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The Rise of the West: A Brief Outline of the Last Thousand Years

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plan, to construct alliances with Machiavellian skill and insincerity, to defer anger or repress any other emotion or desire in our hearts, that too will make us machines or as good as, enslaved to them or those freedom-fearing, liberation-mouthing racketeers and power-mongers that might as well be them. If we are to live spontaneously in the future, with Time a mere forgotten fiction, then why not now? This will be the *real* end of history, not the powerless, pathetic, value-free blissed-out surrender to it envisioned by post-modernity.

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effects that avarice, faction, hypocrisy, perfidiousness, cruelty, rage, madness, hatred, envy, lust, malice and ambition could produce.³

But how can we resist totally and live? Some, of course, must resist because they cannot live in Civilisation an instant more or in the face of its encrouchments, so this question is a pointless abstraction to them. As to myself, I have no qualms about taking from a system if it does not expect my gratitude – provided that this will not prevent me from looking forward to living without it and hitting it where I can to help bring this about. Yes, hitting Civilisation at its joins, where it all holds together, and will fall apart and be gone when enough are ripped or broken. I don't kid myself that the majority of people will voluntarily abandon this system as it is already so total that they can see no alternative to it. It has filled their lives (the present) and filled their horizon (the future). They'll only see and feel anything else if it's taken out of their lives, and even if they don't like the prospect of that, why should my impinging on their lives and desires be so much more terrible then them impinging on mine, keeping me a prisoner in the next blind cell to theirs? Am I selfish? Thank the *bourgeoisie* and their history! Such are the contradictions that will bring down their world.

But my vision is impure, still too invested with rational calculation and survival-sickness, even though the postmodernists tell me we are living in the last days of the human and Jacques Derrida has told me the human is already as dead as God. And perhaps any vision of the future is as much a millstone as the lessons of the past. Do those who have lost everything and in desperation finally turn to destroy those that have destroyed them, do they think of the future? Such desperation will make the future or it will be abolished as we become mere machines. We have learned — even if our disgust is not yet so great that we have also learned to feel — that to

Introduction: Quibbles & Qualifiers

Of course my title is a pun on Oswald Spenger's Decline of the West and, like his, appears to carry the perverse implication that western Civilisation's power to dominate its own people, other cultures and the natural world is a good thing and that its inability to do so in future will be a bad thing. Perhaps 'fall' of the West would be a less ironic title for this essay, better satisfying purists - and so here they have it. It's possible Spengler enjoyed his role as doom-sayer and was into the decline of the West in the spirit of Schopanhauerian pessimism in the same way Goths were into all their depressing stuff, but undoubtedly he still felt the collapse of a civilisation would be a tragic loss, as the fall of Rome was held to be. As an anarcho-primitivist, I couldn't disagree more. An unsustainable worldwide system that substitutes domination and hierarchy for authentic community is inhuman and intolerable. My interest in how western Civilisation was made is immediate and practical - to find out how it can be unmade. Certainly its roots go deeper than neo-liberalism — though 19th-century 'free market' liberalism played its role — and wider than globalisation, though the consequences have been felt worldwide.

Why 'western' Civilisation though? Why not critique Civilisation as a whole, instead of just the traditional Eurocentric version? I'd argue that my limitations here are more of time than space, but — beyond specifics — to critique one civilisation is to critique them all. Originally conceived of as an essay for the millennium, it just so happens that within the last thousand years or so, the focus of

sight. See, for example, The Insurrectional Project (Elephant Editions, 2000).

³ Jonathan Swift's *Gulliver's Travels* (Penguin, 1985), p. 172.

Progress — a term I also use the opposite of positively, akin to both the technique of domination and its propaganda — in this world has been the West. If we'd been writing across all time, I'd have focused more on where the first cities appeared, the Fertile Crescent — as Fredy Perlman does in his seminal *Against His-Story, Against Leviathan* — or the far-East, but even then, you can't stray too far from 'official' history as the facts of what happened where are the same regardless. It's useful to particularise as this allows comparison with other civilisations elsewhere, to see why the West 'rose' and they didn't — or at least not quickly enough. It's taken as read that all were pernicious, based on urbanisation, abstraction, rule, inequality and division of labour.

What do I mean by the West? I suppose ultimately the inheritance of the Graeco-Roman empire, so picking the 10th-century to start in as what was to become Europe was first firming up under Charlemagne was fortuitous, but this picture is complicated by the later global expansion inevitable in a subcontinent composed of ravenous, competing empires. As well as those (now largely akin) cultures forming Europe, we're talking those parts of the world so colonised by their settlers that European languages predominate (eg. North America, the Antipodes, even the Philippines) and also those never so colonised but who consciously followed — or, usually more accurately, had internally imposed — Western models of modernisation and development (even those once though of as 'Eastern' such as Russia from the time of Peter the Great, Turkey from that of Kamal Atatürk, perhaps 20th-century Japan). Of course, driven on by the World Bank and their European educations, just about every Third World elite is trying to impose Western development on its people now, but that just goes to show how hegemonic the Western technique is and that it's not some exclusive property of the so-called 'White Race'. Of course, there are grey areas and you're going to have to use your own common sense figuring them out there isn't enough space in this mag to waste half of it quibbling. That said, an important qualification when speaking of 'Europe' or

this is the habit of reading — the privatisation of the self that was the Reformation's 'great gift' to the world — and part of this is the consequence of Cartesianism that taught us that we aren't ourselves, that we're fragmented into a mind and a body and everything (it's Descartes, so I won't say 'everyone') beyond that is even more problematic. If I look at the rebels of the past — surely they, if anyone, had some answers — I can't know whether I'm feeling what they did in their hearts when they rebelled, however good the documentation, as I might just be projecting my desires and meanings onto them, tainted as they are by the restrictions of the 21st century. In a way, my projections should be enough if they cause me to successfully rebel, but part of that rebellion is the re-creation of authentic human community where the communication of feeling will again be instinctive and unmediated. If I don't know what fellow rebels felt hundreds of years ago, how will I know the common wo/man now?

But, no, let us assume that is enough or in the revolutionary process, the masks of Civilisation begin to slip as part of the process and "the doors of perception will be cleansed" through *praxis*. What the rebels of the past — the rioting Luddites, the Adamites on mounts Tabor, and all the others can teach us — is that there can be no compromise and no turning back. Once we have sensed what it is to be without Civilisation, beyond the veil, we must never surrender this vision and the connecting together of all things it supplies. When we know this, Civilisation is but an illusion, a ghastly one to be torn down as soon and as well as we are able. Even its benefits are as baubles and tinkling cymbals, indivisible from the oppressions that made them and will come from them, the dreadful weight of a millstone of history, described by the king of Brobdingnag in Swift's *Gulliver's Travels*, as

only a heap of conspiracies, rebellions, murders, massacres, revolutions, banishments, and [the] very worst

paradoxically — a loss of control and of the meaningfulness and satisfaction of life the more Power is concentrated and elaborated.

- The futility of entering into an 'arms race' with Power particularly when it comes to mobilising mass v. Mass, a relatively recent (c. 19th century) and highly contradictory phenomena as this only accentuates the tendencies mentioned above, win or lose.
- An extension of this: that material affluence is what such eruptions are most usually bought off with and this doers nothing to address our root dissatisfaction, as our alienation is the root of this affluence, a particular feature of the problematic above.
- The realisation that however inaccessible it is to me now that there is an 'outside' to this empire, Civilisation, whether in distant past or places where Civilisation's writ doesn't run and these are useful in drawing comparing, contrasting and critiquing the existing world order.²

I'm only one person — maybe you will draw different lessons from history — but I think that we need to realise how far Bentham's panoptican extended from its original site above Holloway Road. His 'new model' has infiltrated every part of this society — or any part not infiltrated will be soon, thanks to the von Neumans' of this world — and now everywhere is a prison, an isolation tank where we're sensorily deprived of any real contradiction of it and that we, our selves, are a prison, part of the isolation process. We've been swaddled in an ideological veil where the dissatisfaction we feel in our hearts, our sense of loss of being, can't be expressed simply and directly to others or they can't perceive it as such. Part of

'the West' is that everyone can get tarred with the same brush, including classes and peoples (eg. Celts, Basques) as much victims of the West's rise as external populations. Clearly, this is not our intent — we salute their resistance.

A last thing by way of introduction: it'd be easy to get into endless, obscure referencing, but I'm rationing myself. The history of the last thousand years has been written as many times or more and the facts are commonplace, there for anyone to look up. Like Poe's 'purloined letter', what is best hidden is what is in plain sight — the misery disguised as triumph, the loss disguised as gain. My role isn't as much to trawl old facts or uncover new ones, as to simply to point out 'the empire has no clothes', something you always knew but now will realise.

² Curiously, Bonanno's focus on the immediate denies him this useful in-

Why the West? The Tale of Three Empires

A thousand years ago, China had centralised power and political stability enough to ensure dynasties lasting centuries. The Chinese had invented everything from gunpowder to toilet paper whereas the West had achieved none of these things. Nowadays, China's Westernising what — contrary to all likelihood — accounts for this reversal in fortunes?

The sociologist Max Weber compared the fortunes of China and Europe in his *Protestant Ethic and the Spirit of Capitalism* and though long discredited — capitalism preceded Calvinism in Europe — his analysis of China as too politically stable and centralised for its own good holds true. Even the Chinese empire's traditional 'barbarians', the Mongols of the northern steppe land who wanted to lay the rich, sedentary agriculturalist south to waste, adopted the rhetoric of 'the mandate of Heaven' and were assimilated into the Chinese power structure within two generations — Khubilai Khan swapping his Qaraquorum *yurt* for a 'pleasure dome' in Peking full of native Art.¹

In 9th century Europe, power was fragmented, each fragment vying for the inheritance of the last subcontinent's great empire, Rome. The Papacy had spiritual authority and a literate bureaucracy equal to administering the old empire but territory extending little beyond the Leonine City, where it had been confined during ear-

- The realisation that ideas of 'Progress' and 'Reason' are historically-specific (c. 18th century), were always pernicious and served only sectional interests, and have if anything now been superseded by ideologies more unchallenged but even worse.
- An extension of this: what a hypocritical class the *bourgeoisie* that have dominated this era are, always saying one thing and meaning another, and always presenting their own interests as the common interest. How repressed and in love with the artificial and abstraction they are, rather than reality they have abstracted from, presumably because they find their own creations easier to control. They are also a vicious lot, always accusing others of the atrocities they are responsible for.
- A tendency for Power whether in the form of money, control, State structures or whatever always to concentrate itself whilst simultaneously trying to elaborate and extend itself to control as far and as variously as possible. *Contre* Marx, if this tendency continues unchecked, it will keep doing this until what we know as human or is worth knowing as human wholly ceases to exist.
- An extension of this and of the increasingly complex nature
 of society is how fewer and fewer are 'in the loop' when
 it comes to exercising real power, how utterly unaccountable
 and inaccessible they are, and how little real power even they
 exercise in overview due to their specialisations and the way
 this limits their capacity for vision and general understanding.
- The consequence of this has been a loss of the immediate, a loss of our sense of Self, of the selfhood of others (including non-human others) and our affinity with them, and also —

 $^{^{\}rm 1}$ Robert Marshall's Storm from the East (Penguin, 1994), chap. 8.

or any sort of anarchist history as such, it's just me sharing a few thoughts with you as a fellow amateur interested in opening questions and initiating dialogue that may help us — but particularly you, as it's your life — make for some sort of social change. I'm no authority, nor do I seek it. In fact, as I'm pro-anarchy, I seek the destruction and discrediting of all authority, including any you feel I may have had addressing you this way. It is you that determines your own relationship with reality — don't let anyone else! If it helps, I should say that writing this I came to fully appreciate how little impact anarchism as an ideology has had on the last thousand years, and that's counting in pre-1840 popular utopian and apocalyptic currents that never called themselves 'anarchist' as Proudhon did.¹ At best, it's existed as a mere subset of socialism or liberalism and, most recently, as an influence on the avant garde or recuperated trendy housing, education and childcare policies. I also appreciate that from a prosletysing point of view, it's positively crazy for me to try to sell anarcho-primitivism through the history of the last thousand years, particularly the last thousand years in Europe and its derivatives, where the imperial rhetoric of 'Progress' originated and that of 'Civilisation' has been so ascendent. Then again, a critic is hardly devalued for criticising what's most immediately under (or up) his or her nose. Without the experience of Civilisation, there would be no need for an anarcho-primitivist critique of it. Contre the postmodernists, this dualism doesn't affirm Civilisation, only the need to get shot of it. People got on just fine without it for the majority of human existence, and didn't need some wordy anarcho-primitivist meta-narrative to explain their lives to them either.

However, granting that I do write from this perspective, the immediate and obvious lessons to be drawn from the last thousand years, I see them, are:

lier waves of nomadic invasion.² Charlemagne's self-styled Holy Roman Empire (approx. modern France, Germany and Austria) had had centralised power at Aachen, but it was divided against itself as it had no established principle of primogeniture and any spiritual authority had to be coerced from the Papacy at sword-point, Otto the Great so extracting an imperial coronation in 962 and his grandson Otto III appointing his old tutor as pope.³ Constantinople, the by-far more civilised 'second Rome', had claims to combine temporal and spiritual power (ironically, like China) but had virtually excluded itself from Europe due to the controversy over iconoclasm and was an island in the Islamic sea of the rising Ottoman empire. As to the 'third Rome', Moscow, it was mere log cabins on the steppe ruled over by Norse warlords, soon to drown under Tartary's tide.

Europe's greatest embarrassment during the Medieval era was that it owed its aggrandisement less to its own efforts as to the input from its Islamic neighbours, who looked on the habitually drunk, disunited, unlearned and unwashed Europeans as savages. Had it not been for the battle of Poitiers in 942, the Moors would have crossed the Pyranees and become lords of Europe themselves, one reason the Papacy owed the Franks gratitude. Though early Islamicists did conquer the majority of the eastern Roman empire as that fell, Moslems were more 'the Greeks of the East', their empire growing along the great caravan roads connecting the cities, much as ancient Greece's grew along its Black Sea and Mediterranean shipping lanes. Like Greek culture, that of Islam was primarily mercantile and so rationalistic, based on the idea of a deity so abstract that it was taboo to represent Allah pictorially. Rational calculation, book-keeping and even a largely scientific attitude to astronomy were necessary for long-distance trade, and found-

¹ George Woodcock's Anarchism (Penguin, 1986), p. 13.

² Fredy Perlman's *Against His-Story, Against Leviathan* (Black & Red, 1993), p. 169.

³ 'Roman Catholicism' in *Encyclopaedia Britannica* (Britannica, 1993), vol. 26, p. 880.

ing Moslem philosophers like al-Farabi (872–950)⁴ of the Baghdad Academy and later Byzantium could argue for a complimentary coexistence of science and religion as separate spheres as the Churchcontrolled theologians of Europe could not.⁵ It was through Baghdad, Byzantium and later through Averroes (1126-98)6 in Moorish Spain that the philosophy of ancient Greece — particularly Aristotle's Organon - reached Europe and led to scholars like Church Father St Thomas Aguinas (1224–74)⁷ and St Anselm of Canterbury (1033–1109)⁸ to try to integrate Aristoteleanism with the *Bible*. The founding Church Father, St Augustine (354–430), had cleared the way with his resort to Classical philosophy, his logics. Other significant imports from the Islamic world included a great deal of silver and the mercantile mind-set associated with it and also technical knowledge (I will say more on both below). As with China, we have to ask why the West rose despite Islam's evident economic, intellectual and technical superiority. The main answer to that is the disruption caused by invasion, by European crusaders and much more decimating — by the Mongols, who despoiled Islam's intellectual heartlands, including former Persia. Genghis Khan told conquered Bukhara from the high-point of its desecrated mosque that

I am the wrath of God. If you had not committed great sins, He would not have sent a great punishment like me.

and the Islamic world believed him. A fundamentalist backlash silenced all non-Qu'ranic intellectual speculation from the $13^{\rm th}$ cen-

The *Real* End of History

The insurrectionist Alfredo Bonanno has mocked historians, saying they never sound more stupid than when asked to give their interpretation of current events. Ridiculously even more wedded to the pretensions of the objective than self-styled 'social scientists', historians stand back from history as mere spectators, gathering and arranging all their little 'facts' into pretty patterns so as to make themselves as much 'objects of history' as those they study. As the young Marx said in his *Theses on Feuerbach* and the old Marx had carved on his oversized tombstone in posh Highgate cemetery: "Philosophers have so far only described the world. The point, surely, is to change it". However, *contre* Marx's *Commentary on the War in France*, in knowing history, are we not in danger of becoming prisoners of it, consciously playing roles learned from 'the lessons of History' and by arguing history is repetitive, and acting on in light of that, making it so?

