

the
little
red
climate-
book

the
little
red
climate-
book

November Publications

This book is published in the United Kingdom by
Communist Party of Great Britain, BCM Box 928, London WC1N 3XX
communistparty.co.uk

The author allows reusers to distribute, remix, adapt, and build upon the material in any medium or format, so long as attribution is given to Jack Conrad and Communist Party of Great Britain. The license allows for commercial use. If you remix, adapt, or build upon the material, you must license the modified material under identical terms.

ISBN 978-1-4709-8096-2

Made and printed by Lulu, www.lulu.com

London 2023

Contents

Introduction	4
1 Hadean to Capitalocene	6
2 The wealth of nature	17
3 Delusions of techno-fixes	27
4 Malthus painted green	39
5 Greenism: a rough guide	51
6 Rebels without the means	65
7 On the dark side	75
8 The past as future	87
Appendix	103

Introduction

Anthropogenic climate change represents the most acute danger to human civilisation, perhaps human life itself. Well, that and generalised nuclear exchange. Only if truly revolutionary measures are taken do we stand a chance of surviving.

Yet governments, whether of the conservative, liberal or reformist type, for all their eco-posturing, are in thrall to accumulation for the sake of accumulation, production for the sake of production. The mark of the beast is M-C-M'.

Even if we take seriously the solemn commitments made in Paris 2015, of reducing carbon dioxide emissions to net zero by 2050 - and only a fool would - it is, in all probability, too late. The opportunity to limit global warming to well below 2°C above pre-industrial levels, and “preferably” to just 1.5°C, has, in all likelihood, already passed.

Emissions of CO₂, CH₄, N₂O and other greenhouse gases have continued apace. The world is giddily, crazily, on course to exceed 1.5°C: the “central estimate” being 2030-32. The 2°C threshold is expected to be passed between 2034 and 2052, with a “median year of 2043”.¹ The danger of a 4°C temperature rise might be avoided, but only if - the sooner the better - we act with the utmost decisiveness.

A 4°C world would see the polar ice caps melt, sea levels head for a 10-metre rise, a thawing of Arctic circle permafrost and a feedback surge in global temperatures. Mass extinction of flora and fauna inevitably follows. The North American wheat belt turns

to desert. States collapse. Millions are displaced. Countless cities are inundated: Alexandria, Dhaka, Jakarta, Bangkok, Kolkata, Miami, Houston, New Orleans, Rotterdam, Rio de Janeiro, Osaka and Shanghai lie top of the list. Along with much of Europe and western Asia, Britain eventually fragments into a series of islands. Manchester becomes Manchester-on-Sea.

Protests in the name of Green New Deal, Just Stop Oil, Insulate Britain, Extinction Rebellion, Fridays for Future are obviously well intended, but obviously woefully inadequate. Nor are strikes, occupations or sabotage anywhere enough.

The politics of protest must be superseded by the politics of power.

Three things immediately follow.

1. We communists must present our differences with others, including on the left, when it comes to dealing with the climate crisis.

2. We communists must explain why preventing climate change becoming catastrophic social collapse requires system change.

3. We communists must show what sort of organisation, what sort of political programme, what sort of government is needed if we are to bring about system change.

That is why this pamphlet has been published.

Hadean to Capitalocene

Let us begin at the beginning.

Our planet dates back around 4.6 billion years to the formation of the solar system. During the Hadean eon, Earth's molten surface slowly cooled and hardened into a solid crust.² The first atmosphere had abundant amounts of CO₂ - perhaps between 10 and 200 times as much as today.³ Solar winds stripped away the lighter, volatile gases.

Because of the much closer proximity of Earth's giant moon compared with today, together with churning volcanic activity and countless asteroid and meteorite strikes, a second atmosphere formed: besides CO₂ there was ammonia, methane, carbon monoxide and water. Earth was a hothouse - more like present-day Venus than present-day Mars. Surface temperatures were a sizzling 230°C. Despite that, there were oceans. Heavy atmospheric pressure, maybe up to 90 bar, prevented liquid water evaporating into steam.⁴

According to the famous theory developed - independently - by Alexander Oparin and JBS Haldane in the 1920s, shallow seas constituted a "primeval soup".⁵ The abiotic processing of CHNO compounds resulted in the building blocks of life: ie, prebiotic compounds. Others, more recently, have argued for hydrothermal vents.⁶ Either way, as shown by the fossil record, simple, heterotrophic (food-eating) life, *spontaneously* began some four billion years ago.

Five hundred million years later, tiny, single-cell blue-green

algae were converting carbon dioxide into oxygen through photosynthesis. Eventually there was enough oxygen in the atmosphere to react with the methane and turn the sky blue.⁷ So Earth's third atmosphere is the product of co-evolution. Indeed our climate results from the interaction of atmosphere, hydrosphere, lithosphere ... and biosphere.

The ozone layer formed 600 million years ago ... and as a by-product provided vital shielding from the sun's biologically harmful ultraviolet rays.⁸ However, the evolutionary leap into complex life forms happened in the balmy seas of some 540 million years ago. The Cambrian explosion occupies a mere few million years - in geological terms, a blink of the eye - and led to "virtually all major groups of modern animals".⁹

Temperatures in the deep past were mostly much higher than today. The Cambrian (600-500 million years ago) 14°C hotter. The Silurian (425-405 million years ago) 4°C hotter. The Devonian (405-345 million years ago) 10°C hotter. The Permian (298-252 million years ago) 3°C colder. The Triassic (252-201 million years ago) 10°C hotter. The Jurassic (201-145 million years ago) 8°C hotter. The Cretaceous (145-66 million years ago) 4°C hotter. The Palaeocene (66-55 million years ago) 10°C hotter. The Eocene (55-33 million years ago) 4.5°C to 12°C hotter (all figures being rough and ready estimates).¹⁰

Doubtless, some of these temperature changes were due to planetary wobbles (Milankovitch cycles), volcanic activity and variations in solar brightness. But there is also plate tectonics. Three billion years ago the vast mass of the Earth's surface seems to have been covered with water. There were only a few spots of dry land. Arctica, or Arctida, was perhaps the first supercontinent, and arose some 2.5 billion years ago (there might well have been others, but, if so, only mere geological fragments remain). Eventually Arctica broke apart, but after many more millions of years there were other succeeding continents and supercontinents: Kenorland, Columbia, Rodinia, Pannonia.

Beginning in the Neoproterzoic, about 550 million years ago, most of Earth's land masses are found joined together in the Gondwana supercontinent. Meanwhile, in the seas, giant plankton blooms resulted in oxygen increasing to about 20% of

the atmosphere - roughly the same as today - conditions ripe for terrestrial flora and fauna. Probably the migration from the seas began some 500 million years ago.¹¹ Complex life drifted, crept, coiled, clambered and slithered onto the land and rapidly evolved.

Something like our present configuration of continents appeared 60 million years ago. Doubtless this helped establish our contemporary aligific - ie, chilling - climate regime. The North American and Eurasian land masses more or less encircle the northern pole; that and the Antarctic continental plate centred on the southern pole provide almost perfect conditions for ensuring an oscillation between cool and cold conditions. Moreover, the bulk of Earth's fresh water is kept frozen in two gigantic polar ice sheets - which means much reduced sea levels.

Over the last million years there has been a glacial-interglacial, 100,000-year pattern. Each cycle has its own particular features and oddities. Understandably, though, as with any study of the past, data becomes ever more uncertain with increasing distances of time. So the best records we possess go from the interglacial, known as the Eemian, down to the present Holocene period - deep ice cores drilled from Greenland and Antarctica have yielded enormous amounts of information.

In terms of climatic transition, the most reliable information is for what is called the Younger Dryas to Holocene, which ended the last ice age. At its maximum, some 15,000 to 20,000 years ago, the Arctic ice sheet extended all the way down to Chicago, New York, Moscow and London and saw much lower sea levels than today. What is now Britain was joined to France, the Netherlands and Denmark. Recent studies give a -6.1°C average temperature.¹²

The transition to our present-day climate regime occurred some 11,650 years ago and saw the retreat of the great ice sheets. The tipping point seems to have been only a decade or two long. It is argued that the "speed of this change is probably representative of similar, but less well-studied, climate transitions during the last few hundred thousand years".¹³

During the present (Holocene) interglacial period, there have been cold and dry phases occurring over a roughly 1,500-year cycle, and climate transitions on a decade-to-century timescale. There have been little ice ages, as well as bursts of relative warmth. Between

1100 and 1300, for example, Europe experienced temperatures which were 0.7°C to 1.6°C higher than today (though, it must be emphasised, this was a local, not a global, phenomenon: elsewhere things were cooler). That allowed for more productive agriculture throughout the continent and saw flourishing English vineyards.

It is also worth recalling, though, that the Thames regularly froze solid during mid-17th century winters and that the years from 1805 to 1820 were comparably cold and bleak. What we are experiencing at present certainly needs to be put into the context of the transition from the little ice age, which finally ended around 1880. Temperatures would be expected to rise ... very slightly. But, of course, what we have seen is way beyond that: temperatures increased on average by 0.08°C every decade since 1880 and by an average 0.18°C since 1981.¹⁴ The main cause is human-induced greenhouse gases: eg, in the 20th and 21st centuries “the level of carbon dioxide rose by 40%” - now the highest for some 20 million years (UK Met Office).¹⁵

Our potted history of global atmosphere, temperature variation and continental drift helps explain why those with even a passing knowledge of the Earth sciences consider the Campaign against Climate Change such a weird choice of name. Despite being promoted by the Socialist Workers Party, CCC, founded in 2001, is politically safe, soggy and, quite frankly, stupid. Capitalism, socialism, the working class all go unmentioned. And, of course, crucially, ‘climate’ and ‘change’ go together like ‘weather’ and ‘change’. The two are inseparable. The weather changes from hour to hour, day to day and month to month. Imagine a Campaign against Weather Change. It would be too, too silly.

According to its ‘mission statement’, CCC exists to “influence those with the greatest power” to “minimise” the “harmful effects of climate change” with the “utmost speed and resolution”. Flattering courtiers similarly pleaded to Canute, the 11th century king of Norway, Denmark and England, to reverse the incoming tide. Needless to say, as he famously showed (purportedly on Thorney Island), no-one, not even he, could pull off such a feat. Nor, despite CCC “street demonstrations” and avoidance of “detailed questions” in the attempt to “bring together as many people as possible”,

can we really expect “those with the greatest power” to agree an “international climate treaty” that will *actually* “minimise” the “harmful effects of climate change”.¹⁶

Well, of course, since that ‘mission statement’ was first written, an “international climate treaty” has been agreed. With much fanfare, Cop21 was adopted on December 12 2015 in Paris, signed on April 22 2016 by 195 parties and supposedly made effective on November 4 2016. But will this international climate treaty “minimise” the “harmful effects of climate change”? Hardly: emissions have continued to rise.¹⁷ Surely then, to “minimise” those “harmful effects” our sights must be set far higher than “street demonstrations” (or glue-down road protests). We must talk about capitalism. We must talk about socialism. We must talk about organising the working class into the ruling class. The CCC ‘mission statement’ needs more than a long overdue update. No, an entirely different kind of politics is needed.

Climate is big weather. Karen Bice gives the following definition: climate “is simply weather ‘averaged’ over a time period of one year or more”.¹⁸ In other words, there is nothing fixed about the climate. Climate change has never ceased, is ongoing and must therefore be considered inevitable. Notions of a static, an unchanging climate are, to put it mildly, badly misconceived.

While the climate constantly undergoes change, that happens within a self-adjusting system: that is, within a relatively stable equilibrium, and hence distinct geological epochs and periods. However, yes, there are tipping points - often accompanied by mass extinctions.

Till recently, most scientists thought that all large-scale climate change took place over a timescale of many millions of years: ie, at rates unnoticeable during a human lifetime. Not least for political reasons, gradualism was the ruling orthodoxy. But no longer. Eg, “All the evidence indicates that most long-term climate change occurs in sudden jumps rather than incremental changes.”¹⁹ In point of fact, through mathematical advances, supercomputers and new modelling techniques that link together weather and climate, scientists can now make *extraordinarily accurate* predictions, including when quantitative change tips over into qualitative change. That is what got Syukuro Manabe, Klaus Hasselmann and

Giorgio Parisi their 2021 Nobel prize in physics.²⁰

Such conclusions were anticipated by GWF Hegel and his objective idealism. Marx and Engels, of course, turned Hegel upside-down (put him onto his feet). What Hegel developed as mysterious laws of thought all leading to the ‘absolute idea’ (though often illustrated with striking examples drawn from nature and history) could be put onto solidly materialist foundations and presented in a straightforward manner. According to Frederick Engels, writing in his *Dialectics of nature* (1873-86), there are three general - dialectical - laws of nature and human society: (1) the transformation of quantity into quality; (2) the interpenetration of opposites; (3) the negation of the negation.²¹ Long before Marx and Engels (and Hegel), it should not be forgotten that the best of the ancient Greek philosophers saw the world in ceaseless flux, coming into being out of a fiery chaos, and things changing into their opposites. Similar, wonderfully impressive, dialectical insights can be found amongst Chinese and Indian sages too.

However, in particular during the 19th and 20th centuries, the bourgeois establishment lived in dread of sudden change. The French revolution of 1789, the 1793-94 Reign of Terror, Chartism, the 1848 revolutions, the 1871 Paris Commune, the rise and rise of mass Marxist parties and the world-shaking 1917 October Revolution saw to that. Sudden change - well, until the promotion of ‘colour revolutions’ - was equated with artificiality, aberrance, threat and disaster. Therefore, (Tory) fixity, and *its* opposite, (Whig) gradualism, were the ruling ideas, and not only in politics.

Isaac Newton allowed for the movement of the planets, but on orbits given fixity by “universal gravitation”²² - all given first impulse by the finger of god himself. The steady state theory of the universe was only finally overthrown in the mid-20th century. Edwin Hubble’s observations, and calculations made by Albert Einstein, allowed Alexander Friedmann to show that the whole of the universe is expanding along with space itself. Fred Hoyle represented the conservatives’ last stand. The *coup de grâce* came with the work of Martin Ryle on quasars and the *accidental* discovery of the cosmic microwave background to the big bang by Arno Penzias and Robert Wilson. Beginning with a superdense singularity some 13.8 billion years ago, the diameter of the observable universe is today around

93 billion light years.

Similarly with biology. Lorenz Oken, Jean-Baptiste Lamarck, Karl Ernst von Baer and above all Charles Darwin overthrew old Linnaean notions of the fixity of species. Instead they argued for evolution. One species led to another. Studies of the fossil record, studies of domesticated plants and animals, studies of variations in the wild, all proved it. Famously though, Darwin endlessly delayed publication of his *On the origin of species* (1859). He feared outraging Christian sensibilities. He also feared Chartist revolution.²³ And precisely because of its revolutionary implications, Darwin's theory of evolution through natural selection was determinedly gradualistic in presentation.

