure is surrounded by a mass of images, images personally assembled into a subjective story. As Adam Curtis explained, "it was a utopian vision of the self, selecting and arranging the fragments of images into their own story, and so becoming strong enough to withstand tyranny. Confident individuals, in control of their own world".

Now, in the late 20th/early 21st century, Sergey Brin (b. 1973) and Larry Page (b. 1973) were ready to launch a web-based service that would take Bayer's basic concept, but expand it to an almost unimaginable scale. At the time of Google's founding, the hope was that unprecedented freedom to access the world's information would not confront the old systems of power; rather, it would enable people to bypass them. As was the case with the 'Family of Man' exhibition some fifty years previously, the idealistic vision behind Google was one of every individual gathering data in their own way, and using that information to make up their own stories. Such individuals would be free from the controlling narratives of old elites, but while they would remain individuals they would not stand alone. No, they would be linked together via common interests, forming communities on the Web.

But then, in the early 21st century, certain events happened that forced Google to corrupt the noble idea behind its founding. The first of these events was the bursting of the dot com bubble. Google was one of the Web-based businesses that survived, but now the venture capitalists who had invested in the business and who believed in nothing but money, insisted that Google had better find a way to make money, and quickly.

It did not take the tech geniuses at Google long to figure out how that might be done. They knew that every time anyone was online, they were leaving behind trails. What they clicked on, what they ignored, how long they spent before scrolling, the keystrokes they inputted, it was all useful information. So far, Google had been using this information so as to make the service of giving people the information they wanted more efficient. Now, though, the idea was that if enough information could be gathered together, it would be possible to build up a picture of everyone's psychological profile. You could know almost everything there was to know about them, including their likely future behaviours.

What Google had, then, was a means of inferring what a person would click on and respond to, and all without them even necessarily knowing such information was being harvested. Google started to tell advertisers that their search engine now provided the means to add an unprecedented level of scientific certainty to the old challenge of getting into people's heads so as to sell them stuff.

And so, Google gave the world targeted advertising, a business model that quickly started generating millions of dollars.

There was, however, a slight problem. The business model's profit-making potential lay in the ability to gather an enormous amount of data on millions of people, and to do so without their being aware of it. But Google could not just sneak in and take all the personal data it felt like taking, because laws were about to be passed that would restrict their ability to behave in such ways.

But then the second of those events that would corrupt the idealistic beginnings of Google took place. This was 9/11. Following those infamous terrorist attacks, Security became the United States' primary concern, much more so than individual privacy. After the 'Patriot Act' was passed, Google's money-making idea- that of looking for patterns in a mass of data- became central to the security of the USA, and all the laws that would have restricted Google's ability to surreptitiously gather personal information, faded away.

Now, what all this did was to cause a shift away from the idea of Individualism that had defined the American psyche since the 1950s. And Google changed too. Because, whereas Brin and Page had founded the company on the idealistic dream of giving people data with which they would make up their own stories and become self-actualised individuals, now what Google was all about, was taking people's data, using it to predict what they would do in the future, and all without having to ask them anything. It did not matter what they, as individuals, thought or felt. Nor did the stories they might make up so as to bring some order to a chaotic world matter either. All that was irrelevant. Far from helping individuals become self-actualised, Google ended up sidelining human consciousness even more, and further commodified human life.

To that end, online life saw the introduction of 'Agents'. These were software routines that monitored what you were doing and, in some cases, worked in the background, unnoticed, to encourage you to behave like the good, loyal consumer that Capitalism wanted you to be. One of the more effective ways of achieving such an aim was to populate the Web with 'agents' that worked on the principle, "if you liked that, you will love this". The effect this had was to further organise us into groups of likeminded people, until the Web was less like one big democratic space, and more like a constellation of more-or-less isolated communes where you hardly ever encountered any form of communication or info that opposed or challenged your prejudices.

As well as that, the age of Individualism also found that there was a form of security that people would take great comfort in, which was to be part of systems that reflected oneself back at you. That people found this very comforting was discovered by accident, when a computer scientist named Joseph Weizenbaum (1923-2008) created a software program called 'Eliza', in order to parody what were then attempts to program the rules of human intelligence. Eliza acted like a psychotherapist, responding to what people typed by turning those responses into questions, or by giving one-size-fits all responses. In short, it mimicked the conversations a psychologist might have with a patient, but it did not understand a word being said to it.