My concern — like Bonanno's — is not with the past, at least not for its own sake, but for the future. How much more a fool the historian makes of himself talking of the future than of the present — but why else bother, if not just to shoot the breeze? It is usually at this point that your typical politico racketeer dons the cloak of the objective historian — after disparaging such things to soften you up and make your mind uncritically receptive, of course — and announces 'History proves...' this, that or the other, but most particularly that his particular brand of politics will be the crowning glory of History and that you must all therefore trail along in his (it usually is 'his') wake. As a mere subject of history, I don't make any such grandiose claims. This isn't 'the green anarchist history'

 $^{^4}$ 'Farabi, Abu Nasr al-' in Ted Honderich's $\it Oxford\ Companion\ to\ Philosophy$ (OUP, 1995), p. 269.

⁵ 'Islamic Philosophy', *ibid*, pp. 419–421.

⁶ 'Averroes', *ibid.*, p. 70.

⁷ 'Aquinas, St Thomas', *ibid.*, pp. 43–47.

⁸ 'Anselm of Canterbury, St', *ibid.*, pp. 37–38.

⁹ 'Augustine', *ibid.*, pp. 65–66.

control. Surely a candidate for the interventions discussed above and then, by a levelling up process, the extension of this level of artificiality to all human life everywhere. This sort have even proposed people travel 'bare-brained', to be transplanted back into a convenient (not necessarily flesh and blood) body on arrival at their destination! In this, their hatred of the physical and the body, of the natural, far exceeds even that of the Medieval Church!

The third innovation of note was Bernard Watson and Francis Crick's cracking of the molecular structure of DNA in 1948 (they, at least, claimed the Nobel Prize for it), which led to the 2000 mapping of the human genome by Craig Ventner, a free market fanatic who advocates cloning and the creation of novel viruses from scratch in the laboratory. Though critical of notions of artificial intelligence as a rival technology, Crick is a keen eugenicist despite the world's experience of it in practice in 1930s Germany – and has the ear of Tony Blair. The aim of genetic engineering and of other bioengineering interventions in the human body and natural world is to make it as malleable as possible, for those with the knowledge and power to have absolute, God-like control over Creation (and, yes, they do talk in those terms). This is an old dream of Progress/ ives - dating back at least to Francis Bacon and his 'Atlanteans' - and a nightmarish one. 41 Techno-fixes have a poor track record, one fix just generating other problems (often, as with the agrarian 'Green revolution' of the 1960s, at the most of millions of lives and vast injustice) that have to be fixed ad infinitum, and creating a world from scratch where we control and know about everything sounds like submission to the most total, most totally boring type of tyranny imaginable.

tury and the martial Sunni Ottomans gained ascendancy over the intellectual eastern Shias and the mercantile class. By the 18th century, all Islam could do was imitate the European Enlightenment, too late and too slow to prevent their manufacturing base being swamped by industrially-produced Western shoddy.

 $^{^{41}}$ The 'extropian vision' is extensively critiqued in 'The End of Humanity?' in *Green Anarchist* 57/58 (Autumn 1999), pp. 26–21 and 'A Future for Humanity?' in *Green Anarchist* 59 (Spring 2000), p. 6.

Our Beginning: the Middle Ages

The Crusades appear to have originated in Papal attempts to consolidate power against the backdrop the humiliations of the Investiture Crisis (1085–1122). Before the Crisis, kings claimed the right to invest bishops and to refuse tithes (church taxes), but Gregory VII was having none of this, saying he was master of every Christian soul and made administrative reforms to centralise power in Rome. Thereafter, Christendom divided between Guelphs supporting the Pope and Gibellines supporting the Holy Roman Emperor, popes were kidnapped and intimidated and whole congregations excommunicated in retaliation. This ended with the Concordat of Worms (1122), the papacy only slightly stronger.¹

The popularist Peace of God movement — originally denounced as heretical despite originating at the powerful Cluny monastery, France — was seized upon as a model by Pope Urban II for curbing the power of fractious temporal rulers and winning authority to the Church by projecting their violence outside Christendom or onto scapegoats within it, principally Jews. The crusade had already been abused as a political implement by William Bastard to invade England in 1066 and impose feudalism, land enclosure and systematic taxation, as represented by the Domesday book. Such sanctimonious conquest was, of course, accompanied by Ralph Glaber's "white mantle of churches", often built on the rubble of preceding

ular at Los Alamos, first proposed nano-technology in his 'Room at the Bottom..' paper, was an associate of Norbert Wiener (1894– 1964) and a big wheel in the RAND Corporation circle. Wiener, also at RAND, in turn proposed cybernetics, a systems theory of feedback and control he felt had unlimited applications. Between them, these three not only opened the door to unlimited surveillance and information-storage on each person on the planet - now, given GPS and other advances in satellite surveillance technology, almost anywhere on the planet — but also a mindset that equated artificial and natural consciousness, the net consequence being the artificialisation of human beings and even greater expert inclination to view us as systems to be intervened in and repro-grammed in face of 'adjustment difficulties'. This goes beyond the fakeries of virtual reality — much-hyped and spectacular distractant though it is³⁷ – to psychosurgery, Jose Delgardo-style psychotronics³⁸ and other interventions to simply change the brain rather than the society distressing it.

Though the space programme came after well after the war — Werner von Braun's contributions notwithstanding — and was really just PR spin-off from the strategic missile programme, it's worth mentioning here because the likes of nanotechnology evangelist Eric Drexler³⁹ (himself 'Mr AI' Marvin Minsky's protégé at MIT, itself and 'think tanks' like it the modern-day equivalent of Medieval hermetic cells) see space travel as also being part of their vision of an artificial future. As Mumford pointed out, ⁴⁰ space travel will place human beings in the most artificial environment which they will have to depend on most and where they will have the least

 $^{^{1}}$ 'Roman Catholicism' in ${\it Encyclopaedia~Britannica},$ (Britannica, 1993), vol. 26, pp. 881–882.

 $^{^{\}rm 37}$ Mark Slouka's $\it War$ of the Worlds (Abacus, 1996) is particularly hilarious here.

 $^{^{38}}$ Armen Victorian's $Mind\ Controllers$ (Vision, 1999). The book's better than it's title, based on meticulous research under the US Freedom of Information Act.

 $^{^{\}rm 39}$ Eric Drexler's Engines of Creation (Fourth Estate, 1990).

 $^{^{\}rm 40}$ Lewis Mumford's $Pentagon\ of\ Power$ (Secker & Warburg, 1970), pp. 307–308.

least there won't be a class of professional revolutionaries that'll run off to Moscow or Peking in the hope they get to run the show when the dust settles. What stayed the Empire's hand in the past — and neither superpower would have launched nuclear war over a mere square on the global chess-board — will continue to stay its hand in future. Where Power has been vastly multiplied has been in the realm of techniques that have their origin in or immediately after World War 2.

Though mathematics may have been reduced to the status of a meaningless, self-referential game by the inter-war philosophers, Alan Turing (1912–1954)³⁵ just took Godel's findings and asked the standard technocratic question: 'never mind the why or how, does it get results?' As seen above, World War 2 was the Golden Age of the technocrat — more even than the Victorian era — and it was then that Turing came into his own, inventing the first electronic computer to crack the German Enigma code at the forerunner to GCHQ, Bletchley Park.³⁶ It was he that first proposed the idea that machines could ultimately think — artificial intelligence - and that machines might become self-organising or even selfreplicating. Turing was a rather sad bloke who was terrified of women and often used to go about wearing his gas mask during the war, and was ultimately driven to suicide by MI5 as they were afraid his homo-sexuality might compromise the secret that Enigma had been cracked (Enigma machines had been sold to Third World countries at the end of the war as an 'uncrackable code', the better for GCHQ to monitor them). To him, perhaps, the idea of fathering a new species of artificial life might have had some appeal. Across the Atlantic, John von Neumann (1903–1957) — the supposed 'father of the computer' — designed ENIAC artillery ranging machines for the US military and then mainframes for IBM. He was a regSaxon ones as another essay in Norman power. The European empire was established in the Holy Land with the expedient brutality that accomopanies all empire-building, made worse by the blundering and fanaticism typifying Medieval religiosity. Supposedly liberating Jerusalem — whose Christian population had been tolerated by Moslems also revering the site — the Archbishop of Tyre boasted that the Crusaders, "laid low, without distinction, every enemy [sic] encountered." Everywhere was frightful carnage, everywhere lay heaps of severed heads, so that soon it was impossible to pass or to go from one place to another except over the bodies of the slain... It is reported that within the Temple enclosure alone about 10,000 infidels perished.

However, as they settled down to ruling their fiefs in the Outreimer kingdoms until expelled with the fall of Acre in 1254, "most knights abandoned Western fashions altogether ... as the years passed", developing a distinctly Islamic interest in trading technologies, bathing, and sugar (this last to have a disastrous impact on Africa in future centuries). One key technology was the use of mills as a power source — allowing capital-intensive but labour-cheap development of lands in Europe already being cleared of primal forests with missionary zeal⁴ by the monasteries — and another was transferring moneys as cheques rather than coin, and even the charging of interest. Much of the world's trade passed through the great crossroads of Alexandria, with the port of Venice being Alexan-

³⁵ 'Turing, Alan' in Honderich, *op cit.*, p. 883.

 $^{^{36}}$ George Dyson's $\it Darwin \, Amongst \, the \, Machines$ (Allen Lane, 1997), pp. 36–39.

 $^{^{2}}$ Perlman, Against $\it His\mbox{-}Story, Against Leviathan (Black & Red, 1993), p. 175.$

³ Antony Bridges' *The Crusades* (Granada, 1980), p. 127.

⁴ Felipe Fernandez-Armesto' Civilizations (Macmillan, 2000), pp. 144.

⁵ Peter Jay's *The Road to Riches* (Grafton, 1999), Chap. 4. Despite their mercantile orientation, Moslems as well as Christians were supposedly prohibited from lending money at interest (usury), so this refinement first provably originated at the Benaz synagogue. Moslems recognised the value of this practice and didn't use it as an excuse for persecution. Christian attitudes to usury were also decidedly ambiguous. Christian monastic orders like the Knights Templar who went into banking after their expulsion from the Holy Land didn't hesitate to charge 30% interest on loans. Jewish loans were cheaper, so Christian polemic

dria's *entree* to Europe.⁶ Given this vast influx of Moslem silver, it's unsurprising that recognisably modern banking practices first originated in the Italian city states. In 1204, Venice turned the tables on Constantinople and diverted a Crusader army there — even though Urban II's original excuse for the Crusades was to save the eastern Church from Islam — leading to its savage sacking and its ultimate fall to the Ottoman empire in 1453.

The fall of Constantinople pretty much marked the start of the Renaissance as western Christendom laid fresh claim to the inheritance of the Roman empire, but it would be very wrong to assume that its increased rationalism led to conflicts with established Papal authority. This was rather an 18th or 19th century Enlightenment view from people keen to camouflage their own origins. It should be remembered that the Church has always been prepared to utilise any technique to enhance its power — as early as 1000, Sylvester II invented the first striking, wheeled clock and monasticism — with its rigid timetable of Rules and Hours for every activity, devotional or otherwise — prefigured modern rational / industrial organisation:⁷

The Benedictines, who ruled 40,000 monasteries at their height, helped crucially to yoke human endeavour to the regular, collective beat and rhythm of the machine, reminding us that the clock is not merely a means of keeping track of the hours, but of synchronising human action.

The Scholastic debate about nominals also indicated increased rationalism, but there were limits. When Peter Abelard (1079–1142) went from this to debate textual criticism of the Bible in Paris, he was denounced as a heretic by the mystical Cistercian, Bernard

against them was as much to do with eliminating competition as debts. And, as the Templars found at the hands of Philip the Fair, what was sauce for the goose was often also sauce for the gander when it came to expedient persecution.

rillas, were infiltrated and turned into deniable reservoirs of State violence and / or imprisoned and destroyed 34

The end of bipolarity with the fragmentation of the Eastern Bloc into so many competing nationalisms and Western markets is said to mark the start of globalisation, though the pattern's familiar enough from 19th century British imperialism. With its own national interest ensured by the size of its economy and armies, the US is repudiating notions of 'national sovereignty' supposedly established as far back as the Treaty of Westophalia and using 'humanitarianism' as its excuse to intervene and impose the market and social relations that best suit commercial and political US interests. As always, international administrative forums such as the UN are mere US footstools, a fake 'internationalism' like the European Community or InterNet, mainly intended to accumilate more power to the powerful, and possibly disguise it with the utopian rhetoric of human improvement in the process. Increasingly, a country is designated 'free' not because it has free elections (whatever that means — anyway, Reagan's old definition), but because it has a free market (another oxymoron) regardless of the junta running it. Subjecting people to the market like this isn't just a go at naked exploitation. The social engineers have learned over the last 200 years to always offer a ladder up to those that get a cut of the game, even the pettiest, like getting to boss fellow workers as a foreman or being allowed to take out a mortgage. This embourgeoisment process turns people from being likely allies to trustless enemies, all seeking the next rung up at others' expense or fearful they'll be pulled down again by 'jealous' (more likely, justifiably class-hating) rivals. It's isolating and individualising, atomising and alienating, and was particularly effective in smashing traditional reformist mass movements like the unions during the monetarist excesses of the last days of the Cold War. People will resist — as they have to, that hasn't changed despite the 'humanitarian' rhetoric — but now at

⁶ Fernandez-Armesto, *op cit.*, p. 351.

⁷ John Zerzan's 'Beginning of Time, End of Time' in *Elements of Refusal* (Paleo, 1999), p. 21.

³⁴ Gianfranco Sanguinetti's On Terrorism and the State (Chronos, 1982).

more to discredit the Establishment than a minister lying about having sex with a call girl six years later.