Most modern readers fail to notice how much of the *Origin* consists of a defence of gradualism rather than simply being one long argument about natural selection. After all, in the concluding chapter, Darwin declared his commitment to the postulate: "*Natura non facit saltum*" (nature does not proceed by leaps).²⁴ It was Stephen Jay Gould and Niles Eldredge who finally broke through this orthodoxy. In 1972 they presented their theory of punctuated equilibrium. Species undergo genetic drift, but are essentially stable as phenotypes. Crucially though, the emergence of a new species - speciation - occurs via "sudden" transitions.²⁵ The debt to Marxism is all too apparent.

Many other such examples in science could be cited, but that would be tiresome. The tipping point, jump, sudden shift, phase transition, call it what you will: the dialectical leap is generally accepted in fact, if not always in name.

Climatic change can doubtless produce new opportunities. Palaeontologists note that growing polar ice sheets and the spread of the African savannah 3.6 to 4 million years ago coincided with the "split" in the "evolutionary line" between ourselves and chimpanzees and gorillas.²⁶ Our ancestors came down from the trees and began to walk upright.

Subsequently, other glacial periods and lower sea levels eased migration into Australia and then the Americas by fully modern humans. Getting to Australia from Asia some 60,000 years ago needed only a short hop from the (much larger than it is now) island of Timor. With Siberia connected to Alaska by the Bering land

bridge, tribal groups - perhaps just five of them - simply wandered into America 22,000 years ago and 10,000 years later had peopled the whole of the Americas all the way down to Tierra del Fuego.²⁷ The beginning of crop agriculture in the Middle East certainly corresponds very closely with a sudden warming event, which marks the onset of the Holocene. Desertification slowly squeezed people into remaining riverine strips of greenery. A mixed blessing. For the emerging elite there came power, palaces, luxury goods and leisure; for the masses a nutritionally much reduced diet and backbreaking toil.²⁸

However, there are numerous yanking civilisational collapses: eg, the great Bronze Age states of the eastern Mediterranean, the Harappan in the Indus valley and the Khmer in southeast Asia. The Mayan cities of central America were abandoned one by one and “most cultural activities ceased”.²⁹ True, there is the danger of elevating climate into a monoexplanation. Invasion by neighbouring tribes or states, civil war, disease in crops and humans and the class struggle all play their part too.

Nowadays, there are still a few cranks who think “climate change is good”.³⁰ Crops grow faster, plants absorb more CO₂, less severe cold weather, ice free roads, etc. Some even look forward to ‘normal people’ living in Antarctica. Despite the sunless four-months of winter there is abundant coal, oil and other mineral resources to exploit. However, the general scientific consensus definitely lies with “climate change is bad”. The danger is not just the collapse of civilisation on a local or even a regional scale, but globally. The Intergovernmental Panel on Climate Change (IPCC) has already issued a “code red”. Human activity is changing the climate in ways “unprecedented” in thousands - or hundreds of thousands - of years. Some of the changes are likely to be “irreversible” over centuries or millennia - including melting polar ice caps, rising sea levels and more and more droughts, floods and fires.³¹ And while Antarctica might become habitable by ‘normal people’, large parts of the so-called third world, especially in the tropics, which are today home for 40% of the human species, become uninhabitable. People cannot cope with temperatures of 42°C plus for any length of time. It is beyond our “physiological limits”.³² With this in mind, Tim Palmer, professor of climate physics at Oxford, warns that we face “some

kind of hell on Earth”.³³

The reason why we face “some kind of hell on Earth” is surely all too obvious: M-C-M'. Under capitalism, money is laid out for the production of commodities with one overriding aim, making more money (ie, profit). The secret of making something out of nothing lies, of course, in the exploitation of labour-power. Surplus-value is pumped out from workers and realised through market sale. Using money to make more money is, though, a never-ending imperative. Capital is an alien force which stands over and imposes itself on each and every capitalist (they are mere personifications of capital). “Accumulate, accumulate! That is Moses and the prophets” (Marx).³⁴ Invest, invest, invest. Grow, grow, overcome all barriers to growth. Unless they convert the greater part of surplus-value into capital they fall behind, lose the race and bankruptcy beckons.

With its never satiated lust for profit, capitalism is almost tailor-made to trash nature - and despite its different political economy, the Soviet Union and its ‘socialist’ bloc made no difference here. As for China - today the world’s biggest emitter of greenhouse gases - it is fully integrated into the global capitalist economy. Hence, while some still talk of the Anthropocene, as if it is an undifferentiated humanity that is to blame for global warming, it is surely better, more accurate, to talk of the Capitalocene.

For many on the left, not unreasonably, capitalism is defined as categorically “incapable of carrying out the radical measures required” (*Socialist Appeal*).³⁵ “Capitalism can’t solve the climate crisis” (*Socialist Worker*).³⁶ “Can this climate emergency be halted under the current world economic, political and social system - capitalism? ... No” (*The Socialist*).³⁷ However, even the most fabulously wealthy billionaires or the system’s top politicians and state actors - well, in the main - are not so blind that they cannot see that something must be urgently done. True, it is hard to imagine present-day governments carrying out a programme that would actually achieve net zero emissions - after all, that would require a dramatic restructuring of the entire global economy. Therefore, in all probability, today’s crop of lying, narrow-minded, bribable establishment politicians will continue with gestures, cheap platform rhetoric and legislating for an electorally safe distant future. Meantime it is more nuclear power plants, more roads,

more air travel, more poor-quality housing ... crucially, more of everything - ie, more economic growth.

Yet, as seen with the Covid pandemic - and World War II and World War I before that - the ruling class was prepared to allow governments to *temporarily* suspend the law of value. The normal workings of capitalism were overridden, curtailed or tightly directed in order to achieve agreed state aims.

The more intelligent sections of the left have written about how governments introduced 'Covid socialism' - roughly equivalent to the *Kriegssozialismus* (war socialism) put into effect by the German high command in 1916: ie, the use of concentrated state power to deal with a dire emergency. The Oxford AstraZeneca vaccine is a good example. Developed double quick, produced on a non-profit basis, it was then rolled out and administered according to need by the NHS.

In terms of the general interest - more particularly the general *capitalist* interest - governments will take what are usually regarded as extreme measures. Faced with Covid-19, then Tory chancellor, Rishi Sunak, talked about tearing up *his* economic textbooks, doing what is necessary, thinking the unthinkable and so on and so forth. Though fraught with horrendous difficulties, not least because capitalism - from the level of the firm to that of the state - is characterised by internally generated contradictions, we should not categorically discount the possibility that this will happen with the climate crisis. After all, the capitalist class lives on the same fragile planet as the rest of us (even if Elon Musk would like to rocket off to a frigid, lifeless, almost airless Mars).

So climate socialism imposed by a *firefighter state* - maybe urged on by Friends of the Earth, the Green Party, XR and CCC demands for the declaration of a 'climate emergency', maybe with 'beyond politics' green advisors, enlightened technocrats and the armed forces playing a leading role - such a state could conceivably impose draconian restrictions on greenhouse gas emissions by reorganising industry, transport, housing and agriculture.

Of course, that, or something like it, would have to happen in *all* the major countries if the rise in global warming is to be limited to "well below" 2°C, or even to 1.5°C. Adding to that little difficulty, the imperial hegemon, the United States, is in visible decline and

is, as a result, bent on destruction, not the construction that marked out the post-1945 world order. So there is no effective power that can enforce the general good. Even on a purely national level, we should have no illusions about any eco- or climate socialism, introduced, overseen and enforced by this or that capitalist state (or, for that matter, China's hybrid regime). As with war socialism, if climate socialism happens, there will be stupid blunders, severe restrictions on democratic rights, attempts to drive down popular living standards - all accompanied by endemic corruption and corresponding opportunities for well connected insiders to enrich themselves beyond the dreams of Croesus.

Nor will such a climate socialism evolve peacefully and smoothly into proletarian socialism. True, we reach a partial negation of capitalist production - the outer limits of capitalist society. But, because there is a swollen, parasitic, aggressively repressive bureaucratic state, what we have is the *extreme* opposite of proletarian socialism. Nonetheless, there is a relationship between climate socialism - in reality capitalism attempting to save itself on the back of the working class - and proletarian socialism.

After all, in the paragraph above, substitute the firefighter state by *the working class organised as the state power*. Such a state, based on extreme democracy, closely coordinating with other similar states across the globe, that radically reorganises power generation, industry, agriculture, transport and housing; a state that reduces greenhouse gas emissions to net zero and then below; a state that subordinates production to need. Then it is clear that such a state is nothing more than capitalist climate socialism that really does benefit the *whole of humanity* - and therefore represents the negation of capitalism and the first step towards a classless, moneyless, stateless and ecologically sustainable communism.

The wealth of nature

For years, for decades, the SWP's *Socialist Worker* carried this formulation in its 'What we stand for' column: "Workers create all the wealth under capitalism. A new society can only be constructed when they collectively seize control of that wealth and plan its production and distribution according to need" (Proposition one). And, no surprise, the SWP's dozen or two imitators and clones - organised into the International Socialist Tendency - loyally, crassly, present their own version of this bullshit.

Five examples.

1. In the United States the now liquidated International Socialist Organization: "Workers create society's wealth, but have no control over its production and distribution. A socialist society can only be built when workers collectively take control of that wealth and democratically plan its production and distribution, according to present and future human needs instead of profit."³⁸

2. Its diminutive, IST rump, Marx 21, likewise declares: "We believe that workers create all the wealth under capitalism, which is a system run by a tiny, wealthy elite. A new society can only be constructed when we, the workers, collectively seize control of that wealth and plan production and distribution according to human need."³⁹

3. Up north, in Canada, the International Socialists have: "Capitalist monopolies control the Earth's resources, but workers everywhere actually create the wealth."⁴⁰

4. Down under, in Australia, there is Solidarity: "Although workers

create society's wealth, they have no control over production or distribution."⁴¹

5. Then, finally, in terms of our brief IST survey, we have Workers' Democracy in Poland (formerly Socialist Solidarity). In line with the others we are told: "While workers create social wealth, they have no control over the production and distribution of goods. In pursuit of increasing profits, global capitalism, cultivated by corporations backed by the power of the strongest and richest countries in the world, leads to a progressive stratification of income."⁴²

For those unacquainted with the ABCs of Marxism these formulations might appear perfectly acceptable. Yes, they are superficially anti-capitalist and apparently militantly pro-worker. But, as we have repeatedly argued, there is a problem.⁴³ It lies not with the call for the working class to "collectively seize" control of the wealth they create and then "plan its production and distribution". No, the programmatic poverty, the economism, of the IST tradition announces itself in the very first sentence: "Workers create all the wealth under capitalism" ... or words to that effect.

The fault is twofold. Firstly, the IST statements are simply wrong. Workers *do not* create all wealth under capitalism. Secondly, it treats workers merely as wage-slaves, the producers of commodities - not feeling, thinking, emotional human beings - a mirror image, in effect, of capitalist political economy.⁴⁴

Let us discuss wealth. To do that we must flesh out some basic concepts.

We have already referred to Marx's formula: M-C-M'. In the embryonic form of mercantile capitalism, the secret of making something out of nothing is to be found in the existence of distinct 'world economies'. A 'world economy' being an economically autonomous geographical zone, whose internal links give it "a certain organic unity" (Ferdinand Braudel).⁴⁵

The merchant's ships, wagons and pack animals join *and exploit* each separate 'world economy'. Eg, Muslim Arab traders bought cheap in India and China and sold dear to Christendom (Byzantium and the feudal kingdoms, principalities and city states of Europe). Merchants parasitically acted as intermediaries between such spaces. Mark-ups on spices, silks and ceramics were fabulous. Way beyond the cost of transport. There were no socially determining

capitalist relations of production. Unequal exchange was the key to the merchant's wealth and capital accumulation.

Under fully developed capitalism, however, surplus-value derives from the surplus-labour performed by workers during the process of production. Hence this (extended) formula for the circuit of money: M-C ... P ... C'-M'.

Through repeated enclosure acts, state terrorism and relentless market competition, the direct producers are separated from the means of production. Peasants and petty artisans fall into the ranks of the proletariat and have to present themselves daily, weekly, monthly for hire. It is that or destitution, hunger and eventual starvation. Yet *on average* capital purchases labour-power at a 'fair' market price. As sellers of that commodity - labour-power - workers receive back its full worth. Again *on average*. Wages buy the means of subsistence necessary for the production and reproduction of the worker as a wage-slave. Only as human beings are they robbed.

Capital, as an entity in its own right, has no concern for the worker. Capital, because it is only interested in self-expansion, would compel workers to work for 24 hours a day and seven days a week if such a feat were physically possible. Nor has capital, again as capital, any concern for the commodity created by the combination of labour-power, the instruments of labour and raw materials - albeit brought together under its auspices. The resulting commodity could be of the highest possible quality or complete rubbish. But, as long as it sells, and sells at a profit, that is what counts. Hence, *for capital*, wealth comes in the form of value, surplus-value and above all money. In other words, exchange-value.

Of course, for capitalists, as individuals, wealth also comes in the form of use-values. Despite the myths of Max Weber and the so-called Protestant work ethic, no-one should imagine them living an ascetic, self-denying existence. Especially given this, the second gilded age, they have never had it so good. The super-rich indulge themselves ... and often to extraordinary excess. Private islands, football clubs, famous art works, superyachts, rocketing off into near space and flitting by from one palatial residence to another. Even philanthropy and charity mongering is a form of extravagant consumption by which the elite feed their already inflated egos (and divert attention away from the grubby side of their businesses).

Think Bill Gates, George Soros and Warren Buffet.⁴⁶ When it comes to more commonplace CEOs, they consider corporate jets, chauffeur-driven cars, English butlers, Filipino maids, Saville Row suits, vintage wines, trophy wives and the right to grope female employees as perks of the job (yes, most are male, sociopathic and aggressively self-entitled⁴⁷). Meantime, nearly half the world's population live on less than \$5.50 a day⁴⁸ and a third have no access to safe drinking water.⁴⁹

So, while for capital, wealth is self-expanding money or value, for the human being, wealth is use-value - what fulfils some desire, what gives pleasure, what is useful. Because use-value so obviously relies on subjective judgement, Marx quite correctly gave the widest possible definition. Whether needs arise from the "stomach or from fancy" makes no difference.⁵⁰ Use-value is therefore not just about physical needs: it encompasses the imagination too. Indeed, a use-value may be purely imaginary. Its essence is to be found in the human being rather than the thing itself. The consumer determines use-value (ie, utility).

Obviously use-values are bought on the market for money and come in the form of commodities produced through the capitalist production process. However, capital not only has an interest, a drive, to exploit labour and maximise surplus-labour. In pursuit of profit, capital also seeks to maximise sales and therefore to expand consumption. Capitalists, in department I, sell raw materials and the instruments of labour to other capitalists: steel, electricity, machine tools, computer chips, etc. Capitalists in department II sell the means of consumption to other capitalists ... and to workers too (food, clothing, housing, drink, etc).