Weizenbaum figured that people would soon dismiss Eliza as a mere trick, but instead those who tried it would talk for hours on end, going into great depth about their feelings and other personal stuff. It wasn't that they thought Eliza was a real person that really understood

them; it was more like they had been given a sort of psychological mirror in which they could see their inner selves, and bring it out into the open without fear of prejudice or judgement.

Thanks to Weizenbaum's discoveries, AI changed direction and instead focused on software routines that achieved that secure feeling of having oneself reflected back at you. Thanks to these developments, we ended up with a Web populated by 'agents' that gathered vast amounts of information about people's past behaviour, and then looked for patterns and correlations in order to predict how we would respond in the future. Thanks to the aims driving these AIs- not to know the meaning of anything, but just to look for patterns and correlations- the Web developed into a system that ordered the world in a way that was centred around you. This proved to be a comforting idea in this age of anxious and uncertain Individualism.

As well as that, psychologists who had been brought onboard to find ways of making online life the sort of existence that promoted consumerism, soon found that "angry people click more". In other words, it was found that high-impact, high-emotional content that kept you stimulated (not necessarily angry, though it was by no means disadvantageous to provoke such an emotion) also kept you buying more stuff. For those of us who wanted to vent the frustrations we were being provoked into feeling, we went online and voiced our anger and frustrations into the echo chamber that social media had become, heard only by those who already agreed with one's subjective view of the world, a collective too dispersed in real life to be able to do much of anything about what was considered wrong with the world. And thus, nothing changed.

What was developing, then, was a system that promised not to change the world, but rather to keep the world stable; a very conservative idea, and one that was embraced by both the Right and the Left of Politics (or, at least, that part of left-wing politics with a chance of getting into power). You had Finance, promising it had at last found the secret of controlling the unpredictability of the Market, and new kinds of psychoactive drugs and software agents promising to bring security and comfort to troubled human minds.

What all this did was to transform Politics. Change was out and stability was in, since the overriding aim of Politics now was to manage and maintain the systems we had. So Politics became just another means of managing the world as it is. As Adam Curtis explained, "the old idea of democratic politics, that it gave a voice to the weak against the powerful, was eroded".

Now, in the mid 2020s, there is much hype surrounding the capabilities of new generations of artificial intelligence. While we are undeniably seeing some incredibly impressive advances in what AI can do these days, again not much of this advance has a lot to do with the future we were promised.

When those blue-collar workers picketed to increase automation in industry, they were (we can suppose) foreseeing a world in which robots would do all the dull, dirty and dangerous jobs, and that would free the human workforce to pursue nobler goals, such as creating music, making films, writing novels, and stuff like that. But what we got instead was AI that is incredibly good at producing art and literature (the ability to instantly generate a movie is not

quire there, but rapid improvements are being made) whereas the robots that can do menial chores that require anything other than clockwork routine are lagging far, far behind.

So, far from robots scrubbing our toilets, picking our crops, etc, while we create art, we instead pretty much shut off the opportunity to earn a living from the Arts, and ensured non-routine menial labour would still be done by low-wage human workers. And those wages will only fall as we eliminate white-collar work and creative work with AI, while not doing nearly so much to improve the capabilities of robots in the real world.

People still dream of a world like the one we may suppose those striking factory workers wanted. I have seen people use generative AI to produce incredible images of futuristic cities (sometimes in space) where humanoid robots are everywhere, and people are happy and free of their labours at long last.

But, again, is this not just another form of control, of keeping us pacified while ensuring nothing really changes in any way that would actually bring about such a communist utopia? Is it not too far fetched to suppose that the elites of Neoliberalism are thinking along the lines of “by all means, amuse yourself in cyberspace by generating pretty pictures and supposing that, somehow, such virtual dreams will turn into solid reality. While you are all playing around in your toy realities, our Neoliberal agenda is left almost entirely unopposed to shape the future in our interests”.

Looked at in purely economic terms, the only reasonable conclusion to draw is that Neoliberalism has been a dismal failure. We now have decades of evidence to show us what results from destroying job security and increasing working hours. The result is not a more loyal and ‘productive’ workforce, but the exact opposite, as evidenced by the overall lower growth rates seen around the world from the 80s onwards. Meanwhile the ‘Man With a Gun’ that was created to serve the Neoliberal agenda- all those armies, police forces and private security services that are required to turn the human experience into a commodifiable form- are themselves also ultimately unproductive, since they serve not to increase wealth but rather to protect the ill-gotten gains of the Neoliberal elites while also increasing the debt burden the rest of humanity is left holding.