Decolonialisation had knock-on effects in the Empire's heartlands. The disadvantaged there started articulating their concerns in the language of Marxism or of UN guaranteed 'rights'. They even borrowed the tactics of the colonised, most notably those of passive resistance used by Gandhi during the Indian independence struggle, which he got from Leo Tolstoy in turn. After the Soviets sent the tanks into their Eastern Bloc satellites, Hungary (1956) and Czechoslovakia (1968), Stalinism was largely discredited amongst Western dissidents, but the New Left turned out to be the old Left in polo-necks, the same Leninist ideology, the same control freakery writ smaller. Groups advocating sectional rights splintered from them — Black Power, Womens liberation, gay and lesbian rights, ultimately loony ('kranken')³² and animal rights — and all staking their own claim to be the ultimate revolutionary vanguard. These were unsurprisingly generally discredited as total critiques as soon as the Vietnam War ended and a bout of détente ensured, when president Jimmy Carter (and his European analogues) offered these groups' mouthy representations a little power within the System by the mid-1970s.³³ There they remained recuperated, energetically defending their small concessions and bureaucratic raison d'etres (eg. enforcing PC), liberalism's soft cops. Those that were not or who refused to buy in, like the neo-Marxist German and Italian guer-

of Clairvaux, who had already played such an infamous part in promoting the Crusades in France.⁸ This technique of repression couldn't hold up, firstly because rational productive techniques were profiting the Church nicely but also because an informed clergy was needed for the extirpation of heresy, and the education of the era was inevitably based on Aristotelian and therefore reason and logic. The heretical Cathars could preach an entirely unChristian doctrine as Christianity as no-one was able to contradict them except with the crusader's sword in the 12th century, forcing Urban II to launch the Dominican and Franciscan orders as carefully-trained and well-informed heresy-hunters imitating the heretics' poverty and occasional reverence for Nature. 9 Such a show of poverty was necessary because of how Church estates had grown and through agricultural techniques like sheep-farming for the wool trade, large numbers of peasants were being displaced from the land. Unfortunately for the Church, this mendicant technique didn't work out quite as planned either. St Francis realised how he'd been had towards the end of his life and issued a last testimony holding his order to vows of poverty in order to prevent it falling into the same worldly aggrandisement the rest of the Church was falling into. Those literal-mindedly following their founder's last wishes, the Poor or Spiritual Franciscans, were extirpated as heretics. Amongst their number was William of Ockham (1285-1347),a nominalist like Peter Abelard, who argued his simplification of forms ('Ockham's Razor') was the philosophical equivalent of his vow of poverty. Excommunicated by John XXII, he went on to seek asylum with latter-day Gibelline and proto-scientist Louis

 $^{^{32}}$ For example, the manifesto of the $\it guerrillaista$ Socialist Patients Collective's $\it Turn~Illness~Into~A~Weapon$ (KRRIM, 1983).

³³ I exclude the Green movement from this list only because it came too late, the founding Earth Day spectacular coming in 1970. We have seen the Green movement's ambiguous roots in early-19th century Romanticism and Victorian conservationism in the last chapter and the current movement was most heavily compromised by politicos chasing 'achievable goals' at the tail-end of the antinuclear movement the late-1980s.

⁸ It's telling that both were castrated, Abelard by others and Bernard by himself, in an attempt to rid himself of sexual fantasies of the Virgin Mary as a young monk. Both represented different attitudes to 'civilisation-building', modern and Medieval. Repression / canalisation of libido enabled Abelard to devote himself to rationalistic distraction and Bernard to the devotional hard, physical labour expected of Cistercians.

⁹ Norman Cohn's *Pursuit of the Millennium* (Pimlico, 1993), p. 158.

of Bavaria and extended his simplification argument to advocate a separation of Church and State.¹⁰

Another difficulty with heresy denunciations is that kings started using them against popes as a way of advancing their own secular authority. Come 1310, Philip the Fair tried to have Boniface VIII kidnapped and then post-humously accused him of sorcery in a latter-day version of the Investiture Controversy that resulted in the farcical 'Babylonian Exile', with rival popes being appointed in Rome and Avignon, France, each denouncing the other as servitors of the Antichrist. Acting from *realpolitik*, Philip didn't hesitate to extend his accusations to the still-living Knights Templars — Church bankers since the loss of the Holy Land to Islam — and liquidated his debts by putting the order's grand-master Jacques de Molay, and many others to the stake.

The significance of this wasn't so much that it opened up sorcery accusations as a new repressive technique to the Church - a more effective weapon in eliminating rival rationalities than heresy accusations and to have gynecidal consequences during the Reformation — but that it illustrated the practice of sorcery then ongoing. By the early-1200s, Guillaume d'Auvergne, bishop of Paris, complained of "books bearing the names of Solomon and containing idolatrous images and detestable invocations" 12 and Roger Bacon, the English philosopher then based in Paris, seconded this in 1267. Like Bacon's own alchemy and astrological divination - like Aristotelian philosophy, both imports from the Islamic world — the invocation of demons was intended to be a way of furthering knowledge. Fear of denunciation for unorthodoxy made knowledge a dangerous thing, and so an investigative underground developed that was later to form the scientific community. Bacon, for instance, kept his discovery of gunpowder secret — and rightly so, as when it did leak

'clients' well and their 'clients', in turn, often mangled Marxism to fit traditional forms or the liberal rights ideology of the UN Charter, where they ultimately hoped their aspirations for national autonomy would be satisfied. Initially moves for independence were greeted with great brutality, defoliation and a whole raft of new counter-insurgency techniques — most notably the pseudo-gang strategy first used in Malaya, 1951, by Brigadier Kitson and described in his Low Intensity Operations — but except in rare cases where an example was being made (eg. Vietnam) or where some vital geopolitical interest was supposedly at stake, most colonies were former colonies by the mid-1960s. The Western powers found it easier to have Western-educated technocratic cliques in hoc to the World Bank run countries on their behalf — granting full access on favourable terms to multinational corporat-ions, of course — than to expend blood and treasure over mere quibbles of sovereignty. The running sore of apartheid in South Africa and Rhodesia (now Zimbabwe) was just the tail end of colonial attitudes that once prevailed throughout the continent and, sure enough, come 1993, the pied noires finally threw in the towel and the international community imposed the same solution that has applied in almost all post-colonial situations through Nelson Mandela. De Beers and the other multinational mining interests still export their diamonds and strategic titanium, the townships are the same as ever — except upwardly-mobile Mandela and his ANC cronies don't live there anymore.

And then, of course, there were the nations that couldn't keep up their empire even if they wanted to. Britain was slow to demobilise troops after World War 2 because it's leaders — the new Labour government — thought the longer they stayed overseas, the longer the empire would survive. The troops mutinied and the empire — in general, and especially recently partitioned India, the empire's bankroller — fell. Come 1956, the unstable, speed-popping British prime minister Anthony Eden couldn't even keep control of the Suez canal without American aid, something that did a great deal

 $^{^{\}rm 10}$ 'William Ockham' in Ted Honderich's Oxford Companion to Philosophy (OUP, 1995), p. 633.

¹¹ Norman Cohn's *Europe's Inner Demons* (Granada, 1975), pp. 180–185.

¹² *ibid.*, p.166.

War 2 — much as giving the middle classes little black cars and women the vote included them following World War 1 - and of a way of selling the new elaboration of technique worldwide. By emphasising their buying power rather than their labour power, Keynesianism opened the way to the embourgeoisment of the proletariat, each individually buying into middle-class lifestyles, a phenomena that was being trenchantly critiqued by the Situationist International from the 1950s.³¹ It was the prosperity arising from peacetime 'war production' — and Lend / Lease Agreements to reconstruct a war-torn Europe in America's image — that made the US the planet's foremost superpower, replacing Britain, and gave it confidence enough to launch into full-blown imperialism. Often, as with Dark Age Islam and classical Greece, this was through unequal trade — with the prosperous lifestyle of Americans the rather unlikely main selling point — and strings-attached 'development' (ie. industrialisation) loans from US-dominated international institutions like the World Bank, but sometimes it was through taking up fragments of Empire impoverished Europeans had to leave off, most notably and unfortunately for the US, French Indochina...

Marxism — and more particularly Maoism, fresh from its own anti-colonial struggle — provided the language of decolonisation, putting the West in a reactionary position during the Cold War. Often this polarisation was artificial and unnecessary. The Soviets and especially the Chinese generally lacked the resources to serve their

claim to fame was fermenting the May 1968 Paris Events, though the wave of factory occupations was quickly bought off by the Communist Party negotiating wage rises that were eaten by inflation in months.

³¹ Interestingly, those liberation movements that have expressed themselves in to traditional — rather than internationally accepted — terms were usually more rapidly and effectively marginalised. Often this was more because these traditional appeals didn't have the same openings for 'revolutionary bourgeois' social-climbing and quick reintegration into the world economy under new management than the Marxian national liberation model. In other words, they often offered a more profound — and certainly more authentic — critique. Of interest here is 'The Mau Mau: Better Dread than Dead' in *Do Or Die* 8, (1999), p. 39.

out, this knowledge revolutionised Medieval warfare, making the dispersal of power in high-walled feudal keeps impossible and so promoting absolute monarchs in their wake. Church disapproval for invocation came firmly in 1326 with John XXII's bull *Super illius specula*, ¹³ which just diverted the speculative underground in a direction beyond Church control.

66

¹³ *ibid.*, p. 176.

The Tragedy of the Renaissance

The capital-intensive agricultural technologies that allowed enclosure of huge tracts of land by monasteries and nobles forced huge numbers of peasants to go where the money was or starve — the cities built on Islamic trading techniques where the markets were. In the Italian states — ironically closest to Rome — where the influx of Mediterranean silver was greatest, there was definitely a post-Medieval ethos, Venice ruled more by a council of prominent merchant families than its *doge* and the republic of Florence also council-led.

Though not generally explicitly opposing the authority of the Church — a key founding figure, Thomas de Vio Cajetan (1468–1534), was a cardinal and general of Dominicans¹ — the thinkers of the Renaissance opened up the world to experimenting with alternatives in a way scholasticism generally failed to do and — even more damagingly — broke the Church's monopoly of literacy. This meant that the Europe-wide channels of communication and administration once the Churches alone were now open to other princes — a body-blow in the millennium-old game of jockeying for power between Church and incipient States. When Marsilio Ficino (1435–1499) introduced fresh translations of Plato to Europe, his Neoplatonist Academy in Florence wasn't backed by the Church

ufacture of nerve gases the Nazis first produced at Luneberg Heath (including the likes of ICI inventing new, deadlier varieties), and granting amnesty to the Japanese germ warfare scientists of Unit 731 so as to have the capacity to wage this sort of war themselves, in Korea or elsewhere. The *schmaltz* of 'Atoms for Peace' was invoked, but this was mainly to generate planet-killing amounts of Bomb-grade uranium initially and 'jobs for the techno-geeks' thereafter.

The Bomb was to dominate politics for the next half-century, going through cycles of near-nuclear war — often over the Middle East, where the oil that is the US's lifeblood comes from - to détente again until seeking parity with Ronald Reagan's fantasy of Star Wars (the Strategic Defence Initiative, SDI)²⁹ finally broke the Soviet's increasingly over-extended economy in 1990. The Bomb, however, wasn't the main consequence of World War 2, as Eisenhower made clear when he denounced the military-industrial complex in the immediate post-war US election. The Pentagon, opened as a military hospital as the war began in 1941, never closed as a military command centre thereafter. The militarisation of the US economy is detailed in Lewis Mumford's Pentagon of Power, though it's noteworthy that most European economies were quasi-militarised too as a result of their experience of war. Without it, the central planning and welfare state proposals that took Labour to power in UK for the first time in 1946 would have been an inconceivable violation of liberal laissez faire economics (indeed, both fascism and Stalinism profited from the democracies' dogmatic intransigence on this point, even during the depths of the post-1929 Depression). The 'new economics' John Maynard Keynes (1883–1946)³⁰ pioneered in the 1930s as his antedote to laissez faire became another tactic of inclusion to a proletariat who'd had their aspirations raised by World

 $^{^{\}rm 1}$ 'Thomas De Vio Cajetan' in Ted Honderich's $\it Oxford\ Companion\ to\ Philosophy\ (OUP, 1995), p. 114.$

²⁹ 'Keynes, John Maynard' in Honderich, op cit., p. 442.

³⁰ Key texts include Guy Debord's *Society of the Spectacle* (Black & Red, 1983) and Raoul Vaneigem's *Revolution of Everyday Life* (Left Bank Books / Rebel Press, 1983). An outgrowth of the *avant garde*, the Situationist International's main

were entangled with the collapse of European empires and decolonialisation struggles there.

As well as sharpening the bipolarity borne of the Russian revolution, World War 2 marked another racheting up of technique - as most powerfully illustrated by the Bomb which, in Jonathan Schell's words, "reintroduced eschatology into politics for the first time since the Middle Ages". ²⁸ One instant mythologies that arises whenever the time of a new technology has come — of Lord Rutherford and his atoms, of Madame Curie's lonely struggle with pitchblende, of Enrico Fermi, Albert Einstein and life at Los Alamos was touted about, but things started to slip when the likes of Einstein and Oppenheimer started to oppose this new tool of Power. When the Soviets exploded their first bomb in 1946 — subjecting America to the same terror s/he sought to terrorise the rest of the world with — the Rosenbergs were executed as 'atom spies' and petty tyrant Joe McCarthy saw to it that further dissent was not tolerated. A latterday version of the League of Nations — the United Nations — was immediately subverted by the US with the Baruch Plan (a call to put all nuclear weapons under UN — ie. US — control), but even this was too much for isolationist McCarthyite 'hawks', who imagined the UN a 'hotbed of one-worlder Communism'. Any claim to a 'moral high ground' stemming from World War 2 was undermined by the US employing Nazi rocket scientists for their strategic missile programme under Operation Paperclip, mass manbut rather by the city's most prominent banker, Cesirro dei Medici.² As characteristically, when Giovanni Pico della Miranobla (1463–1494) sought to synthesise Kabbalism and Christianity, this caused only slightly more of a stir with the heresy police than his attempts to synthesise Platonism and Aristotelianism.³ It wasn't a far step from such speculations to full-blown humanism, a *de facto* secular doctrine.

Renaissance art has been lauded for its glowing colours and supposed verisimilitude, but as a two-dimensional representation of three-dimensional objects, it's actually no more so than the Medieval art that preceded it — pretty much all art, in fact. What does this attempt at illusion tell us about Renaissance society? That it was deceptive, of course — an important point, given the internecine nature of Italian city-state societies — but more than that, that their new representation of humanity implied new concepts of humanity. Rather than the Medieval convention of drawing more important figures larger than others, all are represented equally in Renaissance art, in accordance with the iron laws of perspective. The implication is of individuals of equal worth as human beings rather than some divinely appointed as bigger than others, but also of atomisation and of the practical use of power in interaction between these individuals, rather than these interactions being governed by any sense of obligation or tradition. In other words, something very mercantile and contract-oriented, the basis of the city-states. Clearly, something is being lost here as well as gained and it is only an illusion — the artists were never the equal of the patrons that commissioned them. What is disguised is that they were but servile tools of Power, for all their representation of fine feeling. Worse, Renaissance verisimilitude served the same political purpose as socialist realism — as well as disguising tyranny as natural, it implies it is eternal, the natural state of the world.

²⁸ Behind 'the great entertainer' Reagan stood the real father of SDI, the director of the Lawrence Livermore Laboratory, Edward Teller. This veteran Cold Warrior is the original 'Dr Strangelove', the first to denounce Richard Oppenheimer at Los Alamos, the father of the H-Bomb and the US civil defence programme (to 'harden' the nation and so make nuclear more 'winnable'), and whose silicon-etching techniques did much to promote computerisation in the 1980s. Attempts to revive SDI currently are probably also down to him and are certainly feather-bedding for high energy and particle physicists he nurtured in the 1980s (applying Horgan's "ironic science" the same way — and with the same depth of principle — that Alan Turing applied Kurt Godel's mathematics) who'd otherwise have to get a proper job.

² 'Ficini, Marsilio', *ibid.*, p. 279.

³ 'Pico della Miranobla, Giovanni' *ibid.*, p. 681.

The Renaissance was epitomised more by Niccolo Machiavelli (1460–1536) than Leonardo de Vinci. Typical of one scorning feudal patterns of obligation, he rejected scholasticism's founder St Thomas Aquinas's dictum that means must be consistent with ends, instead insisting a ruler is justified in any act that perpetuates his rule, however unprecidented or immoral. Modelling his analysis on the Borgia popes, Machiavelli saw Florence ruled using his advice by the Medici after the failure of a millenarian revolt led by a turned Dominican, Savanorola.