While the individual capitalist, the particular capital, attempts to minimise the wages of the workers they employ, capital as many capitals, capital as a system, pushes and promotes all manner of novel wants and artificial needs. Hence celebrity endorsements, influencers and the huge advertising sector, which work day and night to transform the "luxury goods of the aristocracy into the necessities of everyday life".⁵¹ That, and the class struggle conducted by workers themselves, combine to constantly overcome the barrier represented by the limited purchasing power of the working class.

Part of what the working class produces is therefore sold back

to the working class ... and historically on an ever-increasing scale. That way, workers manage to partially develop themselves as human beings. Not that their needs are ever fully met. There is a steady stream of the latest must-haves. Capital, capital accumulation and the lifestyles of the rich always run far ahead. The lot of the working class therefore remains one of relative impoverishment and “chronic dissatisfaction” (Thorstein Veblen).⁵²

Workers and capitalists alike consume use-values that come in the form of commodities and from the sphere of capitalist relations of production and the exploitation of wage labour (there are, though we shall not explore it here, non-commodity use-values, such as domestic labour - cleaning, cooking, looking after the kids, maintaining the car, putting up shelves, decorating, etc).

Doubtless, once again workers and capitalists alike also consume some commodities that, directly or indirectly, come from peasant agriculture, the individual trader or the self-employed artisan. Such little businesses produce use-values and therefore, by definition, wealth too. With that in mind - and there are millions of them in Britain alone⁵³ - it is surely badly mistaken then to baldly state that “workers create all the wealth under capitalism”.

In theoretical terms, forgetting, passing over, petty bourgeois commodity production is a mote, a mere speck of dust in the eye. There exists a beam however. In his *Critique of the Gotha programme* Marx is quite explicit: “Labour is not the source of all wealth.”⁵⁴ There is nature too. Marx writes here against the first paragraph of the draft programme of the newly established German Social Democratic Party. It has a strangely familiar ring. A ghostly anticipation of the IST: “Labour is the source of all wealth and culture and, since useful labour is possible only in society and through society, the proceeds of labour belong undiminished with equal right to all members of society.”

Some necessary background.

The Gotha unity congress in 1875 represented an unprincipled unification, joining together Lassallean state socialists and the Eisenachers - the followers of Marx, led by August Bebel and Wilhelm Liebknecht. Marx, supported unity, yes, *but not unity which involved weakening the programme*. Note, the Lassalleans, not least because of their dictatorial internal regime, were in steep

decline, their trade unions broke away and various splits joined the Eisenachers. However, the Eisenachers did make unwarranted programmatic concessions: eg, “producer associations assisted by the state” ... Not in itself a disaster, but the central role accorded to the state and state aid nostrums left the door ajar for a “Bonapartist state-socialist workers’ party” (Engels 1887-88).⁵⁵

It should be added that Marx was probably eager, primed, itching to write his *Critique* due to Mikhail Bakunin. In his *Statism and anarchy* (1873) Bakunin portrayed Marx as a German nationalist and an “authoritarian” worshiper of state power. Not only that: Marx was said to have been responsible for the programme and every step taken by the Eisenachers since day one. Eg, “The supreme objective of all his efforts, as is proclaimed to us by the fundamental statutes of his party in Germany, is the establishment of the great People’s State (*Volksstaat*)”.⁵⁶

As a canny political infighter Marx chose to point the finger of blame at Ferdinand Lassalle (1825-64). Lassalle was the real German nationalist and worshiper of state power. He had secretly offered to do a deal with Otto von Bismarck. That way, the Bismarck state would have gotten its “own bodyguard proletariat to keep the political activity of the bourgeoisie in check”.⁵⁷ Marx credited Lassalle with being the spiritual father of the Gotha programme, including the above-quoted first paragraph. Unfair, perhaps - Lassalle was dead, killed in a silly duel.

More to the point, Marx’s own pupils - ie, Bebel and Liebknecht - were quite capable of making elementary blunders, such as forgetting nature, all by themselves. No help, no prompting from Lassalle and his state socialists was needed. But, by blaming Lassalle, Marx was able to give his comrades an escape route, a route which, if taken, would simultaneously save their blushes and draw a clear line of demarcation against Lassallean state socialism.

None of the SWP’s leaders, past or present, eg, Tony Cliff, Duncan Hallas, Chris Harman, John Rees, Lindsey German, Martin Smith, Alex Callinicos, Charlie Kimber and Amy Leather, were cribbing from Lassalle ... or Bebel and Liebknecht for that matter. That much is obvious.

No, we have a clear case of historical reflux, opportunism recurring, economism spontaneously regenerating - as it inevitably

does, given the material conditions of capitalism and the oppressed position of the working class.

Incidentally, economism needs defining here - that is, if we are going to have a fully informed discussion. Economism is, in essence, a bourgeois-imposed outlook, which restricts, narrows down the horizons of the working class to mere trade unionism ... that or, more commonly, it simply denies or belittles the role of high politics and democracy in the struggle for socialism. And, regrettably, the IST and its SWP mothership are hardly alone. Economism is the dominant outlook of today's left.

Not, of course, that economism denies politics. The problem is that, when the economistic left takes up politics, it is not the politics of the working class - ie, orthodox Marxism - no, instead it is the politics of other classes and other ideological trends which they promote: left social democracy, pacifism, greenism, feminism, black separatism, petty nationalism, etc.

Anyway, back to Marx. In 1875, he savaged the "hollow phrases" in the Gotha programme about "useful labour" and all members of society having an "equal right" to society's wealth. There is useless labour - labour that fails to produce the intended result. People are not equal, etc, etc. More to the point, at least when it comes to our main concern here, there is nature. Marx wrote this: "Nature is just as much the source of wealth of use-values (and it is surely of such that material wealth consists!) as labour, which itself is only the manifestation of a force of nature, human labour-power."

Marx goes on to explain that "insofar as man from the outset behaves towards nature" - what he calls the "primary source of all instruments and objects of labour" - as an "owner, treats her as belonging to him, his labour becomes the source of use-values, therefore also of wealth". The same metaphor occurs elsewhere again and again in order to depict the two-sided source of wealth. Eg, in *Capital*, Marx approvingly quotes William Petty: "Labour is its father and the earth its mother"⁵⁸

Leave aside the gender stuff, the really important thing is the two-sided source of wealth. Sunshine and water, air and soil, plants and animals are all 'gifts from nature'. Human beings too are part of nature and, just like every other living thing, rely on nature in order to survive. However, humanity applies itself to nature, albeit that in the

process of production, we often bank on the direct actions of nature. Eg, though a natural product, wheat is selected, sown and harvested by labour; yet it germinates in the soil and needs both rain and sunshine if it is to grow and duly ripen. So the two forms of wealth conjoin. Yet, despite that, for the laws of capital, what gives the wheat value is not what is supplied by nature. That has use-value, but not value. Value derives from the application of labour-power alone.

There is a another - a spiritual, or artistic - dimension to the use-value of nature that should never be underestimated.

There is a pleasure in the pathless woods,
 There is a rapture on the lonely shore,
 There is society, where none intrudes,
 By the deep sea, and music in its roar:
 I love not man the less, but Nature more.

(George Gordon, Lord Byron, *Childe Harold's pilgrimage* - 1812)

Sorry is the one not inspired, humbled, uplifted by the wonders of nature. They are impoverished. So wealth cannot be limited to the products of human activity alone. Wealth must include every form of consumption which produces human beings in one respect or another. Michael Lebowitz rightly considers this of particular significance: “Marx’s identification of nature as a source of wealth is critical in identifying a concept of wealth that goes beyond capital’s perspective”.⁵⁹

Capital, as we have shown, has but one interest - self-expansion. Capital has no intrinsic concern either for the worker ... or nature. And, especially over the last 150 years, and increasingly so, capitalist exploitation of nature has resulted in destruction on a huge scale. Deforestation, erosion of topsoils, spreading deserts, CO₂, methane and other greenhouse gas emissions - all grow apace. Countless species of flora and fauna have already been driven to extinction. Instead of cherishing nature, there is greed, plunder and wanton disregard.

The working class presents the *only viable alternative* to the destructive reproduction of capital. First, as a countervailing force within capitalism - one which has its own logic, pulling against that of capital. The political economy of the working class brings with

it not only higher wages and shorter hours. It is also responsible for health services, social security systems, pensions, universal primary and secondary education ... and measures that democratise the environment, eg, the right to roam that came out of the 1932 mass trespass movement and Kinder Scout. Wealth, for the working class, is not merely about the accumulation and consumption of an ever greater range of commodities.

Besides being of capitalism, the working class is *uniquely* opposed to capitalism. The political economy of the working class more than challenges capital. It points beyond capital - to the total reorganisation of society and, with that, the ending of humanity's strained, brutalised, crisis-ridden relationship with nature. Socialism and communism do not raise the workers to the position where they own the planet. Mimicking the delusions associated with capitalism - as witnessed under bureaucratic socialism - brings constant disappointment, ecological degradation and nature's certain revenge. Humanity can only be the custodian of nature.

Marx was amongst the first to theorise human dependence on nature and the fact that humanity and nature coevolve. He warned, however, that the capitalist process of production is also a "process of destruction" because it "tears assunder ... disturbs the circulation of matter between man and the soil ... therefore violates the conditions necessary for lasting fertility."⁶⁰ John Bellamy Foster coined the term "metabolic rift" to capture this break between nature and the human part of nature.⁶¹

Capitalism crowds vast numbers into polluted, soulless, crime-ridden concrete jungles. Simultaneously, the ever bigger farms of capitalist agribusiness denude nature with mono-crops, the ripping up of hedgerows and, as highlighted by Rachel Carson back in the early 1960s, the chemical death meted out to "birds, mammals, fishes, and indeed practically every form of wildlife".⁶²

The Marx-Engels team wanted to re-establish an intimate connection between town and country, agriculture and industry, and rationally redistribute the population. Mega-cities are profoundly alienating and inhuman. The growth of ever-sprawling conurbations has to be ended and new spaces made inside them for woods, parks, public gardens, allotments and small farms. Doubtless, while this programme has great relevance today, not least given the IPCC's

code-red, it is hard to imagine the capitalist class, with its short-termism and manic fixation on profits, willingly going along with such far-reaching measures. But under conditions of socialism and communism it will surely be another matter.

Our aim is not only to put a stop to destruction and preserve what remains. Of course, the great rain forests of Congo, Indonesia, Peru, Columbia and Brazil must be safeguarded. So too the much depleted life in the oceans and seas. However, more can be done. The riches of nature should be restored and where possible enhanced. Grouse moors and upland sheep farming are obvious prime targets for rewilding in a Britain with its “very striking - and worrying” low levels of biodiversity (Natural History Museum report).⁶³ Wolves should sing again.

But we can think really big. Mesopotamia - now dry and dusty - can be remade into the lush habitat it was in pre-Sumerian times. The Sahara in Africa and Rajputana in India were once home to a wonderful variety of fauna and flora. The parched interior of Australia too. With sufficient resources and careful management they can bloom once more.

The aim of such projects would be restoration, not maximising production and churning out an endless flood of products. Hardly the Marxist version of abundance. On the contrary, the communist social order has every reason to rationally economise and minimise all necessary inputs.

The “enormous waste” under capitalism outraged Marx. The by-products of industry, agriculture and human consumption are squandered and lead to pollution of the air and contamination of streams, rivers and lakes. *Capital* volume three contains a section entitled ‘Utilisation of the extractions of production’. Here Marx outlines his commitment to the scientific “reduction” and “re-employment” of waste.⁶⁴

In place of capitalism’s squandermania there comes with communism the human being, who is rich in human needs. However, these needs are satisfied not merely by the supply of things: they are first and foremost satisfied through the medley of human interconnections and a readjusted and sustainable relationship with nature.

Delusions of techno-fix

Given the abject failure to deliver on government pledges made in Paris 2015 at Cop 21 there has been a widespread turn to techno-solutions. Much is perfectly reasonable, such as solar panels, wind farms, heat pumps and home insulation. Other techno-solutions are, though, pseudo-solutions.

Top of the list here must be electric vehicles, they are capitalism's poster child in the fight to counter global warming. All sorts of government incentives have been put in place to promote the EV industry and get people to buy, buy, buy. Doubtless that helps explain why Tesla ranked up a stock exchange valuation of \$1tn, making it worth more than "the other top nine leading carmakers combined"⁶⁵ - that even though EVs accounted for less than 5% of US sales in the first half of 2022.⁶⁶

EVs have the great virtue of allowing urban sprawl, road building and the whole car economy going unquestioned, all the while promising to deliver 'green transport'. It is undoubtably true that EVs directly emit no greenhouse gases, obviously not the case with conventional internal combustion and hybrid vehicles. However, electricity still has to be generated and this results in an altogether more complex picture. If that electricity is generated exclusively by hydro, wind, solar or nuclear power, EVs perform far more efficiently when it comes to greenhouse emissions than conventional vehicles, perhaps by a factor of three. If, on the other hand, it is fossil fuels, ie, coal, gas and oil, that constitute the primary energy source, performance is decidedly less impressive. With

coal power there is hardly any difference between the emissions of an EV and the best hybrids (over the lifetime of use). Suffice to say, things are not straightforward. There is always an energy mix when it comes to power generation. In terms of advanced capitalist countries, Norway and France are at the cleaner end, the UK around about the middle, and Germany, Netherlands and the US at the dirty end.⁶⁷

Then there are batteries. Manufacturing EV batteries sees, in general, considerable greenhouse emissions (not least due to the need to mine metals such as lithium, graphite, cobalt, etc). As a result, it takes four years, in the UK, before an EV catches up with a conventional vehicle in terms of greenhouse emissions.⁶⁸ There is also the fact that lithium batteries are, to say the least, “tough to recycle”.⁶⁹ Then there are the vehicles themselves. The steel, plastics, glass, computer chips, tyres, etc, all come with an environmental cost. Surely, when everything is taken into account, the much vaunted transition to electric vehicles is more a giant selling opportunity than any kind of a genuine solution to the climate crisis (and car numbers inexorably rise, 1.446 billion of them in 2022, up from a billion in 2011⁷⁰).

After years of disenchantment there has been a renewed spurt of enthusiasm for the nuclear industry. In no small part this is down to the promise to deliver clean and secure energy. Hence nuclear power has found some unexpected advocates, such as George Monbiot, Jared Diamond, James Lovelock, Michael Moore and Alexandria Ocasio-Cortez (who wants to “leave the door open”⁷¹).