So, looked at in economic terms, Neoliberalism fails. But, actually, it was never really a primarily economic project, as can be seen in the way that, when it comes to a choice between economic imperatives or political ones, Neoliberalism has always favoured the latter. In other words, Neoliberalism has always preferred to focus on making Capitalism seem like it could be a viable economic system, over working to create a system that actually does have long-term viability.

This is achieved through depoliticising labour (something it has been tremendously successful at) and by severely limiting our ability to imagine a world that is different from the one that exists today.

The ironic thing about this situation is that, if we assume the Neoliberals consider themselves the heirs of the Californian Ideology, then their aim should have been to create a stable system based on natural feedback loops that would free us from all forms of political control.

As we have seen, though, there never really was an underlying natural order to this system, as the organising principle actually came from the cold, logical machine world. We now know, from failed attempts to model such a thing and from the financial crashes and massive expansion of the State that has always followed attempts to implement it in the real world, that there is no validity to the theory of market stability.

The systems theorist, Stafford Beer (1926-2002), once defined viable systems in the following way: "A Viable system needs no controls". If that is indeed a valid definition, then we have to conclude that the competitive, consumption-based for-profit market system is on no way a viable system, since it has proven time and time again to be unsustainable, absent of a great deal of regulatory oversight.

So, change is obviously called for. But, we have discovered another negative aspect to this system we have created. And that is that the machine organising principle underlying the ideology of our age has its uses, but it also has serious limitations.

As the documentary film-maker, Adam Curtis, explained, "what we are discovering is that if we see ourselves as components in a system, that it is very difficult to change the world. It is a very good way of organising things, even rebellions, but it offers no idea about what comes next. And just like in the communes, it leaves us helpless in the face of those already in power in the world".

In the case of the communes, the extreme individualism that was practiced left those of a less assertive, aggressive nature powerless against the bully. In the case of the Market, it comes in the form of those lacking money ending up helpless to do much about those who have money, particularly once Capitalism's drive to commodify everything that can possibly be commodified, turns political favour from something that is influenced by mass democracy, into something influenced by the power of money. Then, you get a positive feedback loop, whereby the more money you have, the more you can lobby for reforms that kill off any attempts to bring us closer to economic populism, and the further we get from economic populism, the more wealth concentrates into the hands of those bending governments to their will through the ever-increasing power of their money. The end result of this positive feedback loop is that one percent of the human race control 99 percent of the world's wealth, while the remaining 99 percent have to make do with the remaining 1 percent.

It should be clear that such an extremely unequal world is in no way sustainable, and that's before we factor in the immense environmental harm running the (anti)economy so hard it is putting hundreds of billions or even trillions of dollars into the hands of some people. A change is needed before it's too late to stop a descent into total societal and environmental apocalypse but, as Adam Curtis pointed out, we have unfortunately built a system that works to prevent us from seeing any alternative but sticking with what we are doing.

Attempts have been tried, of course, but as was the case with the communes none have had any success in changing the zeitgeist of our age. In this volume, I have focused pretty much exclusively on the failings of Capitalism and how that traces back to the mythstake of the popular story of where money and markets came from. I have not said much at all about

Socialism, and many would conclude that, since I am obviously 'against' Capitalism, I must be 'for' Socialism, and therefore ignorant of the great harm that was done in its name.

That great harm was done in the name of Socialism shows that we should not run blindly ahead and put into practice Marx's philosophical point that Capitalism only exists because we wake up every day and recreate it, and could just as easily create a different system tomorrow. The problem is, change is not always for the best, and can quite easily make things a good deal worse.

In the case of the Marxist revolution, this possibility of things going wrong made all-too probable, thanks to the incentives and ignorance of those attracted to Marx's philosophical position. I would argue that there are three kinds of people who, for one reason or another, are attracted to at least some aspects of Marxism, and I call those types 'Jokers', 'Middles' and 'Dreamers'.

The 'Jokers' are named after a quote from 'The Dark Knight': "Some people are not after anything logical, like money...some people just want to watch the world burn". In other words, it refers to anarchistic nihilists who just hate the current system and only want to riot and cause as much damage as they can, and have no interest really in building anything out of the ruins their vented frustrations have caused.

The 'Middles' are named after a quote from George Orwell's 'Nineteen-eighty-four': "The Middle want to swap places with the High". In other words, this group comprises of power-hungry types who see nothing wrong with extreme inequality and hierarchies per se, but would rather their own minority group ran the show, rather than the current dominant minority. As for the Dreamers, they have vague ideas about living in a world unlike the one we are familiar with, and have no interest in just wrecking everything or just reforming the same old system only with themselves as the ruling elites.