These new principles of rule were applied not only within the Italian city-states but beyond them. The Reconquest of the Iberian peninsula from the Moors, culminating in the capture of Grenada by the self-styled 'Catholic Monarchs' Ferdinand and Isabella in 1492, created a warrior caste of 'new men' who felt obligation only to their monarchs (not to higher-ranked nobles) and a new ideological excuse for imperialism that classified Others by 'race' rather than religion. These 'new men' set out to seize gold and slaves from both Africa and America, inflicting genocidal cruelties. Though few in number, they had gunpowder, the confidence borne of acquisitive individualism, and Machiavellian skill in forging the native alliances necessary to play one against another until all were bought to ruin. The conquistador Pizarro's kidnapping of the Inca king Montezuma well-illustrates the break from the past. In Medieval times, kings were sacred and inviolate, and holding even a non-Christian one hostage would have been thought sacrilege. Typical of the Renaissance, anti-Christian acts were performed under the skirts of the Church. Popes still drew lines on maps as to which parts of Africa and the New World were ceded to Portugal or Spain. The influx of African gold, 'ebony' (slaves) and Inca silver promoted the mercantile classes — and indirectly nationalism — far more than the transnational interests of the Church, however, so it was unsurprising that come 1538, the Spanish emperor's house philosopher, Francisco de Vitoria (1480–1540), positively repudiated profitable if genocidal — imperialism, using scholastic argumentation and Paing to flee lest they 'contaminate the body politic'. Was it the Nazis mass-murder, the history of every empire? Was it that this was done using industrial techniques? Well, that's a product of Progress, a fruit of the Enlightenment and what came thereafter, all facilitated by bureaucratic and military organisation, railway timetabling, census records and IBM punch cards²⁷ that wouldn't have been available 1,000 years ago - rather blowing the liberal 'Dark Age' thesis and the Soviet gulag was the same. Is it, then, that those worked to death in Soviet concentration camps — and there were likely three times as many million — were killed for better reasons than those in Nazi camps, that they were more 'a waste of resources'? What sort of humane argument is that? A Civilised one, perhaps. I am not excusing genocide — the liberals do. I denounce all genocide, whereas they use the Nazis to excuse their own and to obscure its origins. It was they that bought the capacity for industrialised mass extermination and the mindset to use it into the world by pretending 'Progress is blind'.

The bomber war was perhaps the best illustration of the key importance of mobilising and destroying industrial capacities in World War 2 (1939–1945). By it's end, American bombers were destroying one Japanese city a day, 100,000s more during in the final Tokyo firestorm than were killed by the A-bombing of Hiroshima and Nagasaki. This was another shattering blow to liberal-humanist claims of humanitarianism. It has often been argued that as Japan was already finished, these attacks were more to intimidate Stalin — whose armies were then sweeping through China — than the Japanese people. Certainly, since the 1944 Yalta conference, Churchill, Roosevelt and Stalin had been carving the world up between themselves, precipitating all sorts of post-war nastiness in Greece, the Soviet annexation of eastern Europe, *de facto* one party rule in Japan and Italy until the end of the Cold War thanks to the new-formed CIA, and numerous proxy wars in the Third World that

²⁷ Jonathan Schell's *The Fate of the Earth* (Picador, 1982).

tional constraints (at one time, even on the use of the musket in warfare!) in the interests of power. Their annexation of Manchuria and subsequent financing of it through the worldwide opiate trade followed directly on the heels of the British. How was Japan exceptional in doing what industrial logic dictated was most efficient in aggrandising itself? The same is true of Italy — what European nation didn't claim the Roman heritage as its own, with less justification? Germany, perhaps, never conquered by Caesar, even if he got his name from there. Here, too, a newly reunited nation tried to find an ancient, common heritage — Hitler's early invasions were about renewing the Holy Roman Empire, his later ostpolitik modelled on that of the Teutonic Knights (as modern-day Germany's still is) but it was industrial capacity and techniques of mass propaganda and blitzkrieg that gave him power. National mythology had less to do with Nazi political success than Hitler promising everyone everything they wanted to hear, just as long as he got to make all the decisions in the end — typical, if accomplished, fascist opportunist realpolitik. What of the racism of the Nazi regime, that had every German schoolchild read the forged Protocols of the Elders of Zion?²⁵ The eugenic laws that led to the sterilisation (and ultimate extermination) of 'useless eaters' were the same the state of Indiana used to exterminate the itinerant Ishmaelites 30 years earlier and were applied in one form or another by nations worldwide.²⁶ The Nazi's racist anthropology was a late-comer to that of all 19th century empire-builders and may even have murdered less people. Was it the systematic denial of minority rights? A liberal nightmare, perhaps, that a state guaranteeing rights might also take them away - and surely the best argument for another mechanism for securing people's liberties. The liberals, of course, didn't care for these minorities' lost rights at the time, closing borders against those try-

²⁵ Norman Cohn's Warrant for Genocide (Harrap, 1983).

Peru wasn't the only new source of silver. Extensive mining in Saxony, Bohemia and the Harz Mountains further enriched the Empire — and further violated ancient taboos. Henry Cornelius Agrippa's 1530 polemic *The Vanity of Arts and Sciences* condemned mining:5

These men have made the very ground more hurtful and pestiferous ... And indeed, it were to be wished that men would aspire with the same eagerness to heaven, that they descend into the bowels of the earth, allured with that vein of riches that are so far from making a man happy, that they repent too often of their time and labour so ill bestowed.⁵

This profitable violation of the earth laid down a marker, both technologically and ideologically, for the forthcoming Industrial Revolution and ironically contributed directly to the deforestation that made it necessary. Ore from the mines had to be smelted, which meant fuel-wood was reduced to charcoal for metallurgical processes instead.

As well as digging into the Earth, technologists were digging into the human body, another ancient taboo broken in a way entirely consistent with the reverent Renaissance desire to examine Creation. For all its direct examination, Vesalius' *Anatomy* accepted the Classical dictates laid down by Galen. Those following his precedent a century later — notably William Harvey — would less respect antiquity. Copernicus's heliocentric model of the universe was a less welcome addition to the canon, but Galileo Galilei's (1564–1642) practical observations of the moons of Jupiter were a challenge to

 $^{^{26}}$ Edwin Black's 'IBM's Guilty Past' in $Sunday\ Times$ News Review, 11/2/01, pp. 1–2.

⁴ 'Vitoria, Francisco de' *ibid.*, p. 902.

⁵ Carolyn Merchant's *The Death of Nature* (Wildwood House, 1986), p. 34.

Papal orthodoxy and scholastic technique that proved intolerable. John Donne published his reaction, fittingly entitled *An Anatomy of the World*, in 1611:

And new philosophy calls all in doubt, And elements of fire is quite put out; The sun is lost, and th'earth, and no man's wit Can well direct him where to look for it.

Embracing heliocentrism was but one of Galileo's heresies.⁶ His atomistic observations on motion mirrored the pre-Deist beliefs of ex-Dominican, Copernican and proto-scientist, Giovanni Bruno (1548–1600), who was burnt at the stake for implying transubstantiation — a central tenet of the Catholic faith — was physically impossible. Mirroring Neoplatonism with its substitution of the real for the abstract, Galileo pushed for a "mathematization of nature" and took the practical achievements of the Venitian Arsenal (naval shipyards) that dominated the Mediterranean in this period as his yardstick rather than the sayings of the Church Fathers.⁸

own ancestors had done a few centuries earlier. Perhaps they panicked so that they took the Bolsheviks at their revolutionary word or at least realised Bolshevik *bourgeois* rule wouldn't be *their bourgeois* rule. With characteristic hypocrisy, they announced the formation of the League of Nations and an era of peace and prosperity (at least within their trading area)²³ whilst promoting fascism and militarism on the 'front line' with communism, Germany, Italy and Japan. From the *Freikorp* veterans that drowned Rosa Luxembourg and Karl Leibknect in a canal at the end of the November 1918 Revolution, through MI5's formation for the internal security of the Empire and the Liberal welfare reforms, to the millions of little black Fords used to buy the allegiances of the lower middle class (just as Hitler later used Volkswagens and *autobahns* to buy those of Germany), they pulled every trick in the book.

The Western powers were 'building a monster to beat a monster', turning a blind eye first to fascist seizures of power, then to arms manufacturing in violation of the Treaty of Versailles, and finally to intervention in other countries — Ethiopia, China and Spain. ²⁴ Even the Left were paralysed by the pacifist, non-interventionist ethos borne of reaction to World War One. By the time the liberal democracies realised their creations were as much a threat to them as to Communism, they were too weak to do anything about it. A desperate period of appeasement ensured, though even then the 'peace in our time' rhetoric inhibited their building up military capacities.

Much has been made of the exceptionality of the Axis powers by liberals, as a way of excluding their own complicity. They are presented as descending into an irrational Dark Age where only such genocidal atrocity was possible. Japan, here, is most interesting. The military caste the led Japanese industrialisation did have a *Bushido* ethic, but all the Western democracies had their patriotic myths too and the Japanese were less inhibited in rejecting tradi-

⁶ 'Galileo Galilei' in Honderich, *op cit.*, p. 304.

⁷ John Zerzan's 'Number: Its Origin and Evolution' in *Elements of Refusal* (Paleo, 1999), p. 54.

⁸ It's worth being in mind at this point that in order to cross the Atlantic, Christopher Columbus first had to overcome St Thomas Aquinas's dictum that the world was flat "for how else could angels sit at all four corners of it?"

²⁴ Rod Sakolsky and James Koehnline's *Gone to Croatan: Origins of the North American Dropout Culture* (Autonomedia, 1993), chap. 2.

the Czar they had over-thrown — 'war communism'. Of course, the need for 'war communism' never ended — internal and external enemies — real or imagined — were a political and economic necessity for the Bolshevik project, and likely any 'libertarian' project modelled on it. This suited Stalin's high paranoid style to a tee (he took the 16th century tyrant Ivan the Terrible as his "great teacher" and even had Eisenstein make a film glorifying Ivan's rule) but Lenin would have gone on as Stalin did if a Socialist Revolutionary bullet hadn't put a stop to him as they had the enemies of democracy preceding him in Czarist times.

Having — as usual — been promised much but given little after World War One, and perhaps enthused by a few rusty thrones toppling, the eyes of surviving socialists turned to the Soviet Union. A few brave ones rose — as Rosa Luxembourg's Sparticists did in Germany — only to be denounced as "infantile" by Lenin. They failed to understand that the Bolsheviks wanted not to free others but to control them, a ruse that culminated in Stalin rejecting internationalism altogether except, of course, for an alliance with the Nazis in 1939 to annex Finland and portions of Poland to the Soviet empire (replicating Peter the Great's imperial ambitions two centuries earlier). This sectarian intolerance was later to cause the Soviets big problems, not least when another Communist party that was big enough not to need their support took power after World War 2, in China.

Alarmed by socialist risings, the Western *bourgeoisie* couldn't see the Bolsheviks for what they were — themselves — doing what their

The New Man's Revolt: The Reformation

The increased availability of paper in Europe from the 12th century and the rediscovery and retranslation of classical texts in the Renaissance was accompanied by a growth in vernacular literature - from Dante's *Divine Comedy* to Chaucer's *Canterbury Tales*. The implications of nations forming their own body of literature in their own national languages rather than international 'Roman' Latin should be obvious, particularly for Papal power. The development of the printing press from earlier wine presses was a further blow, especially when the first book Johannes Gotenberg published using his new movable metal type technology in 1455 was the Bible. As Alvarez pointed out in his Centuries of Childhood, the book meant that learning and communication moved from the public, communal sphere to the private one and I'd add that a faith based on a direct relationship with the Book is much more privatising than one mainly oriented around public ceremonial, however hierarchical. Such self-enclosure later came to suit the increasingly complex, urbanised economy:

According to Borkenau, a great extension of division of labour, occurring from about 1600, introduced the novel notion of abstract work. This reification of human activity proved pivotal.²

Noteworthy how the US was still insecure enough to insist on its own Kellogg peace pact rather than signing up to European treaties). A former colony, the US was only just beginning to intervene in Latin America (ie. Cuba, Panama) and the Pacific (ie. Hawaii, the Philippines) and even this was too much for Establishment figures aware of the burden of US history. This tension between isolationism and imperialism wracks the US even today, when the resources within the country's borders are clearly not enough to satisfy it's consumers' perceived needs.

¹ J M Roberts' *History of the World* (Pelican, 1980), p. 514.

² John Zerzan's 'Number: Its Origins and Evolution' in *Elements of Refusal*

When the Oxford academic John Wyclif (1320-1384) translated the Bible into the vernacular, revolt ensued. Though many Lollards were weavers protesting their proletarianisation, even the English king could appreciate that the same separation between Church and State that William of Ockham had unsuccessfully advocated half a century earlier would advantage him. Wyclif adherents that sought sanctuary in Prague mustered behind Jan Hus (1373-1415), who questioned mendicant sale of indulgences and transubstantiation a century before Martin Luther. His execution whilst supposedly under imperial protection sparked the Hussite revolt in Bohemia and the rejection of all Church authority. Apocalyptic Taborites took to the country's "five hills" to await the end of the world and successfully destroyed crusade after crusade directed against them by resort to gunpowder.³ They refused work, shared all in common, and during their 'love feasts' dismissed the Host as mere bread and trampled it underfoot. Sadly, the baronial class regained ascendancy after a few decades, but Catholicism never really did.

The recuperation of Martin Luther's 1520 schism occurred much more rapidly and unsurprisingly. There was no surprise in his aligning himself with the German princes against subjects that joined the Anabaptist declaration of the Kingdom of God on Earth at Munster. Luther was a self-denying flagellant, obsessed with order and seething with the pettiest prejudices, a world-denying *bourgeois* type. The German princes — and all others chafing under Church exactions — found in him the ideal excuse to reject Papal authority, regardless of the specifics he was proposing as an alternative. Calvinism would serve just as well as Lutheranism — or even Henry VIII's expedient Anglicanism, wholly Catholic apart from his supplanting of the Pope. The personality cult Elizabeth I built around herself — through which she was portrayed both as a new Virgin

lifted – which would have led to factories being stripped in exchange for food from the countryside and then abandoned due to the famine conditions prevailing during the 1917-21 civil war being met with massacre by Lenin's henchman Leon Trotsky, and ultimately Stalin's liquidation of the kulaks (the mir peasants so idealised by Tolstoy and even Marx) to feed his Five Year Plans for industrialisation with produce from collectivised farms and fresh slave labour for the gulags. The pattern of Europe was repeating itself again, except disguised by a Bolshevik language of liberation. As Alexander Solzenitzin attested, the first gulag was at Solovki under Lenin - supposedly meant, like Bentham's model prisons, to 'improve' the anti-Soviet and criminal by remaking them as new, more controlled people, but actually a conveyor belt for breaking bodies and minds whilst extracting labour along the way — and the practice of internal exile was older yet, a Czarist one, though at least the pre-revolutionary economy wasn't dependant on the labour of those denounced by the million as 'class enemies' by those that actually were. In their rational application of political technique, military might and terror, the Bolsheviks were certainly modern. Lenin (1870-1924) himself had the soul of a bourgeois bureaucrat, was known as 'the Boring Pen' even by those closest to him for writing endless prose rendered turgid by politically opportune ambiguity and contradiction, and was so dull that he gave up even chess for his revolution. He modelled his party on the military organisation of the Jesuits and — typical of the tragedy of Civilisation and resistance to it — when anarchist Nestor Mackno finally fled the Ukraine for Parisian exile, he argued in his *Libertarian Platform* that anarchists adopt Lenin's model too; that in crisis, authoritarian but efficient means justified libertarian ends. In this, Mackno merely repeated the Bolsheviks' justification for a police state worse than that of

⁽Paleo, 1999), p. 54.

³ Fredy Perlman's *Against His-Story, Against Leviathan* (Black & Red, 1993), pp. 214–255.