However the old problems remain. Constructing nuclear power stations produces a hell of a lot of greenhouse gas emissions (mainly due to the millions of tons of concrete and the hundreds of thousands of tons of steel). They also take a hell of a long time before being put into operation - it can take 20 years from start to completion. There is an exorbitant price tag too. Work began on Hinkley Point C in Somerset in 2016 and the estimated completion date is 2027, all at an estimated cost of £25-£26 billion. Even with the most advanced nuclear reactors, the electricity generated remains hugely expensive, four or five times as much as wind and solar.⁷² On top of that there is disposing of the waste and decommissioning. A hidden cost. In the case of plutonium-239 - half-life of 24,000 years

- what makes it particularly hazardous is not its radioactivity, but its carcinogenic properties. If leaked into the water table and drunk, or blown into the air and breathed in as dust, it can slowly kill millions. Spent uranium, though it has a relatively short half-life, kills quickly because it releases lots of radiation. For example, even 10 years after removal from a reactor, a typical fuel assembly “still exceeds 10,000 rem/hour - far greater than the fatal whole-body dose for humans of about 500 rem received all at once.”⁷³ High-level waste is therefore deposited in deep, geologically stable, underground sites or left to cool in large storage pools (which in the US are meant to be impervious to natural disaster and terrorist attack).

However, despite rigorous inspection regimes, tight operating systems and numerous fail-safe mechanisms there have been plenty of accidents, most notably Kyshtym, Windscale/Sellafield, Three Mile Island, Chernobyl and Fukushima. Then there is Zaporizhzhia; it is all too clear that nuclear power is expensive, ecologically unsound ... and potentially disastrous.

Nor are fusion reactors the ‘holy grail’ they are cracked up to be. Even if the tremendous technological problems can be solved, they are hugely expensive and have all manner of safety risks. As Dr Daniel Jassby, for 25 years principal research physicist at the Princeton Plasma Physics Lab, concluded, in a 2017 article, fusion power “is something to be shunned.”⁷⁴

So why do governments still pursue nuclear power? Maintaining nuclear weapon status, or having the option of going for nuclear weapons status, provides the most likely explanation - see the arguments of Phil Johnstone and Andy Stirling (both of Sussex University).⁷⁵ Nuclear power requires a talent pool of physicists, engineers and technicians, along with a chain of companies capable of supplying the necessary components. The nuclear weapons industry rests on that talent pool and supply chain. Peaceful nuclear power is therefore an oxymoron. Those radicals who have thrown in their lot with nuclear power have thrown in their lot with the military-industrial complex.

There are plenty of other pseudo-solutions. Take the case of hydrogen. It has real potential as a source of clean, concentrated and easily stored energy which can be used to avoid the intermittency problem associated with solar and wind (though batteries could

do that). But hydrogen suffers from the same problem as EVs: production requires power, which can, of course, be clean or dirty. So hydrogen comes in many colours. Green hydrogen is made by the electrolysis of water using power generated from renewable sources. However, big oil, eg, Shell, BP, Chevron and ExxonMobil, is proposing, for its own narrow reasons, other, intermediary, hydrogens: blue, grey and brown which rely on oil, natural gas or coal. In other words, burn fossil fuels to save the planet (read: save the fossil fuel industry).⁷⁶

Nor is biofuel the panacea it was once hyped to be. Governments encourage transnationals to grow monocrops on a huge scale, not to feed people, but to generate power. The ever growing number of cars providing a ready market. Though generating costs are not as high as nuclear power, they are still high. Meanwhile, small scale agriculturalists are dispossessed and precious land and water resources wasted.

Afforestation schemes too. Government subsidies for tree planting quotas see transnationals buying up vast tracts of land and establishing industrialised forestry. Native trees and plants are uprooted. Animal species decimated. All in the name of reducing greenhouse emissions.

Carbon capture and sequestration is another techno-fix. The idea is to reduce CO₂ levels by sucking it in from the atmosphere mechanically or capturing it before release from fossil fuel burning power stations, steel plants, cement kilns, etc - and storing it in geologically suitable underwater or land sites (which won't leak, of course).

However, once again, there are definite downsides. The estimated cost of CCS is around \$50-\$100 per ton.⁷⁷ Note, the IPCC reckons that to limit the global temperature rise to 1.5°C, between 100 billion and one trillion tons of CO₂ needs to be removed from the atmosphere.⁷⁸ In other words, if CCS was going to do that job it would cost roughly between \$5 trillion and \$100 trillion (in 2021 global GDP is put at some \$93 trillion⁷⁹).

Not only is CCS expensive, it has “a long history of failing.” That for all its claims to be a *proven* technology. Yes, carbon can be removed from the atmosphere, that much is easy. However, even without the transport and storage, CCS is an “energy intensive”

technology.⁸⁰ Sadly CCS sucks carbon from the atmosphere only to pump it back out again. Doubtless, if perfected, carbon capture and *utilisation* has the potential to clean up vital industries such as cement and steel (CO₂ can be captured and put to use). But as a general solution to global warming CCS is a non-starter, yet another excuse for prolonging the life of fossil fuel capitalism and delaying the measures necessary to reach net zero carbon.

Then there are the geoengineering and climate engineering proposals. Seeding the oceans with iron filings, growing huge algae beds, shooting particulates into the upper atmosphere in an attempt to mask solar radiation by mimicking the cooling effect of volcanoes - the latter suggested back in 2006 by Dutch Nobel prize winner Paul Crutzen.⁸¹

While he deployed the term ‘geoengineering’ Crutzen never actually *advocated* such a course. Presumably he knew better. Despite that, his work spawned a whole slew of well-rewarded research papers, networks, conferences, computer simulations, feasibility studies and government consultations.

There are other such proposed sunlight reflection methods (SRMs) on the table. Eg, deploy a giant, 2,000-kilometre-diameter eye patch in space - estimated cost around \$5 trillion (plus). Then there is building massive cloud-generating machines; whitening low-level clouds by spraying them with seawater; painting roads, buildings and roofs white, etc; - all run into costs of tens of billions annually.⁸²

Elizabeth Kolbert, a Pulitzer prize winning author, pinpoints the faulty logic of the would-be geoengineers: “If control is the problem, then, by the logic of the Anthropocene, still more control must be the solution.”⁸³ In effect, the geoengineers want to treat greenhouse gas emissions in the same way as Victorian engineers such as Joseph Bazalgette dealt with London’s sewage crisis following the famous 1858 ‘great stink’. But the climate system is hugely more complex: everything is connected to everything else. Physics, biology, chemistry and human society form an interconnected and interacting whole.

So, in all probability, if one (or a number) of these pseudo-solutions was to be implemented, it would let loose a Pandora’s box of demons. For example, once the SRM programme of upper

atmosphere seeding is finally terminated, there exists the “potentially dangerous” consequence of a temperature bounce, which would be “two to four times larger” than would otherwise have been the case.⁸⁴ The impact on ecosystems and biodiversity, though largely unexplored, would, to put it mildly, probably be decidedly negative.

Then there is the danger of “slowing or reversing” the recovery of the ozone layer and reducing global rainfall and turning it more acidic (editors *Scientific American* November 1 2008).⁸⁵ Geoengineering might well also breed political complacency. Saved from the immediate prospect of climate catastrophe, big business carries on as before, emitting more greenhouse gases as it furiously pursues its overriding aim: M-C-M'.

International politics represents another obvious barrier. What would China do if the US unilaterally placed a giant solar eye patch above its territory in near space? There would, surely, have to be an agreement between all the rival major powers - not impossible, but unlikely.

Surveying the sorry results of past efforts to ‘solve nature’s problems’, Michael and Joyce Huesmann argue, not unreasonably, that humans cannot “substantially modify natural world systems without creating unanticipated and undesirable consequences”.⁸⁶

With that in mind there are far too many on the left who advocate techno-fixes. This approach can be seen in recent times with ‘left’ accelerationists such as Nick Land, Mark Fisher, Paul Mason, Nick Smicek and Aaron Bastani. Technology is held out as the means of overcoming climate change, third-world poverty, etc, etc. Technology is even credited with a fabulous ability to deliver “fully automated luxury communism”. Instead of organising the working class into a party - so passé - we have the relentless forward march of technology. That, not the working class, undermines capitalism and duly holds out the promise of human freedom. Through supercomputers, through embracing automation, through space rockets, through mining asteroids, through following the “leading-edge” political vanguard of Alexis Tsipras and Pablo Iglesias, we are promised a 10-hour working week, more equality and all manner of tawdry luxury commodities - yes, taken from an article that is over five years old.⁸⁷ The whole, almost instantly dated, utterly banal, ‘left’ accelerationist programme clearly owes rather

more to Eduard Bernstein, HG Wells and Isaac Asimov than Karl Marx and Frederick Engels.

Not that orthodox(ish) Marxism can be entirely excused. Here is what Leon Trotsky, still near the pinnacle of political power in 1924, wrote about refashioning nature:

The present distribution of mountains and rivers, of fields, of meadows, of steppes, of forests and of seashores cannot be considered final. Man has already made changes in the map of nature that are not few nor insignificant. But they are mere pupils' practice in comparison with what is coming. Faith merely promises to move mountains; but technology, which takes nothing 'on faith', is actually able to cut down mountains and move them. Up to now this was done for industrial purposes (mines) or for railways (tunnels); in the future this will be done on an immeasurably larger scale, according to a general industrial and artistic plan. Man will occupy himself with re-registering mountains and rivers, and will earnestly and repeatedly make improvements in nature. In the end, he will have rebuilt the Earth - if not in his own image, at least according to his own taste. We have not the slightest fear that this taste will be bad.⁸⁸

And the approach to nature Trotsky preached, Joseph Stalin and his successors put into practice - not in order to realise some global artistic grand design: rather, more prosaically, to provide the state (and in due course, its citizens) with more and more use-values. However, this could not be achieved with genuine socialist planning, which relies on the active participation, the positive control, of the associated producers. The bureaucratic elite pursued the interests of the state (along with its own narrow self-interest).

Therefore the organisation of production - crucially with the first five-year plan and the counterrevolution within the revolution - necessitated setting targets from above: ie, via Gosplan. This can be presented as: T-P ... PP ... P'-T'. Here T stands for target and P for product. The ellipses indicate the time delay involved with PP, the production process. However, the movement is best presented in expanded form: P-T-P ... PP ... P'-T'-P'. This being the case simply because the targets relied on existing products: eg, raw materials

and labour-power. And, to stress the point, the aim was to obtain use-values on an ever growing scale.

Yet, despite massive oppression and the effective atomisation of the population, those below resisted. They flitted from enterprise to enterprise in search of better terms and conditions, they lied about output figures, they cheated when it came to the time spent at work, they exerted negative control over the production process and they forced managerial concessions one after another. In their turn managers lied to and cheated those above them. They hoarded, over-ordered inputs - ie, supplies of labour-power and raw materials - they did everything to reduce the targets demanded by Gosplan and finally presented wonderfully inventive statistics. That way, failure became success and non-use-values became use-values.

What mattered both to workers and enterprise managers (in industry and agriculture too) was quantity, not quality. Indeed quantity and quality stood in contradiction. Hence the all too *characteristic* expenditure of useless labour-power, waste of raw materials and production of non-use-values. Hence this form of growth: T-P ... P-T'. Or even this: T-P ... P'-T'. In its turn Gosplan had its own reasons not only to accept such results, but to celebrate them as a triumphant vindication of 'socialist planning'. True, between 1928 and 1973 there were impressive economic growth rates - largely for real. True, between 1953 and 1973 living standards rose substantially - largely for real. But what people experienced in terms of everyday life was shortages, poor quality, being lied to and the necessity of lying in return. A vicious circle that was bound to eventually close.

Under such inherently *irrational* circumstances, the top leadership blamed foreign experts, old Bolsheviks, former *kulaks*, first-generation Stalinite cadre, lazy workers, hidebound managers, etc, for the litany of failures ... and all that went hand-in-hand with the desperate attempt to find and implement all manner of gigantic techno-fixes. Surely an object lesson, when it comes to climate change.

Leave aside the radioactive waste littered over Kazakhstan, the open-cast mining, the oil spills and the ruinous industrial practices which caused choking air pollution, poisoned rivers and killed lakes. Let us focus on agriculture. We will see why Marx argued that what

is needed for *rational* agriculture is either the “small farmer living by his own labour or the control of associated producers.”⁸⁹

Expropriating the peasants through forced collectivization in the late-1920s and early-1930s caused agricultural production to crash. The cities went hungry. The countryside starved. Millions died. However, joining together the country’s peasant farms even without the necessary tractors and combines meant that the regime would never again be held to ransom by richer peasants, the *kulaks*. Throughout the 1920s they had held back grain when prices were considered too low. The state had to respond, either by increasing prices (and thereby denying industry, the army, etc) or by sending out special armed detachments to seize grain supplies.

But collectivization merely collectivized primitiveness. The peasants were, to all intents and purposes, re-enslaved. They were state *helots*. When tractors and combines eventually came on stream, productivity remained notoriously low. Collective farm members had to be allocated individual plots to grow fruit and vegetables for their own consumption and for sale in special, private, markets established in the towns and cities. Despite lacking machinery, productivity on the individual plots was far higher than on the *kolkhoz* and *sovkhoz*.

As one of many techno-fixes, in the second half of the 1940s Stalin proposed his ‘Great Plan for the Transformation of Nature’ - a superambitious response to the 1946 drought, which in 1947 left an estimated half to one million dead. Huge bands of land were to be forested in the southern steppe to provide a network of shelterbelts. Rivers feeding into the Aral Sea were to be diverted - once the world’s fourth largest lake, it has now virtually disappeared. Irrigation canals, reservoirs and countless ponds were going to upgrade the thin soils. Trofim Lysenko’s “elite strains of seed”, so went the presumption, would ensure fabulously high yields.

Lysenko, of course, contemptuously dismissed the Mendelian theory of gene inheritance as an example of “metaphysics and idealism”.⁹⁰ Instead he upheld a neo-Lamarckian doctrine of crops passing on environmentally acquired characteristics, such as cold resistance and drought resistance. This was vigorously opposed in Britain by the CPGB’s scientific superstar, JBS Haldane (much to the chagrin of the official leadership faction).⁹¹ Haldane was famously

one of the originators of the Darwinian-Mendelian synthesis⁹² and eventually resigned from the CPGB in 1950. A great loss.

Lysenkoism had been elevated into official doctrine in the Soviet Union. Those who disagreed were viciously denounced, dismissed from academic posts and often ended up in the gulag. That or they were simply shot. The message was clear: politics, not scientific facts - certainly not nature - was in command.

In 1948, Lysenko made his notorious speech to the Lenin Academy of Agricultural Sciences. He rhetorically asked: "What is the attitude of the central committee of the party to my report?" He answers: "the central committee has examined my report and approves of it (Stormy applause. Ovation. All rise)." The "most chilling passage in all the literature of the 20th century science", writes Stephen Jay Gould.⁹³

The Great Plan ended in complete failure. The trees were of the wrong kind, went untended and died. The crops were of the wrong kind too, and froze or wilted. Topsoils were quickly exhausted and were washed away by rain or blown away on the winds (they contained, of course, the highest concentrates of organic matter and microorganisms). All negative and unintended consequences.