Obviously, the first two kinds of 'Revolutionaries' are not much help when it comes to the creation of a viable alternative system. As for the Dreamers, the problem here is that, absent of a clear, detailed and faultless plan of what this alternative system is and how it will function, it becomes all too likely that attempts to build it will fall foul of that paralysis of thought and action that tends to result when we are confronted by the complexity of the possibilities open to us when we are obliged to see reality through a hitherto unknown perspective. And that's assuming that the current, dominant system will just passively allow free experimentation in alternatives. It should be obvious by now, though, that the current system would not passively wait to be rendered obsolete but will fight the establishment of a genuine alternative using every dirty tactic at its disposal. Clearly, Socialism is not sufficient to guide us past the potential pitfalls that come with replacing Capitalism with a viable alternative. As to what that alternative is, nobody really knows.

We began Volume I with an anecdote about spelunkers who discovered fantastic cave paintings, and this led us to wonder what stories such people might have been telling, using this particular art form. You may recall that the novelist and social philosopher, Elias Canetti, suggested that, in depicting great herds of animals, those artists were challenging people to imagine what it might be like if human beings were ever to gather in such stupendous

numbers. In other words, this was our distant ancestors' way of imagining cities, metropolises and nation states, made up of people in their millions, and tens of millions.

What would those ancestors make of our contemporary civilisation? If the latest scientific, archeological and anthropological evidence and research is any guide, I would say they would regard our civilisation as a paradox, because we are stupendously powerful in terms of technological capabilities, but at the same time we are socially retarded.

Let's talk about why those ancestors would be astounded and bedazzled by our technological capabilities first. Obviously this would be the case, for we can achieve things with our tech that would seem like magic to ancient people. With recordings of music from people like Elvis Presley (1935-1977), and of speeches from the likes of Martin Luther King, we can make the dead speak again. With our electric lights we can banish the dark in an instant. We can fly to the far corners of the world in less time than it took our ancestors to travel fifty miles. On and on the list of astounding abilities goes. Once it was understood what we could do with all the tech at our disposal, our ancient ancestors might well believe we had acquired the power of gods.

But, if they were to ask what kinds of societies we had been able to build with our godlike powers, they would be dumbstruck and hugely disappointed to learn that, despite our stupendous technical abilities, we are stuck in a very narrow Left/Right political spectrum.

"How can it be", they would say, "that you have such power to reshape the world and do magical things, and yet you believe the only choice you have, in terms of what society you can have, comes down to a binary choice between Capitalism, which is shown to be non-viable, or Socialism, also shown to be non-viable? You think it has to be one, or the other, or some awkward combination of these two non-viable approaches! How could you people be so socially retarded as to believe those are the only options that could ever exist? What on Earth happened to human imagination?"

We can safely say that our ancestors would reach this grim appraisal of us, because of what the latest archeological and anthropological research is revealing. And that is that the way we have imagined our past, and the journey we imagine we took to end up where we are, was a far more complex, wonderful, scary and varied evolutionary development than the simplistic and sanitised story that follows from the Mythstake of barter.

You can still find accounts that say money and markets have their roots in barter, even though there is hardly any evidence to support this story, and a great deal of evidence to show this cannot be how money and markets actually evolved. It is also a popular belief that hunter-gatherers could only form small groups, such as 'bands' or 'tribes'. This is another belief now totally refuted by some amazing archeological discoveries.

The idea that hunter-gathering gave way to farming in an 'Agricultural Revolution' is another belief that is seriously challenged by the latest evidence, as is the belief that any gathering of people beyond the size of a village must have a permanent hierarchy with a Chieftain, a Monarch, a President or an Emperor to lead it, if it is to hold together.



All these assumptions are wrong. Our ancient ancestors were far more imaginative than we are when it comes to social experimentation, and in our simplistic and sanitised version of the past there are huge gaps which, in our arrogance, we just brush aside, assuming “nothing of note happened during this period” when, in fact (as the latest findings are slowly uncovering) some incredible forms of experimentation were happening.

It would, of course, be outside the scope of this volume to talk in detail about the findings just mentioned. Let us just end by acknowledging that the Mythstake of barter has had a seriously detrimental effect in that it has led us to a state of social retardation, and that in uncovering the real past, we also recover the hope that human imagination is not nearly as constrained in terms of social possibilities, as we have been led to believe.