⁴ Norman Cohn's *Pursuit of the Millennium* (Pimlico, 1993), chap. 13.

mutinied against the Czar in 1917, making the Russian revolution possible. They were the same as those glorified in Eisenstein's propaganda classic, *Battleship Potemkin*, then touring the villages and Europe to drum up support for Bolshevism.

Franklin flying his kite in a storm and came up with DC current, he did much to make Modernity, to light Le Corbusier's towers and make them accessible with lifts, ultimately to bind the world together in one big power grid, all under the hand of the engineers and their managers.²⁰

Lenin's Bolsheviks were a thoroughly modern party, roaring around what was Russia on their locomotives, setting up field-cinemas in every village encountered both to propagandise and demonstrate their slogan 'Electricity + soviets = communism'.²¹ The rhetoric of 'soviets' had been appropriated from the Bolsheviks' rivals, the Social Revolutionary Party, and the Bolshevik programme was actually one of industrial modernisation despite public claims of desiring equality. This was shown by the 1921 demand of the Kronstadt mutineers²² that barriers between town and country be

At the same time cinema was being used to propagandise totalitarianism, television was invented by Logie Baird (1926) in the liberal democracies (significantly, archetypal inventor Thomas Edison had his own stab at it a decade or so earlier). Like radio before it, this was domestic-scale demagoguery, and so was domesticating, not least because it was a high status commodity the *bourgeoisie* could aspire to. To find out about the world around them, each viewer therefore chose to be isolated in his or her home, reinforcing *bourgeois* individualist atomisation and the display of commodity icons that substitutes for authentic interpersonal communication and community: "a Nuremberg rally in ten million isolation booths" [Institute for Social Disengineering's *Test Card F* (AK, 1994), p. 37).

The tendencies Jerry Mander identifies in his classic critique *Four Arguments* for the Eliminiation of Television (Quill, 1978) have only been accelerated by virtual reality and the 'virtual communication' of the Net.

and the embodiment of England - was an astute, if typical, mutation in the new nationalist political climate.

The 1545 Council of Trent launched the Catholic Counter-Reformation.⁵ Whilst territory and believers were won back, the reforms suffered by the Church only ensured later rationalist dominance. The foundation of the Society of Jesus by Ignatius Loyola (1491–1556) — with its commitment to military organisation and rigorous examination of doctrine to missionising / educational ends — was particularly disastrous here, guarantee-ing general secularisation. The mass witch-hunts initiated by Dominican friars Sprengler and Kramer can be seen as both an instrument of terror (like the Inquisition and Holy Index) and a last gasp of Medieval scholasticism, but Protestants persecuted witches as keenly as Catholics.⁶ In part, this was a demand to demonstrate religious orthodoxy and to take sides, but it was strangely also an assertion of a rationalist male *class*, stamping out women's folk practices the better to supplant them with their own, rational and professional.⁷

Given the religious hysteria of the period (and that witch hunts were originally intended as measures against sorcery), it's understandable the proto-scientists of the period were so secretive, continuing in their Hermetic tradition. Despite this, we can discern a connection between Elizabeth I's astrologer John Dee and his Mortlake Circle and the Elector Palantinate, Frederick V,8 whose grab for the Bohemian throne in 1620 brought about a reaction from the Habsburg emperor that finally extirpated the Hussite church at the battle of the White Mountain and which precipitated the Thirty Years War. This merciless conflict — called "the first modern war" — reduced Bohemia's population by 80%, Germany's by

²⁰ In a publicity stunt typical of the man's character and the world-view he represented, Edison launched DC as a new form of execution, the electric chair, though it's first victim took over half an hour to die. Compare this with the key incident of the opening of the Steam Age, where on the first run of Stevenson's Stockton-Darlington railway, a passenger fell from his carriage and was killed.

 $^{^{21}}$ Cinema proved such a powerful tool of total itarianism — Leftist and fascist — because it technologically reproduced the ambiance of the rally: larger than-life demagoguery with its one-way, fixed (therefore incontrover table) script and the atrical effects delivered to a passive audience experiencing it collectively.

²² Contrary to Lenin's self-serving smears, these were the *same* sailors that

⁵ 'Roman Catholicism' in *Encyclopaedia Britannica* (Britannica, 1993), vol. 26, p. 889

⁶ Norman Cohn's Europe's Inner Demons (Granada, 1975), chap. 12.

⁷ A residue of this remains even today in orthodox medicine's legally-enforced denunciation of alternatives as 'quackery'.

⁸ Frances A Yates' *The Rosicrucian Enlightenment* (ARK, 1986), chaps. 1–2.

30% and arrested the development of these countries by centuries. Though there were traditional features — Pope v. Emperor, despite their common religion — there were also alliances across religious lines, such as Cardinal Richeleiu's alliance with the Protestant king of Sweden Gustavus Adolphus against the Emperor, and religious compromises and toleration at the final 1648 Treaty of Westphalia. A key casualty of this conflict — the one that forced the rest of the Habsburg empire to the negotiating table — was Spain, choked on inflation caused by the import of Inca silver and whose native soil was exhausted by the country's huge herds of once-profitable Merino sheep. In later centuries, it was just to become a pawn of greater powers less engaged in the conflict like Holland, France and England. The vast bloodshed of the Thirty Years War secularised Europe and laid the way open for the liberal-rationalist Enlightenment.⁹

philosophy was just words. Later, Heideggar's heritage was formalised via the likes of the post-structuralist literary critic Roland Barthes, Michel Foucault (1926–1984)¹⁷ and Jacques Derrida (1930-)¹⁸ as post-modernism, an even emptier, more pacifying ideology that decided that Sassaure's treatment of language wasn't arbitrary enough but — equally — nothing of note existed beyond the meaningless self-referentiality of language.¹⁹ It was going the way of religion after Darwin and, as in Victorian times, people looked to doers — engineers, technocratic 'Mr Fix-its', and those that would speak in their name — for answers in the 20th century, a tragedy that closed any reasonable prospect of liberation from it.

Around the same time a Technocratic Party was launched in America, Le Corbusier proposed his International Style in Europe. Towns were to be planned and each building within them to be stripped of the physical and ideological clutter of Victorian Gothicism, to become "machines for living in". The Leftist Bauhaus movement in Germany thought the same could be done for furniture, a new, rational-functional craftsmanship. In Lenin's Russia, futurist Igor Tatlin proposed his vast tower of geometric forms to celebrate the ascendancy of socialism, for all the world like some heroic lesson in reanimated Platonism. It never got off the drawing board but showed most clearly what this trend was about — like European culture's roots in Islam, a search for purity through abstraction, larded with a good dose of social engineering through central planning. A blow to the best of liberalism, perhaps, but brute materialism had long since eclipsed that even in the Victorian era, so precious little opportunity for human liberation in this avant garde.

Thomas Edison was really a Victorian inventor, a tinkerer with a big personality and his own workshop. But when he took such eccentricities as Anton Mesmer 'animal magnetism' and Benjamin

⁹ Another beneficiary of the disgust that the bloodletting of the religious conflicts of the Reformation was early primitivism. A century before Diderot and Rousseau, Michel de Montaigne concluded in 1588, after the massacre of Hugenots during the French Wars of Religion, that he much preferred the society of the Tupinamba he'd met in the New World to that of Frenchmen [Thomas Patterson's *Inventing Western Civilization* (Monthly Review Press, 1997), pp. 62–65].

¹⁷ 'Foucault, Michel', *ibid.*, pp. 288–289.

¹⁸ 'Derrida, Jacques', *ibid.*, p. 188.

¹⁹ John Zerzan's 'The Catastrophe of Postmodernism' in *Future Primitive* and *Other Essays* (Autonomedia / Anarchy, 1994), p. 101.

a unified theory of nature, what science writer John Horgan has called "ironic science":

[S]cience that is not experimentally testable or resolvable even in principle, and therefore is not science in the strict sense at all.¹²

Aside from legitimising themselves as a specialist elite, they may as well have been describing the cosmos as supported on the back of a vast turtle, an earlier, more worthwhile mythology that didn't require believers to read *A Brief History of Time*.

With formal meaning devastated, the likes of Edmund Husserl (1859–1938)¹³ tried to salvage philosophy by taking about meaning in terms of human experience. Strangely like Russell, he felt this needed a specialist terminology, so his project inevitably failed. It was taken up by Martin Heideggar (1889–1976)¹⁴ anyway, whose attitude to language was even more opaque and so his project was even more risible. It wasn't equal to preventing from sewing the swastika to his chancellor's robe at the University of Heidelberg and repudiating his mentor Husserl, who was Jewish. There was nothing particularly fascist about phenomenology. Indeed, later disciples included his former mistress and Europe's last wet liberal, Hannah Arendt (1906–1975)¹⁵ and Jean-Paul Sartre (1905–1980)¹⁶ who — pathetically like the Surrealists preceding him — managed to mix his supposedly insightful and liberatory existentialism with membership of the Stalinist Communist Party. No, the point is that

Darkness Visible: The Enlightenment

It's fitting that we begin with the philosopher Baruch Spinoza (1632-1677), whose secretly Jewish father fled notoriously anti-Semitic Portugal to grind lenses in Amsterdam. There Spinoza became a victim of religious intolerance himself at the hands of his own community and went on to argue for a Deistic conception of God-as-Nature. Though nominally a plea for toleration, it actually pushed the science of its times. 1 Science was definitely ascendant, Elizabeth I and James I's chancellor Francis Bacon falling under the influence of John Dee and writing his New Atlantis, a highly authoritarian, technocratic utopia that ultimately led Charles II to form the Royal Society.² There, the Deists and Unitarians could mathematise and abstract Nature to their hearts' content, happily trashing scholastic dictums such as St Thomas Aquinas's insistence that vacuum would represent a hole in God's creation and could not therefore exist and to explore laws of motion rather than take them as Holy writ, God being supposed 'Prime Mover'. Francis Bacon saw the mastery of Nature as discovering and exploiting God's laws, but many Royal Society members went much further, preferring their own laws to God's. Supposedly philosophical contests often played themselves out in scientific arenas. Thus, the method-

 $^{^{12}}$ John Horgan's $\it The\ End\ of\ Science$ (Little, Brown & Co, 1996), p. 94.

¹³ 'Husserl, Edmund' in Honderich, op cit., p. 382

^{14 &#}x27;Heideggar, Martin', ibid., p. 345

¹⁵ 'Arendt, Hannah', *ibid.*, p. 47. Never mind "the banality of evil", how about the banality of Hannah Arendt, who thought even the French revolution too popularist and extreme in her *On Revolution*, and who regurgitated all the most archaic, conservative nonsense about 'fallen Man'.

¹⁶ 'Sartre, Jean-Paul', *ibid.*, p. 791.

¹ 'Spinoza, Baruch' in Ted Honderich's Oxford Companion to Philosophy (OUP, 1995), p. 845.

² Frances A Yates' *The Rosicrucian Enlightenment* (ARK, 1986) and Marie Louise Berneri's *Journey through Utopia* (Freedom Press, 1982), pp. 126–137 for her analysis of Bacon's *The New Atlantis*.

ologies of Rene Descartes $(1598-1650)^3$ – a follower of Galileo so close that he suppressed his own physical writings after Galileo's heresy trial – were largely rejected in favour of the Royal Society's Isaac Newton (1642-1727)4 because the latter's calculus and laws of motion were better argued. In terms of experiencing our full humanity, Descartes claim that we were but thought, that the rest of the world could be demonstrated only through abstract reasoning, and that animals - and, by his logic, probably all others external to ourselves — were mindless automatons was almost as adverse as the sheer indifference that Newton — peculiarly still an alchemist — showed to all such questions. Presumably he shared Descartes' assumption / wish that we were all just clockworks — as Lewis Mumford argued in his Pentagon of Power, the fantasy of predictable, controllable subjects entertained by absolute monarchs and so to Gottfried Leibnitz (1646-1716),⁵ another of Newton's calculus rivals and so regular in his habits as to be a human clock, who argued we were all "monads" — atomised individuals, the better to be manipulated and to function effectively in the market.

If scientific / rationalist materialism demythologised the Eucharist and delegitimised the absolute authority of the Pope, it also absolute monarchs who supposedly ruled by divine right. Seeking to 'limit' kingly powers, the aspirant lawyers, shipping magnates and wool barons of England (the 'grandees') ended up cutting off Charles I's head and installing the Puritan military dictatorship of Oliver Cromwell. Many saw a chance during the disorder of the English Civil War to experiment with lives free of religious or governmental authority, like the agrarian communard Diggers, mutinous Levellers and apocalyptic street-prophet Ranters, but all were crushed when Cromwell recuperated their revolution. It was he that pressed a brutal colonial war in Ireland that was beyond even Eliz-

neo-Kantian Ludwig Wittgenstein (1889–1951)⁸ to choose irrational rather than rational roots as solutions to mathematical problems and challenged him to explain why he did not. He didn't, and it must have had some impact because he went on to drive Betrand Russell (1872–1970)⁹ almost to suicide when he demonstrated the 'truths' of mathematics were irrelevant and trivial, much as was Russell's Anglo-Saxon philosophy, an attempt to salvage philosophical meanings through a positivist analysis of language. Come 1931, the paranoic mathematician Kurt Godel (1906–1978)¹⁰ proved with his Incompleteness Theorem that mathematics couldn't even establish Truth in its own terms,¹¹ whilst the influential linguist Saussure argued that language was a mere arbitrary pairing of words and meaning.

There was equivalent Progress (ho, ho!) in cosmology, where Albert Einstein (1879–1955) first showed that everything in the universe was relative to an arbitrary constant 'c' (the speed of light) in his 1905 theory of special relativity and then was himself outraged ("God does not play dice") by the quantum physics of Max Planck (1858–1947), Niels Bohr (1885–1962) and Erwin Schrodinger (1887–1961), which showed that nothing physical was definitely knowable. This, supposedly, was the new paradigm for the Modern age — as Newtonian physics was for the Enlightenment — and people asked why there were Dadaists in the world?!

Later cosmologists were to wax lyrical about the forces, particles and sub-particles of the universe in pursuit of Einstein's dream,

³ 'Descartes, Rene' in Honderich, op cit., p. 188.

⁴ 'Newton, Isaac', *ibid.*, p. 618.

⁵ 'Leibniz, Gottfried Wilhelm', *ibid.*, p. 477.

oretised, ideologised and Art-referential than the last — exercises in 'the painted word', as Tom Wolfe wittily put it and so each was more abstracted from it. All attempts to 'break the bopundaries' of Art only enlarged them, aestheticising the world and reducing all to the status of spectators on the unreal, especially those that were most devoted to 'actively' creating yet more Art unreality.

⁸ 'Wittgenstein, Ludwig Josef Johann' in Honderich, op cit., p. 912.

⁹ 'Russell, Betrand', *ibid.*, p. 781.

 $^{^{\}rm 10}$ 'Godel, Kurt' and 'Godel's theorem', ibid., p. 320.

 $^{^{11}}$ John Zerzan's 'Number: Its Origin and Meaning' in $\it Elements$ of $\it Refusal$ (Paleo, 1999), p. 60.

it's hard to agree. The war had novel refinements like poison gas, submarine blockades and the tank - a novelty soon to be turned on the workers of the 'Red Clyde' and to become a symbol of Jack London's 'iron heel' ever after — but the American Civil War over half a century earlier had been a total, industrial war of the most vicious kind, with entrenchments and weapons of deadly accuracy and rate of fire (Pickett's charge didn't fail for nothing). World War One's scale was greater, but for every 'genius' killed in the trenches, another was inspired by wartime experiences in his stead. As to the common man — and cultural historians seem notably indifferent to his loss — the 1918 flu pandemic killed three times more than the war, 40 million, and that's written off as a mere footnote of history.⁵ Technique ratcheted up — impossible not to in such a large-scale conflict, with industrial capacity the key determinant of victory – and the lumber-room of European feudalism was cleared out a bit, the Habsburgs getting the bullet at the start of the conflict and the Romanovs at the end. The smashing of socialist internationalism was a loss, but the Russian revolution a gain (no, it was!). There was even ironic humour in the ideology of 'race' Europeans had used to slaughter and exploit the rest of humanity for centuries finally leading them to slaughter each other — even the erstwhile socialists. As to a more nihilistic mood? I don't think so!