Nikita Khrushchev attempted his own techno-fix. In 1953 the virgin lands campaign was launched. Within two years the first secretary sought to put 13 million hectares of hitherto uncultivated land under the plough, in "Kazakhstan, western Siberia, the lower Volga and (to a limited extent) in the northern Caucasus".⁹⁴ 'Fallow land is lost land; erosion is a fiction' ran a Khrushchevite slogan, featured widely in the Soviet press during the mid-1950s.⁹⁵ An obvious absurdity.

The eventual target for 1962 was adding a staggering 42 million hectares. Never before in history had there been such a vast projected extension of cultivation in such a short period of time. Masses of urban volunteers were mobilised - especially young enthusiasts. However, neither instruments of labour (tractors, combines, etc) nor the extra labour-power itself proved up to the job. Crucially, though, topsoils were thin and weather conditions notoriously dry. Repeatedly ploughing, sowing and harvesting the fragile virgin lands of the northern Caucasus, western Siberia and north Kazakhstan saw productivity steadily decline. Soils were

quickly exhausted and deserts expanded.

Khrushchev had one more gigantic techno-fix up his sleeve: irrigating the arid south, specifically in order to expand cotton production. He gave the go-ahead to divert 12 rivers ‘uselessly’ flowing into the Arctic Ocean. Reversing the flow of the Pechora was not only going to boost cotton production: the shrinking Aral and Caspian seas would be replenished.

Obviously part of the project relied on digging new water channels. However, instead of using traditional methods - mechanical diggers, dumper trucks and the requisite labour-power - the proposal was to detonate 250 nuclear devices. In fact, the Soviet bureaucracy envisaged the almost boundless application of nuclear technology to construction, industry, agriculture and medicine: “atomic-powered communism”.⁹⁶ Sounds familiar, doesn’t it.

The wonders of computers, automation, robots and, yes, nuclear power held out the prospect of catching up with the US by 1970 and the beginnings of ‘communist abundance’ by 1980. Three 15-kiloton devices were actually detonated - inevitably causing some fallout. The whole crazy river-diversion idea was finally abandoned in 1986. Who knows what the consequences would have been if it had gone to completion.

With warm river waters no longer flowing into the cold Arctic ocean from the south, maybe a new, Eurasian, ice age is triggered. Glaciers, permafrost and sea ice slowly spread. Leningrad is eventually permanently frozen in. The city becomes uninhabitable and has to be abandoned. Nowadays climate modelers might well be able to give us a highly accurate prediction. Impossible in the 1960s and 70s, though.

In a final, desperate throw. Mikhail Gorbachev told the 27th Congress of the CPSU that a “decisive turn is needed in the agrarian sector to improve the food supply”.⁹⁷ He proposed to dramatically increase mechanisation, chemicalisation and soil amelioration (ie, drainage schemes, irrigation, erosion control). In other words, to up the mass of allocation applied to the same area of land. Despite the “objective of improving food supplies” being “first in line”, when it came to Gosplan’s guidelines for the period ending 2000, agriculture showed the unmistakable signs of diminishing returns.⁹⁸ Albeit in the distorting language of roubles (not real money, not

a universal equivalent, but only a partial equivalent), what was needed to obtain a ton of grain rose from 51 roubles in 1970 to 101 roubles in 1987.⁹⁹ With still further mechanisation, chemicalisation and soil amelioration, the chances are that what would be needed to obtain a ton of grain would have doubled again ... if the system had managed to survive into the 21st century.

Here, as the officially-approved economist and ecologist, Mikhail Lemeshev, argued, one glaring factor was ignored, or given mere lip service: ie, the “reproduction of the natural-resources potential of agriculture”.¹⁰⁰ Soviet agriculture was not *sustainable* agriculture. Effectively the soil was being mined. Artificial fertilisers could temporarily “override ecological limits”.¹⁰¹ But chemicalisation created conditions where vital minerals, such as calcium, magnesium and potassium, were gradually leached away.¹⁰²

Once upon a time it was lazily assumed - and not only by the paid apologists for the Soviet regime - that, untrammelled by the capitalist profit motive, with universal nationalisation, and hence the ability to organise on a vast scale, environmental protection was guaranteed.

No, nothing could be further from the truth. The progress of Soviet agriculture was progress towards ever greater ecological degradation.

Malthus painted green

When the likes of Liz Truss, Donald Trump, Narendra Modi, Jarosław Kaczyński, Viktor Orbán and Jair Bolsonaro are elevated to high office it amounts to putting an arsonist in charge of a fire hazard. However, it would be a profound mistake to imagine that it is them versus all the rest of us. All too often the left lines up behind ‘build back greener’ establishment politicians, the ever growing army of greenwashed corporations, the bloated eco-charity sector and green campaigns, green coalitions and green parties.

True, over the years, green thinkers have produced a whole literature which, often brilliantly, warned of the disastrous effects of rapacious mining, industry and agriculture. Rachel Carson comes to mind. Others have detailed the destruction of rain forests, the loss of animal and plant species, the spread of deserts, the melting of glaciers and polar ice caps, the pollution of the air, rivers and seas, the depletion of the ozone layer, acid rain, soil erosion, etc. Governmental complacency and culpability has also been thoroughly exposed. If only by implication, capitalism is shown to be inherently unsustainable.

Certainly, most contemporary left groups have pilfered. Little bits and pieces of green intellectual property turn up tacked onto famished, economistic check-lists, election manifestos and transitional programmes. The most blatant example is what describes itself as red-green politics. But one way or another all are guilty: Socialist Campaign Group, Momentum, SWP, SPEW, the *Morning Star*’s CPB, Anticapitalist Resistance, etc.

However, in class terms, greenism amounts to a petty bourgeois discontent with capitalist progress - its crass commercialism, its soullessness, its heedless productionism. Yet, despite airs of moral superiority, even saintliness, greenism comes with a deadly barb: its denunciations of ecological degradation are joined with *assumptions* of human “overpopulation” and the limited “carrying capacity” of the planet: “population growth ... must be addressed to avoid overpopulation”, says the Green Party in England and Wales.¹⁰³

According to Rex Weyland, Greenpeace co-founder, “climate conferences are not addressing the real root problem, which is overshoot of the human species on Earth, and they are not doing anything about the one symptom they are addressing, which is climate change.”¹⁰⁴ A proposition which inevitably finds its red-green echo: eg, Alan Thornett, of Anticapitalist Resistance and CCC. He has exactly the same diagnosis: a “major contributory factor” to the ecological crisis is overpopulation.¹⁰⁵ BirthStrike, established by women closely involved with Extinction Rebellion, even vowed to go childless in protest against “climate breakdown and civilisation collapse”.¹⁰⁶

As everyone knows, the inventor of modern overpopulation theory is the reverend Thomas Malthus. This *celibate* Church of England vicar anonymously published his *Essay on the principle of population* in 1798. His stated polemical targets were the “speculative” writings of Nicolas de Condorcet and William Godwin - both political radicals and upholders of women’s rights.

There was, however, next to nothing original in the *Essay*. Marx contemptuously dismissed it as a “superficial plagiarist of De Poe, Sir James Steuart, Townsend, Franklin, Wallace, etc”.¹⁰⁷ Nonetheless, with the thrilling excitement, hopes and turmoil unleashed by the 1789 French Revolution, the forces of reaction grabbed hold of Malthus’s *Essay* as a godsend. He was proclaimed a genius of the first order, who had single-handedly founded a brand new science. Dreams of achieving ‘perfectibility’ here on Earth, even radical electoral reform, could be smothered with the ‘principle’ of despair.

In the original edition(s) of the *Essay*, the law of diminishing returns from agricultural land was entirely absent. Malthus had to make do with this line of argument: “the increase of population is necessarily limited by the means of subsistence.”¹⁰⁸ When

subsistence increases, so does population. But humanity's powers of reproduction greatly exceed its ability to produce the means of subsistence. Population is considered elastic, the means of subsistence inelastic. Therefore, the lot of the greater part of humanity is to live in abject poverty. The annual cull from starvation and disease mercifully kept population numbers within natural limits - all part of god's magnificent grand design.

Towards the end of his life, in 1830, Malthus did introduce diminishing returns from agricultural land - a theory which can be traced back to the likes of Johann Heinrich von Thünen, Jacques Turgot and Adam Smith. Hence 1830 marked the birth of 'classical' Malthusianism: a "geometrically" growing population cannot be supported by the "arithmetically" growing supplies of food, because agriculture is driven by rising population numbers to extend cultivation from land with absolute fertility into marginal, less fertile, land - acre-by-acre output would thereby be expected to fall (hence the theory of differential rent critiqued by Marx).

Whether or not the population was growing "geometrically" is a moot point. It certainly never occurred to Malthus that agricultural production could grow geometrically: eg, through selective breeding of plants and animals, and increasing soil productivity through irrigation, drainage and the application of fertilisers. Malthus's biology was mentally caged by Linnaean notions of fixity. Only very limited wriggle room was allowed for 'improvement'.

Whereas *late* Malthus based his prognosis on the claim that a "geometrically" growing population could not be supported by the "arithmetically" growing supplies of food, present-day greens talk of the ecological footprint and the finite carrying capacity of the planet.¹⁰⁹ Different words, but the operative conclusion is the same: population growth has to be halted and put into reverse as a matter of urgency.

Malthus's theory accepts that, while humans are part of nature and subject to nature's usual laws, they are, unless restrained, destined to increase at an unsupportable rate. That restraint is either physical or moral. Of course, the base, instinctive, ignorant masses could never be expected to give up on sexual pleasure. Besides opium, alcohol and tobacco, what else gave their miserable, bleak, squalid lives those saving moments? Hence, if the moral restraints of

delayed marriage or sexual abstinence failed, hunger and starvation were inescapable ... and natural.

Suffice to say, for Malthus, the limit on human numbers had already been reached by the close of 17th century - when the global population is estimated to have topped 600 million. All the evils that swarmed around him - beggary, drunkenness, filth, slums, abandoned children, thievery, prostitution, epidemics, riot and the threat of leveller insurrection - were explained (away) by Malthus as being the result of excessive population.

Logically though, this overpopulation crisis should have begun with Adam's rib. After all, with god's creation of woman, the numbers in Edenland instantly doubled. According to Malthus, Adam's ability to increase food production should have been incapable of matching such a shuddering population increase. Adam and Eve would have been expected to have quickly starved to death.

Adam and Eve (and even Malthus) notwithstanding, there has been a rapid population increase. Clearly, human numbers have grown geometrically ... if we take a long enough view. It took around 250,000 years to reach a billion. A figure that seems to have been reached in 1825 ... or thereabouts. The next billion was added over the following century. But it took only some 35 years after that to reach 3 billion and a mere 12 years for another billion increase.

Despite this tremendous spurt, there has been an accompanying - and in actual fact a *higher* - increase in the means of subsistence. Our numbers did not expand geometrically - eg, 1, 2, 4, 8, 16, 32, 64, etc - while food production trailed behind at an arithmetical 1, 2, 3, 4, 5, 6, 7, etc. During the 19th century the agricultural land that was *organically* included within the sphere of the capitalist world economy expanded stupendously with the integration of Canada, New Zealand, Argentina, Australia and the vast US interior. Eg, 1, 4, 16, 64. Meanwhile, humanity's instruments of labour and productive techniques have gone forward in leaps and bounds: eg, railways, telegraphs, tractors, combines, electric power, refrigeration, telephones, airfreight, container shipping, freeze drying, artificial fertilisers, genetic manipulation, computers, gene editing, etc - all spurring and feeding off successive scientific revolutions: ie, 1, 8, 64, 512, etc. In principle the possibilities are limitless.

While some strands of green thought claim to be informed

by Marxism, greenism as a whole is permeated with a nature-worshipping idealism, which easily segues into a thoroughly nasty, anti-human irrationalism. People are cast in the role of the problem. The language and choice of metaphor is revealing and on occasion downright chilling.

In his *The population bomb* (1968), Paul Ehrlich - a Stanford University entomologist - depicts Earth as drowning under “too many cars, too many factories, too much detergent, too much pesticides, multiplying contrails, inadequate sewage treatment plants, too little water, too much carbon dioxide” all of which can be “traced easily to too many people”.¹¹⁰ Looking forward just a little to the 1970s and 80s, he apocalyptically announced: “The battle to feed all of humanity is over.”¹¹¹ Instead of giving aid to the needy and feeding the hungry, responsible states should henceforth put in place the harsh population control measures needed.

Ehrlich equated this, admittedly unpleasant, task with cutting out a “cancer”.¹¹² The operation will “demand many apparently brutal and heartless decisions. The pain may be intense. But the disease is so far advanced that only with radical surgery does the patient have a chance of survival.”¹¹³ Surely a barely concealed call for the mass extermination of the surplus population - considered globally, that means the poor and destitute in the so-called third world. Accusations of unintended racism appear more than justified. Expropriating the kleptocrats, the giant corporations, the parasitic royal houses, the banks, insurance companies and private equity funds never seems to occur.

The population bomb served as an antidote to the spirit of '68. After a slow burn, Ehrlich's book not only became a media celebrated best-seller: it spurred on what became an anti-population growth crusade. Millions were sterilised, often coercively, in countries such as India, Mexico, Peru, Egypt, Tunisia, Indonesia and Bangladesh - all backed, promoted and urged on by the UN, the World Bank and a swathe of NGOs. And, of course, between 1980 and 2015 China imposed its own draconian one-child policy.

Optimum Population Trust was founded in Britain in 1991 and rebranded as Population Matters in 2011. Its website displays a “world population clock” ticking away (presumably towards the final moment of ecological collapse).¹¹⁴ A thoroughly respectable

pressure group, it makes the case for putting population reduction at the heart of government policy. Britain should, it submitted, reduce its numbers to 30 million by 2130 - about the same level as 1870.

Not so long ago the Green Party too prescribed a similar human purgative - except down to 20 million! True, the Green Party's neo-Malthusianism has been somewhat sugar-coated; likewise Population Matters. Under the banner of living in harmony with nature, it advocates empowering women and girls, quality education for all, free contraception and reversing foreign aid cuts. But the truth will out. In 2013, Population Matters strenuously objected to Syrian refugees being granted asylum in the UK.¹¹⁵ The organisation stands for zero net migration. Nonetheless, worthy public figures have lined up to endorse the organisation - apart from Paul Ehrlich himself, Sir David Attenborough, Jonathon Porritt, Sir Partha Dasgupta, Jane Goodall, John Guillebaud, Leilani Münter, Lionel Shriver and Chris Packham.¹¹⁶ Sons and daughters of the reverend all.

Inevitably, however, if voluntary methods fail, then other, involuntary, solutions present themselves ... and the danger is that sooner or later such other methods will come to be accepted as common sense: Population Matters boasts that an international opinion survey conducted in February 2019 found that two thirds of respondents consider "population growth a global catastrophic risk".¹¹⁷ Clearly, you can fool most of the people some of the time.

In *The population bomb*, Ehrlich was quite explicit: "We must have population control at home, hopefully through changes in our value system, but by compulsion if voluntary methods fail."¹¹⁸ He toyed with the idea of lacing food sold in the US with contraceptives. After rejecting this as *politically* unfeasible, he advocated ending US food aid to countries abroad. And, he added, almost as an afterthought, that all men in India with "over three children" should be "forcibly sterilised".

Official Britain not only blew trumpets and banged drums for Malthus as an intellectual saviour from the French Revolution and its odious doctrines of *liberté, égalité, fraternité*. More prosaically, Malthusianism served as a wonderful excuse for dispensing with the horribly antiquated old poor laws: since 1601 anyone without work had the *legal right* to obtain help from parish authorities.

By embracing Malthus and his claim that the inexorable growth of pauperism was the result of the old poor laws, not the growth of capitalism, large amounts of money could be saved. An all too tempting promise.

The 1834 Poor Law introduced the hated system of workhouses. More than 500 of these 'pauper bastilles' were built. The deserving poor were incarcerated in austere, single-sex blocks, the able-bodied being obliged to labour in return for upkeep. Conditions were callously designed to be so off-putting that only the most desperate would present themselves.

Albeit with a heavy heart, Malthus himself positively recommended famine. The frightful results were seen in Ireland during the 1845-49 Great Hunger. The Liberal government in Whitehall considered it both ethically right and financially prudent to let nature take its course. Amid continued food exports to Britain, a million Irish people were left to die. Two million more "fled their homeland for the United States, Canada and Britain".¹¹⁹

Doubtless, finding Christian justification in Matthew xxvi,¹¹ and the foul saying, "For you will always have the poor with you", Malthus icily reasoned that mass starvation would at least *temporarily* result in fewer mouths to feed. As the lower orders seemed to religiously follow the commandment, be "fruitful and multiply", they would have to pay for their sins. Nothing could be done for them, except to make their death as easy as possible. In other words, his theory excused social murder.

Exactly the same perverted morality leads mild-mannered greens to advise the UN, the World Bank, the G8 countries, etc, to impose sterilisation programmes. The poor are blamed for their poverty, not the imperialist system of exploitation.

Though recognising that the *Essay* acted as an intellectual stimulus - eg, on Charles Darwin - Marx had no hesitation in dismissing Malthus's entire population theory as a "lampoon on the human race!"¹²⁰ Needless to say, an almost unbelievably cruel one.

Marx hurled some well-aimed polemical thunderbolts. For instance, in *Capital* volume one, he included a telling footnote: the publication of Malthus's *Essay* had caused a sensation, but this "was greeted with jubilation by the English oligarchy as the great destroyer of all hankering after human development".¹²¹ *Theories of surplus*

value, the fourth volume of *Capital*, devotes a whole chapter to comprehensively demolishing Malthus and Malthusianism. Marx concludes that the *Essay* “was an apologia for the poverty of the working classes”.¹²² No *feeling* human being could disagree.

None of this is to imply that Marxism regards planet Earth as an unlimited source of wealth or that population has no effect. No, Marxism urges humanity to treat nature with respect, to act as Earth’s guardian, not its master. As for population, it should not be treated as an abstraction, an unchanging natural law. Population has to be treated in relationship to definite societies and definite classes.

Eg, the land could *not* sustain the hoplites (heavy infantrymen) of classical Greece. Their short-termist agricultural techniques quickly exhausted the soil. Deforestation and overgrazing added to mounting problems. So did heavy winter rains. The topsoil was washed away. Writing of Attica, Plato sadly observed:

... in comparison of what then was, there are remaining only the bones of the wasted body, as they may be called, as, in the case of small islands, all the richer and softer parts of the soil having fallen away, the mere skeleton of the land being left.¹²³

The polis of Athens, and other similar Greek city states, responded by planting numerous colonies around the coastal rim of the Aegean and the Black Sea, and in Sicily and southern Italy. Surplus *citizens* were exported. Meanwhile, these colonial outposts acted as slave trawling centres (the human catch being exported to the home city).

What numbers were involved in this chronic problem of citizen overpopulation? Athens and the surrounding territory of Attica had approximately 300,000 inhabitants and 20,000 full citizens. Small beer for us. The same pocket of land is nowadays home to around 3.75 million people.

Each society possesses its own population laws - something that Malthus palpably failed to recognise. His theory of surplus population sits outside any *theorised* history and therefore takes no account of the distinctions that exist between one society and another.

Classical Greece, to state the obvious, had significantly different population dynamics compared to ancient Egypt. The same applies,

but more so, to 11th century feudal society, 19th century classical capitalism, 20th century bureaucratic socialism or present-day 21st century decadent capitalism.

Take the peasant family - or indeed, broadly speaking, patriarchal production as a system. It has a definite interest in maximising the number of children. Put more accurately, maximising the number of *male* children. A vital difference. Sons are treasured because they remain *within* the patriarchal family and through marriage bring in extra wealth in the form of dowries, wives, inheritance and in due course their own children. Girls leave the family and marrying them off costs a small fortune ... their birth is often the cause of mourning in pre-capitalist social formations.

Female infanticide was therefore frequent. Archaeological records indicate that in ancient Greece killing female infants was "so common that among 6,000 families living in Delphi no more than 1% had two daughters" (Sarah Hrdy).¹²⁴ Female infanticide was widely practised - a form of post-birth family planning. And it did not stop there. Cursed by 'interesting times' - crop failure, foreign invasion, oppressive taxation - girls received the smallest portions of food. They were even poisoned or murdered if things got really dire.

Nowadays, India, Pakistan, Vietnam and China have noticeably large gender gaps. Selective abortion has robbed China of 11.9 million females. Even with the abolition of the one-child policy, today there is a 100:112 disparity between the number of girls and boys.¹²⁵

In peasant society, the family is a unit of *production*. Boys and girls alike labour in their father's fields from the age of five or six and, of course, not in return for money wages. Food, clothing and shelter are provided - little more. After the age of 10 it is reckoned that children are fully paying for their upkeep. From then on it is gain. Male heirs are also expected to maintain parents into old age. Children are therefore unpaid labourers and a form of social insurance. Given high infantile mortality rates, it can easily be appreciated why it is a case of the more, the better.

Apart from capitalism's more primitive, unrestrained and brutal stages or forms, children are an enormous expense for the proletarian family - from baby carrier and now well into adulthood. During the

industrial revolution, it is true, parents sold their children into work from a tender age. Children of eight or nine did 12- and 14-hour days (until factory acts cut into that ‘freedom’ and limited hours). Families could only survive if all available members brought in some kind of wage (the wife was frequently pregnant - and, lacking reliable birth control and with the peasant mentality still lingering on, she was typically burdened with a brood of young children). The *average* woman in 1820 Britain had 5.56 children.¹²⁶

The proletarian family is a unit of consumption, not of production. And today, with universal primary and secondary education, and around half the school population expected to go on to university, the financial outgoings are very considerable. Prudential, the insurance company, estimates that on average children cost over £40,000 each nowadays.¹²⁷ Even after graduation many mums and dads go on to help out their offspring with mortgages, etc.

Certainly, for the *simple reproduction* - not expansion - of the proletarian family, it requires *two* adult incomes. Average *individual* hours might have been forced down - in 1846 parliament passed the first 10-hour act (for what was a five-and-a-half-day week). In more recent times fulltime male workers in Britain notch up an average of 39.2 hours.¹²⁸ But the workforce has expanded significantly, not least by drawing in more and more women. The total number *employed* is now around 32 million - roughly a threefold increase over the 1930s. At the beginning of the 20th century females made up 29% of the workforce, now it is 48%. Women workers today average 34.3 hours per week.¹²⁹ Add those figures together and what it tells you is that the family unit is more exploited nowadays and is certainly under more psychological pressures (put another way, an intensification of labour and relative exploitation). Not least due to these extra strains and life-limiting pressures, on average women have children later and fewer in number, compared with the recent past.

In 2020 the average woman in Britain had 1.75 children - down from 2.6 in 1960.¹³⁰ What is true of Britain is also true of other capitalist countries. Globally the average shrank from 6.1 in the 1960s to less than 3 in 2005. In Cyprus, Taiwan, South Korea, Poland and Japan it now stands at between 1.0 and 1.3 children.¹³¹ An unmistakably negative ‘growth’ rate.

Global population is expected to carry on increasing simply because of the sheer momentum built up by the disproportionately large numbers of young people born over the last 20 years. By 2050 we could reach 9.8 billion.¹³² After that population should stabilise ... and perhaps start to decrease (though there are lurid *projections* of 27 billion by 2150). Despite that, governments - and not only in the advanced capitalist countries, but in China too - already *worry* about a declining workforce in relationship to future pensioners (which, of course, in western Europe and North America, given mass immigration, is a complete non-problem).

Yet simultaneously capital creates a *surplus* population. Obviously, nowadays, this category has little or nothing to do with starvation in the metropolitan capitalist countries. Overpopulation is entirely due to the changing requirements of capital itself. Labour is *both* attracted and ejected. Capital constantly strives to accumulate, including by extending the scale of production. New car factories, power stations, chemical plants and oil refineries are commissioned, the latest machinery is installed and workers are recruited. However, profit is always the bottom line. Capital's aim is to expand capital. Hence loss-making enterprises are quickly closed and surplus workers ruthlessly discarded.

In his 1845 *The condition of the working class in England* Frederick Engels invented the phrase, 'reserve army of labour'. He located capitalism's surplus population not only to the needs of capital: there was also "competition of the workers among themselves".¹³³

To safeguard vulnerable livelihoods and, just as crucially, to meet expanding needs and wants, individuals are willing to work endless hours ... and that leaves others surplus to requirement. Crudely, if the working day is seven hours, then the capitalist will have to hire two times as many people than if the working day was 14 hours. Under conditions of primitive capitalist accumulation long hours and absolute exploitation went hand-in-hand with mass unemployment, and families going hungry, their members also suffering the diseases of absolute poverty, tragically dying off well before their allotted three score years and ten. Without a strong counterpower - mass workers' parties, militant trade unions, cooperatives, provision of social housing, unemployment benefit

and other inroads into the logic of capital - competition *between* workers will always be more fierce than competition *for* workers.

What of the upper classes? Their numbers are miniscule relative to the overall population. But not their ecological impact. It is common knowledge that the average US citizen has an ecological footprint around six times deeper than the average inhabitant of China, India, Latin America and Africa.

One can only guess what the ratio would be, once class is introduced into the equation. According to *Forbes* magazine in 2022, there were 2,755 billionaires globally, 724 of them in the US alone.¹³⁴ They include, of course, Elon Musk, the world's richest person, who is worth \$239.3 billion, Bernard Arnault and family (\$198.6 billion), Jeff Bezos (\$187.3 billion) and Bill Gates (\$132.6 billion).¹³⁵ Of course, there are up and downs, but, meanwhile, as the wealth of the billionaire class steadily climbs, over the last 30 years the mass of Americans have seen living standards stagnate or decline. Officially 45 million live in poverty, and income inequality in the US is now near an all-time high, with over 50% of income "going to the top fifth of households".

The CEOs of America's largest companies received salaries worth 312 times that of their average worker.¹³⁶ With their 'how to spend it' lifestyle, they surely leave an ecological footprint out of all proportion, compared with the regular US Joe - let alone a Chinese factory worker, a South African miner or a landless Indian peasant labourer.

A twofold conclusion:

- (1) Neo-Malthusianism can all too easily provide a pseudo-scientific excuse for waging a war of extermination against the mass of the world's population.
- (2) Theories which stand above history, which fail to incorporate national and social inequalities, are blinkered to the point of blindness.

Greenism: a rough guide

Like any socially significant ideological current, greenism has many schools of thought, competing leaders, rival campaigns, odd conjoinings and strange offshoots. However, even the briefest survey reveals the severe limitations of them all.

There were more than a few commendable democratic demands contained in the 2017 general election manifesto of the Green Party (England and Wales): abolition of the standing armed forces; withdrawal from Nato; replacing the monarchy with a republic; proportional representation for local and parliamentary elections.¹³⁷ Well to the left of Labour's "socialist" *For the many, not the few*. Hence rightwing accusations that the Greens were a 'watermelon party': green on the outside, red on the inside. A nice joke, but their perspectives remain firmly located within the narrow confines of existing society.

As a matter of pride the underlying ethos is localism, not globalism. Small businesses, mutuals, home and self-employment are upheld as an ideal. Meanwhile, a remoulded banking system provides "cheap basic" services and lends "locally".¹³⁸ So finance capital is reined in, but continues, albeit in a diminished form. Essentially the same happens with industrial capital.

Imagine then that the leader of the Green Party is called to Buckingham Palace and is asked to form a (republican) government. True, an unlikely scenario - more a thought experiment. For the sake of argument, then, we shall put aside a joint chiefs of staff mutiny, MI5 black ops, US pushback, military threats and crippling

sanctions imposed by the global hegemon. Hiving off the UK parts of giant transnationals, if it were possible, would not only infuriate AstraZeneca, BP, Fords, BMW, Tata, Honda and Airbus ... and invite retaliation (even, if only in the courts). Such a policy, reversing the socialisation of labour, must send overall productivity plummeting.

With what result? Capital flight, sterling devaluation and steeply rising costs. Hyperinflation rips. Unemployment soars. Shortages grip. People turn to black and grey markets. Corrupt fortunes are made. Social tensions reach boiling point. Those with marketable skills flee abroad. A Green Party government would thereby be faced with an unenviable choice: either screw up rates of exploitation and administer poverty - that or abandon the “fight for equality”.

Unfazed, the Green Party breezily promises: “everyone” will “live happier and more secure lives”; “everyone” will have an income “above subsistence level”; there will be “an environment where everyone feels fulfilled in worthwhile employment”; and “everyone” will have “access to healthy, nutritious, locally grown food”.¹³⁹ Greenism as manifest self-deception. Bernie Sanders and Alexandria Ocasio-Cortez champion a similar line in the United States.

In practice, the Green Party’s programme is far more prosaic: rhetorically urging legislation against polluting industries, promoting recycling, advocating a universal basic income, championing wind farms and solar panels, setting earlier dates for meeting net zero CO₂ emission targets, etc. Not that talking the talk and walking the walk are synonymous. Proved in miniature with neoliberal Brighton and Hove: “a ‘Green’ council in name only”.¹⁴⁰

Like their (junior governmental) colleagues in Germany, Austria, Belgium, Finland, Ireland and Luxembourg, the underwhelming GPEW leadership of Carla Denyer, Adrian Ramsay, Amelia Womack, Caroline Lucas and Jenny Jones are realos, not fundies. They want to be a “*serious* electoral force”.¹⁴¹ Here “serious” should be understood not merely as increasing votes, councillors, mayors and MPs. It means being politically *acceptable*, like Patrick Harvie and Lorna Slater in Scotland ... and, therefore, if given the chance, responsibly administering, not fighting, capitalism. Their role model is Germany’s Joschka Fischer. From being a leading member

of the ultra-left Putzgruppe in the early 1970s, he soon ‘matured’. Fischer went on to serve as foreign minister and vice-chancellor in Gerhard Schröder’s 1998-2005 red-green coalition. Inevitably, he backed the Bundeswehr joining Nato’s Balkans intervention in 1999 and Afghanistan in 2001.