The founding of the Dadaist unchallengingly named Cabaret Voltaire in Zurich, 1916,⁶ is seen as a real break with the past, but playing with randomness and the Unconscious was nothing that hadn't been going on in the *avant garde* for decades — and for most of humanity's being if we count folk magic, shamanism, etc.⁷ Amusingly, though, it was students with this mindset that heckled

Just as Enlightenment jurisprudence was a reaction to the unlimited horrors of the Thirty Years War, so Thomas Hobbes' (1588–1679) philosophy was an attempt to rationally justify absolute rule. Bowing to the *bourgeois* tide, his arguments were grossly materialist and empiricist, constantly arguing that we in ourselves feel should be the ultimate test of the real. There is also an early version of the social contract so loved of the *bourgeois*, though stacked even more than the usual monopoly capitalism of the early-modern period. According to Hobbes, people "agree" to escape their supposedly "nasty, brutish and short" lives in the state of Nature by accepting the monarch's monopoly of violence and — disarmed and dependant — are never allowed to break this contract however the monarch abuses his power thereafter as any kingly abuse is supposedly preferable to civil war.

Newton's friend John Locke (1634–1704)⁸ had a similarly dim view of the state of Nature but argued a person's power to defend "his [sic] life ... liberty, or goods" rested with that individual rather than the monarch, and that higher authority was only justified in defending the weak from the strong. Against Hobbes, Locke

⁵ Arno Karlen's *Plague's Progress* (Indigo, 1995), p. 145.

⁶ Greil Marcus' *Lipstick Traces* (Picador, 1997), p. 192.

⁷ The Surrealists that followed, with their tameness, imitation and allegiances to Stalinism that totally contradicted their own vision were even weaker. The failure of the *avant garde* was in some ways the failure of all Modernism in miniature. Each attempt to end the separation between Art and life was more the-

⁶ 'Hobbes, Thomas', *ibid.*, p. 367.

⁷ Hobbes evidently knew very little anthropology, even of that of the New World — then discovered a 'mere' 150 years earlier — where would-be colonists defected in droves to the 'state of Nature' rather than die in 'civilised' work camps. Rod Sakolsky and James Koehnline's *Gone To Croatan: Origins of North American Dropout Culture* (Autonomedia, 1993) contains many fascinating anecdotes on this theme.

⁸ 'Locke, John' in Honderich, op cit., p. 493.

was arguing for an atomisation of power rather than its concentration, a monadic society rather than the 'sovereign body' of Hobbes' frontispiece. Newton's influence in the development of this liberal paradigm should not be underestimated:

[I]t has been suggested that two principles which gave unity to Newtonian cosmology are to be found at work in liberal thinking about man and society. In their liberal context they are that the stability of society, like the stability of the universe, depends upon the maintenance of the relationships between its parts and that the energy required to sustain the harmony of these relationships originates within the system as a whole in a manner comparable with that controlling the order and movement of the planets.⁹

Liberal society was seen as a "perpetual motion machine" — a ridiculous obsession of this mechanistic era, even patented and invested in during the 'South Sea Bubble' speculation crisis — generating infinite Reason and Progress. 10

Locke's reference to "goods" was telling, illustrating it was the propertied and those aspiring to property that liberalism was pitched at. Even the self-styled "anarchist" Robert Nozick (1938-)¹¹ would claim three centuries later that some sort of state was necessary to guarantee contracts, the basis of *bourgeois* society. Locke was a little less equivocal about property rights, this philosopher of freedom exercising his liberty by investing in the Royal African Company

 9 DJ Manning's $\it Liberalism$ (JM Dent & Sons, 1976), p. 23.

¹⁰ *ibid.*, p. 16.

of objectivity (how touchingly naive!) and attempts at Art imitation — Realism and the snapshots techniques of impressionism — had yielded mind-numbing results of one sort or another. Like farseeing Kierkegaard (1813–1855),³ the new material for *fin de siecle* Art was absurdity and despair — Jarry, Rimbaud, the nihilism of Mahler, even the tinkling 'Art for Art's sake' emptiness of Wilde. ("France is certainly decadent if she thinks she is" said Shaw.⁴) Even Yeats — like most of the bored middle class — turned to the hobby occultism of the Golden Dawn Society (a relic out of its time) and the aesthetician Walter Pater had to issue a disclaimer denouncing those young men who found a motive in the purely aesthetic to run through the marketplace in full daylight not with a lighted candle like Nietzsche's lunatic, but with bombs, as Emile Henri did at Paris's Cafe Terminus.

I think Nietzsche's answer to all this — the 'death of God' — is too simple, too simple even for Nietzsche. It was more a death of meaning, or of any meaning that mattered — something that would reach its culmination in a post-modernism where Baudrillard would actually boast of "the extermination of meaning" — and that in turn was rooted in mechanisation and bureaucratisation, technique making humanity potentially much more powerful in terms of modifying the environment but each human powerless to effect any change themselves.

World War One (1914–1918) is generally presented as a devastating blow to burgeoning European culture, but in light of the above,

¹¹ 'Nozick, Robert' in Honderich, op cit., p. 629.

 $^{^3}$ 'Kierkegaard, Soren Aabye' in Ted Honderich's Oxford Companion to Philosophy (OUP , 1995), p. 442. Often presented as a founder of existentialism, the Kierke-gaard phenomenon raises interesting questions about why people only started to look for a 'meaning of life' in the early-industrial / Modern era. John Zerzan's 'Running on Emptiness' (Green Anarchist 45–46 (Spring 1997), pp. 22–24) suggests this a deeper question than mere loss of traditional (in this case Christian) meaning systems and goes to an acceleration of the fall into the symbolic that began with shamanism and Neolithic agriculture.

⁴ 'European Culture' in *Encyclopaedia Britannica*, op cit., vol. 18, p. 708.

the Civilised man instead of the hysteric and he didn't even have the good manners to be scientific about it, for all his pretensions otherwise — consistently, how could he? — preferring intuition to objective tests.¹

Nor is that the last of it. Just when smug Victorian scientists thought they had the secrets of the universe sewn up and were ready to retire for want of anything new to discover:

From the 1880s onwards it had been clear that simple mechanistic explanat-ions based on 'dead' matter were inadequate... James Clerk Maxwell's attempt to work out the facts of electromagnetism on Newtonian principles had failed. And on the philosophic front the notion of natural 'laws' was being radically modified by thinkers such as Poincare, Boutroux, Ernst Mach, Bergson, and William James.²

And Newtonianism the scientific analogue of liberalism — oh dear. There was also the small matter of a slight, already-ill Polish woman refining hundreds of tonnes of pitchblende in Paris. For isolating radium, then uranium, Marie Curie was to be the only woman to receive two Nobel prizes. Like Roger Bacon before her, she was to change the world beyond her imagining. Unlike Bacon, she lacked a world-view that gave her any sense of responsibility in seeking to do such a thing.

Even worse was the situation in the Arts, where journalism and the camera now held the high ground in terms of popular notions

 1 Anyone doubting the status of all three as $20^{\rm th}$ century surrogate religions — despite their vagueness in terms of proof and prediction, and perhaps because of it — need only peek into anything by sociobiologist Richard Dawkins, dogmatically obsessed with extracting meaning from the most wretchedly reductive of explanatory models — to the exclusion of all others.

whose initials, RAC, would be branded into so many black breasts in Africa during the last quarter of the seven-teenth century.¹²

The development first of cartography and then of navigation technology — not least that associated with clockworks used for establishing longitude — meant that sea-faring Western trade now encompassed the planet and wars were fought over it, rather than over religion. Competing for control of the massively lucrative far Eastern spice trade (a strange hang-over from the Middle Ages, where the spices of the — Islamic — Orient were associated with Paradise) had fellow Protestant countries England and Holland (the 'Venice of the North' in every sense) at it like ferrets in a sack. 13 During the Seven Years War, Robert Clive's incredibly lucky and opportunistic seizure of large tracts of India in 1757 effectively provided the bank from which the rest of the British empire could be financed. 14 Without Indian opium, cotton, the tea central to the domestication rituals of the respectable bourgeois and markets for mass produced English shoddy, the British empire would never have been what it was in the 19th century.

Even more tragic — and key as economic underpinning of the Enlightenment project — was the Triangular trade: guns, beads and textiles from Europe sold in West Africa for human beings, who in turn were sold to West Indian and American planters for sugar, cotton and tobacco for import back to Europe. Most of the 11+ million exported from Africa between the 16-19th centuries were worked to death in under five years — modelled on Roman estates, the *haciendas* were the first Belsens. Slaves were so abundant that the plantocracy owning them felt it cheaper and easier to buy in more than

 $^{^2}$ 'European Culture' in ${\it Encyclopaedia \, Britannica}$ (Britannica, 1993), vol. 18, p. 709.

 $^{^{\}rm 12}$ Hugh Thomas's $\it The\ Slave\ Trade$ (Paper-mac, 1998), p. 14.

¹³ Felipe Fernandez-Armesto's *Millennium* (Black Swan, 1995), pp. 303–309

 $^{^{14}\,}$ ibid, p. 365. Fernandez-Armesto's description of Clive of India as "a typical conquistador" says more of the modernity of the first invaders of the New World than any archaism on Clive's part...

to encourage 'self-increase'. Indeed, in Brazil at least, slave mothers were forbidden from breast-feeding their new-born children, effectively condemning them to death by starvation — and the regime in Portuguese Brazil was usually held less harsh than that in the West Indies. 15 Meanwhile the coffee-houses of the City of London became banks and insurance exchanges and the people of Europe grew fat on sugared dainties. Those insisting the Enlightenment philosophes hands were clean — or that they in fact opposed slavery — should remember that the slave ship Voltaire that sailed from Nantes was so-named not from irony but from "freedom's champion" in Ferney's investment in it.16 It wasn't just that the comfortable lives that made their philosophising possible were bought at the expense of slaves. It was that their free trade philosophy positively encouraged slavery and — as those that wanted to reintroduce Classical values into their own era argued — slavery was part of the heritage of that 'greatest of civilisations' ancient Rome. One of the greatest ironies was that when the British decided to end the slave trade that had earlier profited them so well, this was recuperated as an excuse to seize and search all other nation's ships they chose to under the humanitarian-sounding excuse of 'abolishing the slave trade' — thus securing British maritime dominance.

Attempts were made to resist European 'gunboat trade', some successful for centuries. Japan threw out its Jesuits and their muskets in 1640 and only succumbed to survival-modernisation over two centuries later. ¹⁷ The king of Benin initially refused to sell men, only to have savage, cannibalistic, semi-nomadic Jaggas — themselves already brutalised by their participation in the slave trade —

Modernism and Post-Modernism

There appears to be no adequate definition of Modernism, not even as an *avant garde* movement. Modern doesn't mean 'now'— it's already of the past. To 'modernise' is held equivalent as to industrialise but equally, Modernism is held to have begun in reaction to the Victorian era, the century of industrialisation. Even as an Art movement, Modernism is too diverse and amorphous to pin down, a whole bunch of reactions to something ill-defined in the first place, much as Romanticism was a (usually disappointed) reaction to Neo-classicism and the French Revolution, but what it was beyond that is anyone's opinion. So was Modernism simply a rejection of the past? Wasn't the Renaissance — and similarly rooted in it? The Italian Futurists said they rejected the past but endorsed fascist reaction. Others in the Modernist canon, such as the Fauvists, specifically embraced the primitive.

If there is any coherence to Modernism — even in the sunniest, most facile arcadias of Picasso and Matisse — it is of great, gnawing doubt, of a falling away of confidence in established institutions. Though rooted in supposed Victorian 'scientific objectivity', evolution and dialectical materialism both make something about reality slippery and uncertain, that what is here today could flip tomorrow, that everything is conditional. Sigmund Freud's (1856–1939) notion of the unconscious bought up the underside of Victorian society in a way it found hard to cope with — face to face with the shrieking hysteric, always present within, possibly the flip for tomorrow. It's only from dutiful conformity Freud comes down on the side of

¹⁵ Thomas, *op cit.* , p.569. I do not wish to imply the slaves of Brazil were passive victims, resigned to their fate. Large portions of the country's interior were *de facto* slave kingdoms though, grotesquely, these too practised slavery. The 'Maroon' (runaway slave) strongholds were a feature of all New World slave societies.

¹⁶ *ibid.*, p. 463.

¹⁷ JM Roberts, op cit., p.452.

ceding wave of colonialists, the Boers. Indeed, a lesson in the expediency of racism — though non-Whites that stood in the way of Empire were just 'hammered' to extinction. By 1896, Africa was all carved up by the European powers except for the ancient Christian kingdom of Ethiopia, which newly-reunited Italy thought would make easy pickings. At Adowa, they found the Maxim gun's writ didn't run or — more precisely — it had no exclusively European prerogatives. The emperor Menelik had bought 100,000 European rifles, an act of modernisation the Italians proved no match for man for man, despite their boasting 'racial superiority'. 32 They came again in 1936 as fascists, with aeroplanes and mustard gas, and the League of Nations expediently turned their backs on Haile Selasie's plea to each and every one of the 'civilising' polities. However, with the help of only a few "noble savage fanatics" from the Foreign Office, Ethiopia was the first country to liberate itself in World War 2, before even Yugoslavia.

Sadly Ethiopia was the exception. Colonialism's excesses so disgusted HG Wells — himself a Fabian and keen eugenicist — that he wrote *War of the Worlds* as a memorial for the Tasmanians. This Australian people, who had gone so far as to refuse even fire, fought colonialism with exceptional skill and courage but ended up as museum trinkets by the early-1900s. Wells portrayed the Martians showing humanity the same mercy the British had shown one portion of it in Tasmania — and using the same callous social Darwinist logic. Wells' book ends with a joke on this theme: England is saved by the 'lowest' life-form then known, bacteria, bitter mockery of the Civilised pretensions of an arrogant culture so utterly lacking in feelings of common humanity.

 $^{\rm 32}$ Fernandez-Armesto's $\it Millennium,$ op cit., pp. 414–415.

thrown at him until he was forced to play the slave-traders game in exchange for muskets and military support. Thus the myths of savagery used to justify the West's 'civilising mission' (originally a Christianising-through-captivity mission) in Africa were orchestrated by the West itself, as much a lesson in hypocrisy as Britain's final abolitionist efforts.

Ironically, the heartland of the Enlightenment — at least in the 18th century — was the one country in Europe were absolutism was most established, the France of the Louis'. We have seen what Voltaire was really worth above, but the *Encyclopledists* are also worth a look. Aside from tinges of Deism and Freemasonary¹⁸ that got Diderot jailed in Vincennes, the main point was the systematic cataloguing of knowledge.¹⁹ It was the same rage for order that produced the megalomaniacal and utterly artificial geometric landscaping of Versailles, the clockwork music of Mozart. At root there is again the project of naming Nature, the better to understand, predict and control it. On this, Campbell notes:

With novelty value gone, what can be done with the inert facts? The answer is to start arranging them. 'Arrange' in English is a curiously modern word, not found in the Bible, Shakespeare, Milton's poetry, nor Pope's work. Apart from its military sense of putting

 $^{^{18}}$ Freemasonry was essentially a continuation of the Hermetic tradition initiated by Elias Ashmole, a Royal Society member and collector of John Dee's arcana, in the early- $17^{\rm th}$ century. [Yates, *op cit*, chaps. 14–15] Hermeticism persisted in France as its underground character was well-suited to resisting the censorship regime of Absolutism — a relic of earlier times. In its increasing feeble and pathetic way, the Church continued to oppose Freemasonry on the curious grounds that it resembled atheism — though as the $lingua\ franca$ of international liberalism (to achieve its first great victory with the American revolution in 1776, the first US government being largely Masons) this is nearer the mark than might be supposed.