In that same realo spirit, the republic, Nato withdrawal and a popular militia already gather dust - a passing childish phase. Put crudely, GPEW leaders are buyable. Open to the same institutional corruption that routinely sees fire-breathing politicians turned into pliant servants of capital (barely remarked upon by the mainstream media). Note: the Green Party-backed Republic in Parliament Campaign is now officially “closed”.¹⁴²

To ensure that there remains not a shadow of doubt, Caroline Lucas, GPEW MP, vigorously defends the “very clear” International Holocaust Remembrance Association’s so-called ‘working definition’ of anti-Semitism.¹⁴³ Code for restricting free speech, witch-hunting anti-Zionists and siding not only with the Israeli colonial-settler project, but the US-dominated world order. She has never been much of a fire-breather, but Lucas is all too willing to be a pliant servant.

Let us now look at the elitist pressure groups: Greenpeace and Friends of the Earth are typical. For the price of an annual subscription their many tens of thousands of almost entirely passive members get a vicarious thrill from media-friendly campaigns and stunts.

Yet, despite the image of being fearless eco-warriors, such organisations are in fact top-heavy with managers, accountants, lawyers, press officers and fundraisers. “Interminable meetings, not action, are the order of most days,” writes Charles Secrett, FoE executive director between 1993-2003.¹⁴⁴ Radicalism has certainly been blunted by the self-interested need to cultivate and maintain links with the political, business and cultural establishment.

Because Greenpeace relies on direct action, advertising and media publicity, it is run on a ‘command and obey’ basis. Greenpeace has numerous offices, its own ships, a helicopter and employs well over 2,000 people. Annual income amounts to some £300 million globally. Jobs as glamorous professional activists are much sought after. Scientists are employed too. Executives vie for dominance.

Meanwhile, the rights of full members are strictly limited and most local groups concentrate on money-raising. Chugging, on a wage of about £10-£11 an hour, has been turned into a successful business model.¹⁴⁵

Interestingly, the first major action of Extinction Rebellion, on October 17 2018, was to occupy the London HQ of Greenpeace. Suffice to say XR's 'beyond politics' slogan explains both its current strength, but also its probable ultimate demise (see next chapter).

FoE (in England, Wales and Northern Ireland) is somewhat different from Greenpeace organisationally. For example, while CEOs survive on a £80-90,000 salary, they preside over considerable local initiative and local campaigning. However, finance not only comes from membership subscriptions. When it comes to elitist organisations such as Greenpeace and FoE, capitalist philanthropists - eg, Richard Branson, Bill Gates and Michael Bloomberg - provide considerable sums and arguably set (or at least limit) the agenda. Inevitably then, capitalism is taken as a given - albeit, once again in the imagination, downsized and made eco-friendly.

Almost by definition the same goes for Zac Goldsmith (Baron Goldsmith of Richmond Park) and his "liberal Conservative" Bright Blue outfit.¹⁴⁶

Tory greenism is, of course, nothing new. In October 1988 Margaret Thatcher made her famous 'green' conference speech: "No generation has a freehold on this Earth. All we have is a life tenancy - with full repairing lease."¹⁴⁷ The Countryside Alliance also comes to mind. Claiming over 100,000 members, the ermine-led campaign aims to protect and promote the interests of rural Britain: farming, fishing, fox hunting ... and making Brexit work.

Indeed, ever since industrial capitalism rose to dominance there has been a strand of Tory thought which has sought to defend so-called traditional ways against the flood tide of utilitarian liberalism and republican democracy. Eg, Young England during the early 1840s. Born on the playing fields of Eton, Oxford and Cambridge, it loosely grouped together a blue-blooded membership - George Smythe, Lord John Manners, Henry Hope, Alexander Baillie-Cochrane, but most notably, its figurehead and leader, Benjamin Disraeli (who was no aristocrat, nor did he attend Eton).¹⁴⁸

To gain a wider audience these gentlemen feigned indifference

to their own specific class interests. Nostalgically they advocated a rural idyll of snug hamlets, independent artisans, upstanding yeomen farmers, benevolent Christian alms-giving and absolute monarchy. Everyone has their place and everyone knows their place: “The rich man in his castle, the poor man at his gate”.

Dreamy poems and didactic novels lauding a mainly fabricated past went hand in hand with eviscerating attacks on rapacious industrialists who heartlessly exploited their workers, rode roughshod over family values and inadvertently fuelled the danger of revolution. Not that Young England had the least interest in nor wish for democracy. But they wanted to rouse the masses; that way they sought to restore the power of landed wealth and put an end to the “madness” of Chartism (Thomas Carlyle).¹⁴⁹

Charles Windsor very much stands in this Young England tradition. In the name of “generations yet unborn”, he told world leaders gathered at Cop26 that we “have to put ourselves on what might be called a war footing.” However, the “vast military-style campaign” his royal greenness advocates is designed to engage with the “global private sector”, not subordinate it to state power (so no climate socialism yet).¹⁵⁰

The most comprehensive statement of eco-royalism can be found in HM’s co-authored book, *Harmony* (2010). He begins boldly by declaring: “This is a call to revolution.” Against what? Well, nothing less than “the current orthodoxy and conventional way of thinking, much of it stemming from the 1960s, but with its origins going back over 200 years.”¹⁵¹ A barely concealed call for the *counterrevolutionary* restoration of feudalism.

Belief that western civilisation took a wrong turn with the Enlightenment is common coin amongst conservative traditionalists. Take Roger Scruton (1944-2020). He invented the term oikophobia - *oiko* being Greek for home - to damn those who repudiate tradition and country. He singled out, in particular, Howard Zinn and Noam Chomsky for opprobrium. Scruton urged “environmentalists and conservatives” to make “common cause” around “territory”, in particular its “strongest political expression”, the “nation-state”.¹⁵²

There is Edward Goldsmith (1928-2009), uncle of Zac, too. He argued for cutting the population by 50%, repatriating immigrants ... and establishing a green social order based on the patriarchal

family, small-scale communities and something resembling the Indian caste system.¹⁵³ On that programmatic basis, Michael Benfield, Freda Sanders, Tony Whittaker and Lesley Whittaker founded the PEOPLE party. Edward (Teddy) Goldsmith stood for them in the 1974 general election (and did badly). In 1975 the PEOPLE party became the Ecology Party and 10 years later, in another name change, the Green Party (UK).¹⁵⁴

There are pale greens who unapologetically promote monopoly capitalism. A small clique, but well connected and therefore disproportionately influential. Jonathon Porritt's *Capitalism: as if the world matters* (2005) serves as a kind of manifesto. He has been rewarded with all manner of posts, honorariums and prestigious invites. Charles Windsor is a friend and confidant. Porritt rejects capitalism, not "*per se*" - well, of course not - but in terms of this or that "particular model". Unsurprisingly, he concludes that sustainability is fully compatible with a revised, retuned, recalibrated capitalism. If that is not possible, or so he claims, then one would be morally obliged to "devote one's political activities" to the "overthrow of capitalism".¹⁵⁵ Well, capitalism still has not been revised, retuned or recalibrated, and yet we still await the clarion call for overthrow from 'comrade' Porritt.

Needless to say, ecological responsibility cannot replace accumulation as the mainspring of capital's laws of motion. To claim otherwise is to desert objective reality ... true, for a well-rewarded capitalist reality. In 1996, following the line of least resistance, Porritt and Sara Parkin founded the Forum for the Future. After a simmering civil war they both resigned from the Green Party's executive just a few weeks prior to its annual conference. Presumably, they expected humiliating defeat.

Forum for the Future is a well-heeled charity - 66 staff members and an annual income of £5.2 million. It courts big business and its cheque books. No one-way street. Forum for the Future magnanimously bestows green credentials on transnational corporations and translates sustainable development into the language of share price, cash flow, cost-cutting, efficiency and profit. Its 50-plus corporate sponsors and partners have, we are reassuringly told, a "proven commitment" to the environment.¹⁵⁶ Only the naive will be surprised to learn that listed amongst the

virtuous are: American Express, the British Aerosols Association, Land Rover Jaguar, Tata, Nestle, Sky, M&S and Aviva.¹⁵⁷

Obviously being green is considered good public relations and therefore good business. Saving on inputs such as energy and other raw materials can certainly be presented in a way that enhances green credentials; motivated not by the intrinsic capitalist drive to minimise costs and maximise profits - rather a benevolent concern for the environment.

Eco-taxes and subsidies, emissions trading and carbon capture and storage all chime with manufactured public opinion. However, these green capitalist panaceas legitimise pollution, favour the most powerful concentrations of capital, threaten to pass on additional costs to the consumer or simply lead to offloading dirty industries onto the likes of China, India, Vietnam, Philippines, etc. Guilt can be exported.

Prostituted apologetics of the type coming from the Forum for the Future notwithstanding, there are those greens who offer forthright critiques of monopoly capitalism. Overconsumption, insatiable greed and the wanton misuse of nature are all subjected to withering criticism and on occasion profound analysis. Many radical green thinkers proudly cite Gerald Winstanley, William Morris and Peter Kropotkin as their fiery inspiration. Others prefer the milder flavours of St Francis of Assisi, Leo Tolstoy and Mahatma Gandhi.

Obviously, green anti-capitalism too comes in many strands. Before examining the deep greens, let us discuss Ernst Schumacher, George Monbiot and Murray Bookchin. Between the three of them they cover the spectrum of green thought that stretches from eco-theology by way of eco-Proudhonism to eco-libertarianism. Besides a burning desire for change, what joins them together is the big idea that ‘small is beautiful’.

The future must be non-capitalist, but also decentralised, self-reliant and non-hierarchical. However, the social agent capable of bringing about such an outcome remains totally unconvincing in each account. For Schumacher it is enlightened aid workers and third world bureaucrats. Monbiot talks of collective action by “poor countries”, while Bookchin looks to “libertarian municipalism”. All shrink back from organising the working class into a revolutionary party.

Ernst Schumacher (1911-77) considered unrestrained industrialisation to be the cause of “unlimited sorrows”, especially in the former colonial countries. Schumacher advocated ‘appropriate technology’ and rejected the ‘bigger is better’ ethos characteristic of the 1950s-60s long boom. He located this ethos not in capital’s spontaneous tendency to monopoly or/and the organised concentration of capital: rather in six leading ideas inherited from the 19th century.

Those are Darwinism and “natural selection”; the “idea of competition” and “the survival of the fittest”; Marx’s observation that all “higher manifestations” of human life - religion, philosophy, art, etc - are nothing but “necessary supplements of the material life process”; the “Freudian interpretation which reduces human life to “the dark stirrings of the human subconscious”; relativism and “denying all absolutes”; positivism and the claim that “no knowledge is valid unless it is based on generally observable facts” and therefore denies the possibility of objective knowledge of purpose and meaning.¹⁵⁸ These ideas, which “claimed to do away with metaphysics”, were in fact, intoned Schumacher, “bad metaphysics and bad ethics”.¹⁵⁹

Joining natural selection and historical materialism together with positivism and scientism is not as absurd as might first appear. Ideologically the post-World War II period was under the tyrannical sway of productionism - social democracy and mainstream liberalism on the one side, the official ‘Marxism’ of the Stalinites on the other. Though manifestly failing to locate the real causes, Schumacher exposed the negative ecological results of both capitalist and Stalinite economic growth. As an alternative he opted for what he called ‘Buddhist economics’ (though he himself converted to Catholicism). His model was post-independence Burma!

A regular columnist in *The Guardian*, George Monbiot has written a string of excellent books: *Amazon watershed*, *Heat*, *Captive state*, *Feral*, etc. His case for a “democratic revolution” - fully elaborated in *The age of consent* (2003) - skilfully dissects the “global dictatorship of vested interests”. Clearly a welcome revolt against capitalism, but just as clearly a reinvention of pre-Marxist utopian socialism.

Once a confirmed localist, he now espouses globalism - at least in terms of strategy. His democratic revolution begins at the global level. Anarchism and green capitalism are rightly rejected. But Monbiot suffers from what can only be described as a Pavlovian aversion, when it comes to Karl Marx. To use a phrase, he sees red. The merest mention of Marxism sends his brain into a spin. Monbiot ridiculously blames Marx for Stalin's gulags, Maoism and Pol Pot. Bureaucratic socialism is put down to the *Communist manifesto*. His "pathological" Stowe public school education clearly conditioned him all too well.

Monbiot has gone to the trouble of drawing up a detailed blueprint for tomorrow's world. There will be a 600-seat global parliament - one MP for every 10 million electors. Parliamentary voting will be weighed according to a sliding democratic scale - once again courtesy of our clever friend. However, the authority of this august body would be purely moral. National states would continue to exist. It is just that they would now be under pressure to do the right thing. The world 'government' would have no law courts, no army. Nonetheless, a 'fair trade' organisation ensures that transnationals retract their exploitative claws and respond to popular environmental concerns and worries.

How such a 'one person, one vote' global institution is supposed to arise, while national states and US, EU, UK, Japanese and Chinese transnationals still constitute the dominant economic power, is lightly skated over. But does anyone really expect the US administration to facilitate its citizenry voting in Monbiot's elections? Would Washington shoulder the considerable costs involved? And what of 'rogue states' such as Iran, Syria, North Korea and Afghanistan? Though Monbiot gives a passing nod in the direction of existing campaigning organisations, his elaborate schema is built on nothing more substantial than the clouds of fantasy.

Murray Bookchin (1921-2006) offers a slightly less utopian perspective. Describing himself as a libertarian communist - a former 'official communist' and then Trotskyite - he took theory seriously. His considerable body of work contains many worthwhile criticisms of the domination and hierarchy involved in class society. This has produced humanity's imbalance with nature. He has no

time for pro-capitalist greenism, overpopulation panics or primitivist technophobia - all have inherently reactionary implications. A complete social revolution is needed.

Bookchin's unwillingness to embrace the means - the mass revolutionary party - is perfectly understandable, especially given the US radical milieu he inhabited. The countless, tiny, self-isolating, often unhinged sects, which still buzz around, grandly claiming to be *the* party, pathetically reproduce the structures and much of the attending egoism of capitalism itself. Central committees behave as boards of directors, the rank and file are treated as mere speaking tools. Then there are the proprietorial general secretaries.

Fleeing from this madness, Bookchin found refuge in the idea of little communes, municipalities which consist, to begin with, of putative hardcore cadre. Somehow these bacilli survive within the decaying body of capitalist society and steadily grow into organs of dual power. Momentarily suspending our disbelief at the chances of this happening, we are still left with a fundamental problem.