¹⁹ 'European History and Culture' in *Encyclopaedia Britannica* (Britannica, 1993), vol. 18, p. 681.

soldiers into a rank, the first example of the sense of 'putting things into order' is given by the *OED* as 1791 where James Boswell describes greengrocers 'arranging' their hampers. It is one of the list of words with recently acquired senses ... that includes 'category', 'classify', 'method', 'organize', and 'systematic', all of which are put to strenuous use in anthropological writings. The conditions of the arranging activity are made possible because of the separation of fact from significance, as it is put in Lithgow's Travayles of 1632, given as one of the earliest uses of 'organize' in this sense: 'I Organize the Truth, you Allegate [sc. "Allege"] the sense' 20

Not so much the Age of Reason, then, as an age of reification, our humanity dissected under keenly-honed legalistic and propertarian 'rights'.

Jean-Jacques Rousseau (1712–1778)²¹ started off with a different take on the state of Nature in his youthful 1755 essay, *Discourse on the Origins of Inequality*, but didn't live up to his early promise. Of all Enlightenment thinkers, he still accepted that the primitive was a Golden Age of innocence and equality, where there was abundance rather than Hobbesian savagery. Accepting Locke's idea that the human mind was a *tubula rasa* (blank sheet), he logically argued that only the unpleasantness of Civilised living made people unpleasant. Beyond this, however, Rousseau was a liberal, insisting that this socially-induced wickedness still needed containing by a *Social Contract* (yes, more *bourgeois* contracts!) and that sovereignty should reside in what he termed with unfortunate vagueness 'the Popular Will'. His model for the ideal future society was uptight Geneva, home of patriarchal city fathers, morality po-

and Darwin's ideas were quickly seized upon by apologists for Civilisation-building like TH Huxley ("Darwin's bulldog") and popularised as "Nature red in tooth and claw". Those that profited from *laissez-faire* capitalism were hailed as *ubermensch* and their victims dismissed as naturally inferior, fit only for social exclusion or sterilisation, or classified as different 'races' fit only to be colonised or exterminated. A new science of anthropology set up its ramp in European universities, deciding which 'races' were to be saved and which drowned, which heads to anoint and which to collect. Anthropology's basis was as absurd as the Italian Lombroso's determination of criminality through physical characteristics, more biologisation of the oppression of the underclass.

Thus, the 'inferior' Chinese, from a civilisation more ancient and sophisticated than any in Europe, found their country flooded with Indian opium and when the Tai'ping revolt arose to resist it, they had General Gordon float gunboats up the Yangtze and massacre the apocalyptics literally by the million.³¹ Within fifty years, China was a patchwork of warring fiefs and the Chinese a people reduced to the servitude of coolie labour. In newly-opened Africa, Cecil Rhodes went the *conquistador* route, hiring ruthless opportunists like himself to provoke incidents in the interior that justified similarly genocidal intervention by his British backers 'to defend our nationals from barbarity', though at least here the Brits got a bloody nose at Ishandwana, where the Zulus proved as militaristic but tactically cleverer and braver than their erstwhile conquerors. In the end, they couldn't resist Western civilisation's productivity, as it manufactures armies with the same ease as commodities. Almost incomprehensibly for him, the Zulu king just ran out of *impis*. The world's first use of concentration camps by the British in South Africa shocked the West only because those interned were a pre-

 $^{^{20}}$ Alan Tormaid Campbell's $\it To~Square~With~Genesis$ (Edinburgh University Press, 1989), p. 7.

²¹ 'Rousseau, Jean-Jacques' in Honderich, op cit., p. 781.

 $^{^{31}}$ Roberts, op cit., pp. 778–781. When Gordon died on the spears of followers of the Madhi in Khartoum 20 years later, only readers of the jingoistic British press mourned him.

friendships with Matthew Boulton, Josiah Wedgewood, James Keir, William Small, and James Watt, Darwin founded the Lunar Society of Birmingham, an informal association of natural philosophers and industrialists whose meetings were scheduled to allow the full moon to assist its members home. The group of self-styled 'Lunaticks' formed a nucleus for the industrialization of Britain, and either directly or via the interlocking relationships of the Lunar Society Erasmus Darwin had a hand in the origin of almost every species of mechanism explicit or implicit in the technologies of today.²⁹

His *Zoonomia* (1794) beat both Darwin and Wallace to the draw by over 60 years in outlining evolution and he also anticipated Gregor Mendel in noting the importance of *sexual* reproduction as the motor of genetic diversity and the resultant competitive evolution. His grandson's *Origin of Species* (1858) had more impact mainly because it marked the Enlightenment's final death blow to Biblical fundamentalism and scholasticism, but also a greater death blow to the liberal Enlightenment project than Marxism, inasmuch as it portrayed Progress as brutal and blind to Reason, more so even than class conflict. It's tone is more that of Auguste Comte (1798–1857),³⁰ who tried to make a religion of positivist objectivity and a saint of Adam Smith, though it may even go beyond this, beyond any consideration of humanity.

Am I unfair to Darwin, a man smaller than his ideas who died an earnest Christian? Who cares? A thinker doesn't own his ideas lice, bankers and cuckoo clock-makers, the dull sort of place Murray Bookchin would dig.²²

A combination of poor harvests and high taxes to fund a topheavy court falling on the French peasantry, little industrialisation or development of national resources, the loss of Quebec (and associated lucrative fur trade) to the British in 1763, the breaking of the myth of French military superiority won at the end of the Thirty Years War (Rocroy, 1646) by the Duke of Marlborough's victories in the Seven Years War (1756-1763), and the example of a French-backed liberal American Revolution precipitated the final clash between absolutism and its nemesis in 1789, the French Revolution. Upwardly-mobile lawyers like Robespiere (a member of the 3rd Estate — the peasants got no representation) seized on Rousseau above all others to legitimise their rule, Lenin-like, 'on behalf of' the General Will. As with the relationship between the Parliamentarian grandees and the rank and file of the New Model Army in the English Revolution, the bourgeois 'representatives' could offer the street mobs of revolutionary Paris or Lyons they needed to hold power everything and give them next to nothing using this rhetoric of 'universal rights' applicable only when there were realistic opportunity to exercise them These were no critics of Civilisation either. Indeed, there could be no more fanatical advocate of Progress that Saint-Just, who renamed Notre Dame 'the Temple of Reason' and who was the first to sign Louis XVIII's death warrant, and with it that of what remained of the ancient regime across Europe. As with Cromwell during the English civil war period, the opportunism of these liberals was, of course, later over-matched by that of 'the Corsican lieutenant', Napolean Bonaparte. Though he emulated Otto the Great's example and crowned himself emperor in Rome over the objections of a powerless pope, his legitimacy rested not just on his military skills — as much a matter of technique as

²⁹ Dyson, *op cit.*, p. 21.

³⁰ 'Comte, Isidore Auguste Marie Francois' in Honderich, *op cit.*, p. 145. He greatly influenced the utilitarians. It is also telling that a revolutionary much more influential in the early-19th century than Marx, Saint-Simon, was this positivist's secretary for many years. No wonder industrialism was so readily accepted and revolutionary demands were so pathetically diluted in the 19th century.

 $^{^{22}}$ Murray Bookchin's libertarian municipalist ideology owes so much to Rousseau, so it's strange he acknowledges him so little...

tactical insight, his all-conquering *grande armee* being the first organised on mass industrial principles — but on the *Code Napoleon*, a model of the impersonal, bureaucratic power liberals saw as ideally administered by an impartial state. That Napoleon was eventually pulled down at the battle of Waterloo, 1815, by the arch-reactionary Duke of Wellington, and the Prussian *junker* Blucher made no difference. To fight Napoleon, they largely had to adopt his methods and industrial economics to match his war effort too.

Such laws imply some rural resistance from those that preferred their smallholdings to compulsory purchase, but the buck didn't really stop until the latterday Romantic John Ruskin gathered a lobby to save the Lake District from a new railway line in the 1880s. This formed the basis of the National Trust and the national parks movement, both more about preserving heritage than landscape or biodiversity per se. Much of the proto-Green movement was reactionary, looking — as Ruskin did — to a mythical Medieval era of craftsmanship and social obligation better known as feudalism. Even the best of the 19th century anarchists, Peter Kropotkin, was taken in by this, portraying the Medieval city state as somehow 'anarchist' in his seminal Mutual Aid.²⁷ William Morris is now better remembered for his Arts 'n' Crafts wallpaper than his Arts 'n' Crafts socialism — faint-hearted anyway when it came to the 1886 crunch and the Pre-Raphaelites for the Englishness of their pretty pictures rather than for their critique of 'immoral' industrialism. Gothicism was just surface sheen and quickly became as much the architecture of Empire as Neoclassicism — as much a patriotic symbol as the Houses of Parliament rebuilt to incorporate it — and 'merrie England' as reactionary and faked-up a British myth as Hanoverian queen Victoria's revamped monarchism.²⁸

Just as there was a largely-recuperated anti-industrial bohemian *avant-garde*, there was also a clique of its boosters, strangely still operating in the same hermetic way the proto-scientists of the Middle Ages did and led, even more strangely, but Charles Darwin's grandfather:

Erasmus Darwin was a ringleader of the Industrial Revolution ... In the 1760s, inspired by the Birmingham visits of Benjamin Franklin and drawing on his

²⁷ Harold Barclay's *People Without Government* (Cienfuegos, 1982), chap. 6.

²⁸ A latterday example of 'merrie England' fakery is the ploughman's lunch. Evocative of some late-Medieval rural idyll, it was actually invented as pub food in the early-1970s by ad men keen to offload industrially-processed cheese.

engineered engines were those of the railways, later incorporated in the factories and war machines; they not only bought coal, labour and commodities with them, but also industrial discipline, inter/national time to replace local time, and the standardisation of tooling of machine parts to facilitate their transfer between regions by the railways. The railways also paved the way to the early industrial megalopolises, allowing workers and — more significant in the early-20th century, middle-class administrators from suburbia ('Metroland') — from far greater distances than horse and cart could have managed in earlier eras. These great cities prompted the centralisation of municipal power through sanitation reforms (something early anarchists like Michel Bakunin were pathetically vociferous about) and the scientific combating of epidemic 'crowd' diseases that allowed the simultaneous colonisation of equatorial regions, particularly of Africa. In the US, railways — and also steam ships — were key to the colonisation, resource-extraction (timber, mining) and primary production (herding and wheat farming) that as much ensured America's rise to the status of premier world power in the 20th century as the huge influx of refugee labour from Europe — albeit at genocidal cost to the continent's original inhabitants. 26 The railways were seen as much as the icon as the indicator of Progress, so big rail crashes like the Tay Bridge disaster caused by procedural failures or railway workers driven beyond human endurance were seen as ominous allegories, as the later sinking of the Titanic, crash of the Hindenberg and explosion of the Challenger space shuttle were. The 'railway interest' was the huge block of industrialists, investors, shareholders and speculative land owners in Parliament that would pass any law to further their common interest — even that making life imprisonment the punishment for 'interfering with the railways'.

Age of Industrialism, Age of Imperialism

Where did the age of industrialism come from? A comparison between Holland and Britain is helpful here. The Dutch had a seaboard empire nearly as comprehensive as Britain's, once arguing for the 'freedom of the seas' as a mark of their dominance (admittedly this was against British navy searches — how they actually obtained their dominance). Militarily, the Dutch proved a match for the British at sea during the 17th century — successfully blockading the Thames Estuary in 1665 — and no colonial army was of any great size during the era. The Dutch were probably more technologically innovative than the British, as shown by their use of mills for land drainage and reclaiming so much of East Anglia — a feat evidently beyond British engineers — that portions of it came to be called 'Little Holland'. In terms of the free speech so precious to liberalism as a source of innovation and Progress, Holland was streets ahead of Britain. It's where dissidents had their tracts printed and imported to England from. William of Orange ended up ruling Britain — to the eternal regret of the Catholics of Ireland — rather than any Stuart ruling Holland. And yet Britain gained industrial predominance in the 19th century and Holland lagged so far behind that the century ended with van Gogh's peasant Potato-Eaters characterising the nation. How can we explain this stupendous reversal of fortune? The answer, in one word, is coal.

²⁶ Many native American survivors were 'improved' by deculturating mass education in the early-20th century by State-backed (Bureau of Indian Affairs) 'Lady Bountiful' missionaries — and so the European pattern repeated itself.

¹ JM Roberts' History of the World (Pelican, 1980), p. 669.

Even by Tudor times, large tracts of England were deforested, either for ship-building or the charcoal needed in the blast furnaces that made smelting iron economic from c. 1600.1 With no readily-available wood for fuel or construction, the society should have gone into importing it — another reason for the big growth in British maritime trade during this era - or accepted natural limits. Already imbued by rationalist ideas of Progress, the idea of natural limits was unacceptable and, sure enough, Science came up with the answer in the form of Derby's coke (1709) as an alternative fuel to last for many centuries ahead.² Britain knew about mining too. Just as the Germans mined the Harz mountains for silver from the Renaissance, so the Cornish had their stanneries (tin mines), the basis for their independence until Henry VIII put a stop to that along with Catholicism in England. It was a short step from mining for tin to mining for coal, particularly rich Cambrian deposits underlying the island. Deep mining implied pumps to keep the mines clear of water, one such pump being Newcomen's steam engine. Come 1760, James Watt re-engineered the Newcomen engine to make it of use as a general power source — best fed with coal, and so the whole technological edifice came to pull itself up by its own bootstraps.³ Interestingly, the mines of Saxony and Cornwall were also key to re-engineering human beings, having them work an unprecedented three-shift system, rather than according to the natural rhythms dictated by daylight and immediate need, in a proletarian rather than peasant way.

Also needed for winning coal is a readily available subject population with little option but to endure inadequately-compensated mining. Holland had been forged in a war for independence from Habsburg Spain only two centuries earlier, but England had the Celtic people within its borders to draw on, early-industrialism marking a devastating blow to their traditional pastoral way of life. Rural

always - Karl Marx (1818-1883) was hardly heard of, indeed utterly unheard of by the Parisian communards of 1871. If this had not been the case, it would have made little difference, as his philosophy was rooted in the materialism legitimising industrialism, the racist anthropology of Klansman Henry Lewis Morgan, 21 and the reified dialectics of Hegel (1770–1831), ²² a child of the *bourgeois* French Revolution who glorified the Reformation as a Golden Age of rationality and felt the reactionary Prussian state was the culmination of his philosophy (indeed all philosophy!). Marx's own career began with the liberal revolutions in Germany and ended in the most respectable, bourgeois setting, a plot in Highgate cemetery (his wife preceded him, driven to an early grave by Marx's incessant demands to 'keep up appearences'). 23 The most 'successful' Marxist revolutions of the 20th century – when influence did accrue to old Karl — have been Left-nationalist ones and their biggest beneficiaries have always been the bourgeois intelligentsia that form each Orwellian 'dictatorship of the proletariat'. Mere coincidence - or something intrinsic to Marxism and its point of origin in history? Radicals like Max Stirner (1806–1856), ²⁴ a Young Hegelian like Marx, and Freidrich Nietzsche (1844–1900)²⁵ reacted to the illusions of socialism by positing the most extreme individualism, but in retrospect it's understandable this was consistently mistaken by contemporaries as an assertion of aristrocratic values, of 'lord above mass'. It was later recuperated as such by fascism, just as socialist internationalism was warped into national socialism.

No discussion of industrialism can end without mentioning 'the railway interest'. The railways were the powerhouse that drove production and the 'glue' that held it together. The most finely-

² EJ Hobsbawm's *Industry and Empire* (Penguin, 1974), p. 70.

³ Lewis Mumford's *Pentagon of Power* (Secker & Warburg, 1970), p. 147.

²¹ 'Hegel, Georg Wilhelm Friedrich' in Honderich, op cit., p. 339.

²² Fredy Perlman's Against His-Story, Against Leviathan (Black & Red, 1993), p. 14.

²³ Zerzan's 'The Practical Marx' in *Elements of Refusal, op cit.*, p. 133.

²⁴ 'Stirner, Max' in Honderich, op cit, p. 852.

²⁵ 'Nietzsche, Friedrich', *ibid.*, p. 619.

they augmented productive innovations in terms of elaborating control. By the time Mill came along, industrialism's ascendancy was more assured, so he was inclined to equivocate on what Bentham meant by 'the greatest happiness for the greatest number', blatantly revealing his bourgeois prejudices by contrasting 'the pleasure of the poet' with 'the pleasure of the pig' as if only abstract, structured pleasure was of use to the society he represented. In this, he was little different from the Wesleyans and 'Lady Bountiful' types that would descend missionary-style into what they saw as 'darkest England' — the factory slums their class had themselves imposed — to try to make the Other they'd created more like themselves by preaching abstinence, Samuel Smiles-style financial continence and proper middle-class manners. 19 Mass organisation of society led to mass production, mass marketing, a mass media to facilitate that, and even such pathetic absurdities as mass sport where the many lived surrogate lives through the achieve-ments (including social climbing achievements) of the few.

There were experiments with mass resistance too — Chartism — actually a mere buying into the system — and trade unionism, including its nominally revolutionary extension, syndicalism. Of course the *bourgeoisie* feared the rise of a class they could not domesticate but the workers' movement was borne of industrial domestication, so such mass organisations desired nothing beyond it and presented their greatest weaknesses ('unity', 'discipline') as their strengths. The bulk of it having, at best, only social democratic aspirations, it was no wonder they were finally shattered by nationalism come World War One, which had as much 'pie' on offer or more. The liberal-nationalist revolutions of Germany, Italy and Latin America of the 19th century showed that at least representations could profit from such antics. Though there was socialist input — the working class suckered by *bourgeois* promises of 'rights' as

Wales was nearly depopulated as people sought wages in the mines and iron-works of the south. After the crushing of the Jacobite rebellion at Culloden by the 'butcher' duke of Cumberland, the criminalisation of tartan central to the traditional clan system, and the extension of enclosure to Scotland with the Highland Clearances (though here, deer — rather than sheep — ate men), Scots had little option but to join the industrial conurbations on the Clyde or to emigrate.⁴

Lands can't be depopulated, of course, without some provision being made for those absenting it to be fed - as even the Elizabethans discovered, when they suddenly found their highways and byways chock-solid with newly landless "sturdy beggars" and bandits. A good number that didn't emigrate voluntarily sometimes found themselves transported anyway when they stole for bread the Cromwellian solution. The loss of America meant that Botany Bay, Australia, became a favoured dumping ground — disastrous for the hunter / gatherer aboriginals already living there⁵ but eventually a net gain food-wise for the host country when Australian mutton started appearing at British ports. None of this really bridged the gap though. What did was the revolution in agricultural technique that preceded the Industrial Revolution. Given that the smallscale strip farming practised under feudalism gave higher yields, the only reason to 'improve' agriculture was to make it less labourintensive, logically needed as the concentration of land ownership through enclosure forced the majority from the land or into unprecedented dependency as (low) wage-labourers. This was done through crop rotation, improved stock breeding, new machinery all aimed at the market rather than subsistence. It was no coincidence that George III – in the thick of these innovations, studying new breeds and establishing his own model farms as he knew

 $^{^{20}}$ Zerzan's 'Origins and Meanings of World War One' in $\it Elements$ of Refusal, op cit., p. 145.

⁴ Strangely, the 'coffin ships' that carried the Scots from the native land merit less mention than those carrying the Irish during the Potato Famine of the 1840s, though the conditions were the same and mortality rates as high.

⁵ Alan Moorehead's *The Fatal Impact* (Penguin, 1971), Pt. 2, chaps. 4–7.

how important they were for Britain's burgeoning power — was known as 'farmer George'. Many rural people didn't accept agroindustrialisation with equanimity. These included Fen Tigers that broke dams and fences⁶ and later Swing rioters that smashed steampowered threshing machines that would have made them redundant even as field-proles.⁷

With both food and fuel production concentrated in specialist areas, the landless and dispossessed — particularly the Irish 'navvies' (navigators) — were mobilised to die by the thousand digging canals and later — when the steel mills really started rolling out the rails and Robert Stevenson figured out the full potential of a moving steam engine in 1825 – laying track. Landowners – particularly those with mineral deposits under their land — figured this would add to their wealth in much the same way the old turnpikes did. It could even have made it possible to allocate resources more equally across the country, ending the risk of famine. The landowners and the technological optimists couldn't have been more wrong. Their produce was funnelled into mushrooming industrial cities like Manchester and pretty soon, customers were demanding the right to set prices to suit themselves rather than the landed producers. The Anti-Corn Law League finally won the day in 1846 and rural decline got so bad that von Liebig invented NKP fertiliser ("the killer of continents⁸) to replace traditional manure and rotation practices — guaranteeing the land's eventual desertification.

The mechanisation of the land was, of course, mere precedent for the mechanisation of all labour and stemmed from the supposedly humane ideology of the Enlightenment. Strangely, practical application of the principles of division of labour are heavily associated with naval power and exploration and have their roots in able stimulation, it also systematically broke their minds, so Bentham's 'model' had to be moderated. In *Discipline and Punish*, Foucault shows how these organisational principles were extended to other key social institutions such as the school and factory, where

When middle-class women realised their homes were as much prisons as the factories towards the end of the $19^{\rm th}$ century, they pushed for the same education and property rights as men, even for universal suffrage, from the 'feminine' to the 'female' wave of women's liberation. For all its widespread militancy, this was about social inclusion — hardly radical critique — and any particularly 'female' elements were actually domesticating ones aimed at making society more 'moral' (self / controlled), such as the latter-day Puritans in the US that made Prohibition a central plank of the women's platform.

A more profound and interesting critique that also originated in the US was the widespread spiritualist movement, aligning the spiritual, domestic and antirational (all supposed women's attributes in this era) in unspoken opposition to rationalist-industrialism. Annie Besant is particularly noteworthy here — moving from being handmaiden to Charles Bradlaugh, the secularist and electoral reformer, in the 1880s through Helena Blatavsky's theosophy to championing the guru Krishnamurti in the 1920s (though in practice, this Eastern tradition was as patriarchal and 'outside' Western tradition only to the extent India was then a key British colony). As with the conflict between folk healers and orthodox medicine, male experts quickly tried to take control from the female mediums through 'scientific' legitimation of the area, either through dismissing it or through objectivist professional bodies like the Society for Psychical Research.

 $^{^6}$ Steve Booth's 'Fenland Rebels' in *Green Anarchist* 45/46 (Spring 199), pp. 24–25.

 $^{^7}$ Eric Hobsbawm and George Rude's $\it Captain~Swing$ (Hodder & Staughton, 1969).

⁸ Zerzan's 'Agriculture' in *Elements of Refusal* (Paleo, 1999), p. 84.

¹⁹ 'Lady Bountiful' is meant deliberately. Aping the genteel manners of the French aristocratic *salon*, 18th century *bourgeois* women carved out a niche for themselves in the home through the European tea ceremony. This insistence on gentility proved even more domesticating than the bourgeois 'men's space', the coffee houses where they did business. A double standard ensued where men bossed hands at work whilst women bossed servants in the home. Most notoriously, this led to the Victorian sexual 'double standard' where wives were for breeding heirs and their orgasm denied as indecorous — a question only for scientific experts — whereas their husbands furtively spent their earnings exploiting less privileged women as prostitutes, who formed 10% of London's population during the early-industrial era. In calling for an end to women's and children's labour, *bourgeios* women were trying to maker their proletarian peers more like themselves — at a time when working class men were sufficiently dispossessed, disempowered and domesticated — not least by *bourgeois* ideas of respectability — to serve as factory hands in their stead.

hard-working and subservient.¹⁶ Fitting that his great innovation, the assembly line — where workers were forced to work at the rate of not just one machine, but all machines in one factory — was modelled on the disassembly lines of Detroit's slaughter-houses, where living flesh was butchered and commodified.

Smith's idea of 'improvement' was extended beyond the factory into society generally by the utilitarian philosophers Jeremy Bentham (1748–1832)¹⁷ and John Stuart Mill (1806–1873).¹⁸ Like Machiavelli, the utilitarians felt means justified ends — albeit that of the mass rather than the monarch. Like the radical John Wilkes in the previous century, they realised they needed to harness the power of the mob to overwhelm feudal reaction — hence their support for manhood suffrage and the Anti-Corn Law League — but also that this mob had to be tamed for industrialism to function effectively. It's no surprise, therefore, that Bentham also bought 'model' prisons into the world — the first being HMP Pentonville — which was designed to reduce prisoners to the level of atomised individuals through a combination of anonymous surveillance and solitary confinement. Though what was effectively sensory deprivation made prisoners suggestible to chapel homilies in lieu of any other avail-

the Venetian Arsenal of the Renaissance that so influenced Galileo. With the projection of naval power so key to British pre-eminence on the global stage, the Royal Navy base at Portsmouth became the technological marvel of its age. It had dry docks built by Napoleonic prisoners of war that died in their thousands in the dockyard's dank subterranean prison, much as the slave labourers of Hitler's rocket scientists were to die without seeing the light of day under Pina-Munde. It had a semaphore system that allowed communication with Admiralty Arch in London in minutes. And it had the world's first production line based on division of labour principles, the block mills used to make the wooden pulleys needed for rigging and other shipboard work. (A later naval innovation was expert cryptographer Charles Babbage's 'Difference Engine', intended to mechanically calculate the logarithms needed for safe navigation of the high seas, which was to open a new age of dehumanisation in the 20th century⁹). The utility of division of labour was not just that the most deskilled and vulnerable - widows, orphans, the newly landless and later those craftsmen displaced by the encroachment of industrial techniques — needed to learn only the simplest of repetitive tasks to become factory fodder, but also that they could be more easily replaced and controlled, cheap labour in all respects. The early manufactories — usually of textiles — were prisons pure and simple, where workers were separated from their friends and family by gates, walls and guards (supervisors), where they were expected to work at the rate of mill-driven machine rather than at a rate natural and convenient to them.¹⁰ The yoking of coal-fired steam engines made this model transplantable to everywhere in the world (one demand of the Anti-Corn Law League was precisely that a ban on the export of industrial technology be lifted) and only accelerated and increased the workers' dehumanisation and suffering.

¹⁶ Despite — or perhaps because of, as we'll see below — of his prematurely Modern attitudes to managing production, Henry Ford was also prepared to resort to cruder 19th-century union-bashing techniques — Pinkertons — and even to issue the Tsarist anti-Semitic forgery *Protocols of the Elders of Zion* as a pamphlet to his employees, *The Eternal Jew*, until it was discredited by the London *Times* in the mid-1920s (see Norman Cohn's *Warrant for Genocide* (Harrap, 1983)). The Nazis hailed Henry Ford as "the American Hitler" and saw him as the New World's fuhrer. More significantly, they learned Ford's techniques of mass production and car consumption to hold the favour of the German lower middle class on assuming power.

¹⁷ 'Bentham, Jeremy' in Honderich, *op cit.*, p. 85. A particular oddball, Bentham had his body stuffed and donated to medical science at the end of his life, at a time when popular disgust at the violation of the human body through dissection was forcing the likes of sado-automaton Claude Bernard to vivisect animals to find out about anatomy instead.

¹⁸ 'Mill, John Stuart' ibid., p. 566.

⁹ George Dyson's *Darwin Amongst the Machines* (Allen Lane, 1997), pp. 39–

 $^{^{10}}$ Zerzan's 'Industrialism and Domestication' in $\it Elements$ of Refusal, op cit., p. 91.

These developments did not go without resistance, not least the Luddite textile workers that smashed steam looms doing them out of work and control over their work, a revolt so determined and widespread that more soldiers were mobilised against it than against Napoleon during the Peninsula War happening at the same time. Similar revolts greeted the industrialisation of weaving when it hit France in the 1830s, the silk workers of Lyons also 'taking up Enoch' to smash machines. It is easy to see no further than the rebels' own demands but — like the weavers of Flanders and Wyclif's followers in the Middle Ages — the protest was as much against the end of a whole way of life and the encroachment of further controls, proletarianisation in Medieval times, then industrial domestication five centuries later. Description of the controls and the encroachment of further controls, proletarianisation in Medieval times, then industrial domestication five centuries later.

Infatuated by Progress, economist, moral philosopher and associate of David Hume, Adam Smith (1723–1790 — "one of the most revered figures in the history of the tradition" ¹³) ¹⁴ jumped on industrial division of labour as a source not just of profit, but of human improvement. Whilst his *Theory of Moral Sentiments* (1759) argued

the happiness of mankind ... seems to have been the original purpose intended by the Author of Nature when he bought them into existence

and that society should be organised on this natural principle, his *Wealth of Nations* (1776) became the handbook for every cheap-jack industrialist wanting to make a buck off the division of labour, imprisoning others weaker than themselves in the most unnatural and miserable conditions. By 'improvement', the likes of Smith meant subjecting these people to the pettiest rules, regulating their every

nuance of behaviour so they could be organised and made productive *en masse*, as the independent, riotous weaver-types they were replacing could not. People were to be tamed and made more rational, more profitable, more like their middle class masters. In their minds, there was no contradiction between brutalising and exploiting their workers with long, unreward-ing hours on the one hand and this sort of 'improvement' on the other. Fernandez-Armesto points to the early factories being characterised as "palaces of industry" in contrast to the aristocracy's "palaces of decadence, indolence and vice". 15 There was certainly no contradiction in the philanthropist and utopian experimenter Robert Owen — or Marx's patron, Freidrich Engels (1829–1895), come to mention it — also being prominent industrialists. It was Quakers that first campaigned against slavery when they had more willing, productive wage slaves available to them in factories (the same story later with the abolitionists that precipitated the American Civil War) and Smith that first argued the economic case for 'free-' over slave-labour. The Lowell mills — the first factories in America — were sold as moral environments for the upbringing of young women, the main factory fodder before famine and persecution bought the Irish and East Europeans to the continent. Much of this was claptrap, of course, with much higher illegitimacy rates and the uniquely industrial innovation of so-called 'butcher nurses' who would take the proletariat's unwanted children off their hands with the intent of finishing them off through neglect as quickly as possible (echoes of the Brazilian plantation, augmented by specialisation...). This need to 'improve' (ie. control) extended to Taylorism at the end of the 19th century - where the worker's every movement was regulated to maximise productive efficiency — and Henry Ford's psychological profiling and home checks on his Detroit workers so that he also had 'scientific' control of their morals and character ensuring they were

¹¹ Kirkpatrick Sale's *Rebels Against the Future* (Quartet, 1995).

¹² Zerzan's 'Who Killed Ned Ludd?' in *Elements of Refusal*, op cit., p. 105.

 $^{^{13}}$ DJ Manning's $\it Liberalism$ (JM Dent & Sons, 1976), p. 71.

¹⁴ 'Smith, Adam' in Ted Honderich's *Oxford Companion to Philosophy* (OUP, 1995), p. 829

¹⁵ Fernandez-Armesto's Millennium (Black Swan, 1995), p. 372.