If for some reason these extended households managed to avoid succumbing to state repression, to the pressures and lures of everyday capitalist society, then, no matter how powerful they became, they would still come to grief on the shallow reefs of localism. By their very nature they would generate sectional, not universal, interests and, therefore, quickly fall into bickering rivalry. The fate of trade unions as trade unions, coops as coops and soviets as soviets. Without the coordination, discipline and theory provided by the highest form of working class organisation, sectionalism is bound to take hold.

As personalities, the likes of Schumacher, Monbiot and Bookchin are clearly motivated by a heartfelt desire to improve the lot of the world's population. That cannot be so readily said of deep greens. Yes, they despise car culture, pollution, monocrop agriculture, the whole cult of economic growth. However, for them, the adverse effects this has on humanity is secondary. Nature comes first. We have many responsibilities to nature, but few definite claims on it.

Arne Naess (1912-2009), the Norwegian mountaineer and sage, began laying the theoretical foundations as far back as the early 1950s - at least to the degree that deep greenism can be considered a theory. He attacked the short-termism, the irrationality

of neo-classical economics and sought to displace anthropocentric modes of thinking with what he and his followers call “biocentrism or ecocentrism”.¹⁶⁰

Anthropocentrism - which I take as meaning that humans alone have intrinsic value - dates back, he argues, to the Neolithic (counter)revolution, around 10,000 years ago. The adoption of anthropocentric modes of thought is collectively remembered in the story of Yehovah’s expulsion of Adam and Eve from the Garden of Eden and other such myths.

The long and the short of it is that, once human beings stopped venerating nature and started to treat it as a thing to be subdued, an object fit only for exploitation, then they fell from grace and condemned themselves to the endless drudgery of labour. Civilisation thereby becomes a terrible mistake, a dangerous detour. Suffice to say, deep greenism lacks anything resembling an adequate account of history.

Deep greenism amounts to a retrogressive plea for humanity to adapt to nature, to give up on all hope of progressive social change and return to a lost innocence of childhood. But no adult can perform such a feat. Nor can the human species. The door to the past is permanently closed. It is impossible to sustain an 8 billion global population with Palaeolithic hunter-gathering. The only door open to us is the future.

According to Naess, there is no moral hierarchy of life. He rejected all paradigms whereby species are ranked according to whether they have a soul or possess consciousness. Naess says: “... the right of all forms [of life] to live is a universal right which cannot be quantified. No single species of living being has more of this particular right to live and unfold than any other species.”¹⁶¹

This is not the self-destroying ordinance it might first appear to be. Despite the insistence on non-hierarchy, elementary biological necessities have to be recognised. “Except to satisfy vital human needs”, there is no sanction to kill. But there is a “vital human need” for food that must be constantly satisfied. People have to consume fellow life forms ... and thankfully they can do so with the sanction of the deep greens. In point of fact, there is a deep green macho minority, which actually revels in hunting, shooting and fishing as a means of rediscovering their human essence (nature being red in

tooth and claw).

In that naturalistic spirit, we find green thinkers such as (Saint) James Lovelock - he of the Gaia hypothesis - scornfully dismissing the pain and suffering of his fellow human beings:

Our humanist solicitude towards the poor living in the impoverished suburbs of the big cities of the third world, and our almost obscene obsession with death, suffering and pain - as if these were harmful in themselves - all these thoughts deflect our attention from the problem of our harsh and excessive domination of the natural world. Poverty and suffering are not sent; they are the consequence of what we do. Pain and death are natural, we could not survive for long without them.¹⁶²

Those species which pose a threat to Gaia's self-regulation - ie, we humans - are likely, he says, to face extinction, as the planet moves to find a new stable state: ie, the climate tips from one qualitative state to another. The Earth strikes back.

A line of thought which has led some deep greens to view the HIV/Aids virus either neutrally or as a welcome response to the human cancer.¹⁶³ Celebrating authenticity, fragility and destiny, these ecobrutalists decry anti-Aids drugs and the entire health infrastructure. Nature knows best. Via polio, influenza, Aids, Sars, Ebola, Covid-19, etc, humanity is culled. When that task is finally completed, it is deep green survivalists who inherit the planet.

Such viewpoints more than smack of anthropomorphism. Nature is given human attributes. Hence we find the American naturalist, Aldo Leopold, telling us to "think like a mountain" and Christopher Stone asking, "do trees have rights"? A rhetorical question. Forests, mountains, rivers and lakes should be given the same legal status as corporations, he suggests.¹⁶⁴ The absurd notion is that this would stop exploitation. Recent history fails to support such a contention. Capital treats what is bought and sold, what is property, in a purely instrumental (slave-like) fashion. Necessarily that entails mistreatment as a means to an end. Labour is exploited. So too is nature.

Biocentrism, to state an obvious truth, is a human-created ideology. If it means recognising that humans are part of nature

- the uniquely conscious part - that human society should cease fetishistically worshipping production as its one and only real god, that we should start looking after nature by reordering ourselves, then no worthwhile communist would disagree. On the other hand, if biocentrism means placing the interests of humanity against those of nature, diminishing humanity and depicting it as a cancer, then we must strenuously disagree.

Deep greenism comes 'unencumbered' by a fully debated and democratically agreed programme. It is a loose conglomeration and ideologically very pick and mix. Consequently deep greens are more than prone to both navel-gazing individualism and falling under the spell of the latest social media-generated mass hysteria. Exponents frequently hold completely juxtaposed viewpoints and easily lurch from elation to despair and back again.

Ecofeminist deep greens blame "capitalist patriarchy" and male values for the degradation of the environment.¹⁶⁵ Women are considered innately attuned to nature. Menstruation and motherhood separate them from men and go towards what is essentially a form of biological determinism. Not a few have taken to witchcraft.

One celebrated exponent of deep-green irrationalism is the physicist, Fritjof Capra, founding director of the Center for Ecoliteracy in Berkeley, California. According to his official website, he "frequently gives *management seminars* for top executives".¹⁶⁶ Capra co-authored *Green politics* (1984) with ecofeminist Charlene Spretnak, and in later books, such as *The web of life* (1996) and *The hidden connections* (2002), he details why he believes physics and metaphysics are both inexorably leading to the same stunning conclusion: "there are hidden connections between everything".¹⁶⁷

As is standard deep green fare, Capra dismisses as outdated the mechanical 'Cartesian-Newtonian paradigm' - in justification he cites 20th century developments in sub-atomic physics and systems theory. Instead, he calls for a delving back to the truths that can be discovered in the ancient eastern outlook - ie, Hinduism, Buddhism and Taoism - which maintain a mystical holism. Of course, the truths Capra finds in these religions/philosophies are a primitive, one-sided form of dialectics, developed by members of the pre-capitalist ruling classes - specifically those intellectuals who possessed the abundant leisure time needed to contemplate and debate.

However, their dialectics were quietist, a means of interpreting, not radically engaging with the world. That precisely was the great advance brought about by the Marx-Engels team. Marxism continues, but transcends, such philosophy. Marxism is quintessentially about practice: investigation is for the purpose of overthrowing all existing social conditions and, through that, establishing a genuinely human relationship with nature.

Rebels without the means

Established in May 2018, Extinction Rebellion - self-abbreviated as XR - dominated media headlines when it came to climate protests ... well, till the motorway sit-downs staged by the Insulate Britain breakaway, then the Just Stop Oil attacks on petrol stations, etc. Not that XR is a spent force. It boasts of organising in 84 countries and having 1,202 groups.¹⁶⁸

XR calls upon supporters to unite around the three (actually quite extensive) core demands worked out by its original 11 founders. They can, though, as intended, be pithily presented:

- (1) Tell the truth: governments must tell the truth by declaring a climate and ecological emergency, working with other institutions to communicate the urgency for change.
- (2) Act now: governments must act now to halt biodiversity loss and reduce greenhouse gas emissions to net-zero by 2025.
- (3) Go beyond politics: governments must create, and be led by the decisions of, a citizens' assembly on climate and ecological justice.

Nothing untoward here - all good demands which expose government sluggishness. Well, that is until the third formulation. Does a government-created "citizens' assembly" override elected parliaments, when it comes to "climate and ecological justice"? No, not quite. The plan is for a parliamentary vote after statistically representative citizens' assemblies have long deliberated, expert opinions are heard and final conclusions made. Then comes a referendum. A wonderful cover for diminishing, sidelining, *going beyond* party politics and representative democracy, and imposing a

form of government based on state-controlled citizens' assemblies and referenda.

Needless to say, Marxists support party politics and representative democracy. Why? Because the working class can build its party, in no small part, through standing in elections. Votes are gained, members are trained, recruits are made, strength and influence are grown. Our MPs act as tribunes of the people under the tight supervision and control of the party. Careerism is thereby guarded against. Such a party - a mass Communist Party - is the logical, the proven and the surest way to draw sharp lines of class demarcation and, no less to the point, the *only* way for the working class to educate and organise itself, so that it is ready to take state power.

Suffice to say, citizen's assemblies and referenda tend to cut across party and class divisions, lining workers up behind one bourgeois faction or another. It should be added that life is complex. Neat 'yes' or 'no' answers rarely do.

When XR was taken up in the US, a fourth aim was proposed and agreed:

We demand a just transition that prioritizes the most vulnerable people and indigenous sovereignty; establishes reparations and remediation led by and for black people, indigenous people, people of colour and poor communities for years of environmental injustice, establishes legal rights for ecosystems to thrive and regenerate in perpetuity, and repairs the effects of ongoing ecocide to prevent extinction of human and all species, in order to maintain a livable, just planet for all.¹⁶⁹

On the quickest of quick reads it appears wordy, somewhat pious, but largely unobjectionable. But give it a slower, more considered, second reading. "Just", "justice", "injustice"? Trite liberal phrases that provide cover for wooly thinking. "Indigenous sovereignty"? Over little patches of land? What if there were precious metals under that land? What happens if a lucrative deal is struck with a mining corporation? Would indigenous sovereignty trump the interests of the wider population in having clean, unpolluted, water supplies? "Legal rights for ecosystems"? For planet Earth? The Mississippi Delta, The Rocky Mountains? Central Park? The town hall pond? A

lawyers' paradise. No, no, no. Why not, instead, demand, fight for extreme democracy and the rule of the majority: that is, the workers and poor peasants?

Understandably, this hopelessly muddled, fourth aim caused a split in the US. XR America replaced the fourth aim with 'Black lives matter'.¹⁷⁰ No less to the point, the fourth aim found no welcome aboard the UK mothership. Whoever is *really* in control seems to have rejected it out of hand ... and as such it need not detain us any further here.

But this does raise the question of structure, accountability and decision-making. We come, therefore, to XR's 10 principles:

1. We have a shared vision of change - creating a world that is fit for generations to come.
2. We set our mission on what is necessary - mobilising 3.5% of the population to achieve system change by using ideas such as "momentum-driven organising" to achieve this.
3. We need a regenerative culture - creating a culture that is healthy, resilient and adaptable.
4. We openly challenge ourselves and this toxic system, leaving our comfort zones to take action for change.
5. We value reflecting and learning, following a cycle of action, reflection, learning and planning for more action (learning from other movements and contexts, as well as our own experiences).
6. We welcome everyone and every part of everyone - working actively to create safer and more accessible spaces.
7. We actively mitigate for power - breaking down hierarchies of power for more equitable participation.
8. We avoid blaming and shaming - we live in a toxic system, but no one individual is to blame.
9. We are a non-violent network using non-violent strategy and tactics as the most effective way to bring about change.
10. We are based on autonomy and decentralisation - we collectively create the structures we need to challenge power. Anyone who follows these core principles and values can take action in the name of Extinction Rebellion.

Basically, what this comes down to is a decentralised, non-

hierarchical organisation based on “high ideals” and escalating, non-violent civil disobedience. That is what the “momentum-driven organising” stuff is all about (more below).

What about the assertion that non-violence is the most effective way to bring about change? This is based on the work of Erica Chenoweth, who is treated as something of a guru by XR. Through exhaustive comparative studies and careful statistical calculation this Harvard academic and TED talker argues that non-violent campaigns are far more successful in terms of outcome than violent campaigns: an exact 53%:26% figure is widely cited.¹⁷¹ More than that, violent campaigns promote tyranny! In December 2013, *Foreign Policy* - founded by the US political ‘scientist’, Samuel P Huntington - named Chenoweth as one of the Top 100 Global Thinkers of the year “for proving Gandhi right”.¹⁷²

Chenoweth is a committed, not to say a professional, peace-monger and as such wants to, needs to, foster pacifistic illusions. Doubtless that explains her extraordinarily naive admiration of the peaceful protests which ended in the resignation of Hosni Mubarak in February 2011: “Egypt stands out as a particularly stunning example of why peaceful resistance works.”¹⁷³ Well, except it does not. Since June 2014 Egypt has been ruled by Abdel el-Sisi. Egypt went from army dictatorship to army dictatorship by way of the Muslim Brotherhood’s Mohamed Morsi.

Chenoweth’s statistics are most likely spot-on accurate in so far as they go and have surely been subject to the usual peer review process. But Mark Twain’s phrase, ‘lies, damned lies and statistics’, comes to mind. After all, her historical examples amount to comparing apples with pears.

Let me illustrate the point. Take the demand for Nigerian independence tamely put forward by the country’s rival political, business and tribal elites in the 1950s - implicitly backed by the newly hegemonic US and willingly conceded by Harold Macmillan’s Tory government.

Just before midnight on September 30 1960, in the presence of HRH princess Alexandra of Kent, the lights on Lagos racecourse were switched off, the UK flag was lowered and Nigeria’s green-and-white flag was raised aloft. When the lights were switched on again, much cheering and celebrating followed. Surely a stunning

example of peaceful means leading to success.

But Nigeria's smooth transition from colonial rule, which began in 1954, was hardly the same as taking refuge in remote base areas, fending off the murderous Japanese colonialists, defeating the US-backed Guomindang and establishing a 'socialism with Chinese characteristics'. Try doing what Mao Zedong and the People's Liberation Army did with non-violent civil resistance. To state the obvious, it would not work. Yet, despite its binding commitment to 'system change', XR is committed to a non-violent strategy and tactics as a matter of absolute principle.

Needless to say, for communists there is no such principle. Violent politics is simply non-violent politics carried out by other means. What is primary is the politics, not the means. Marxists cannot rule out the possibility of using violence: eg, imposing a picket line, fending off a fascist attack, breaking out from a police kettle. Indeed, to renounce violent means, especially as an absolute principle, is, in practice, to renounce the struggle for 'system change'. Of course, because it is ordinary people who usually suffer the most when the ruling class unleashes a civil war to protect their wealth and preserve their privileges, we hold to the old Chartist dictum: 'peacefully if we can; forcibly if we must'.

Members of the ruling class can, possibly, be persuaded to peacefully surrender - if there is *overwhelming* potential physical force ranged against them. Eg, if we have a people's militia on our side or we have split the state's armed forces to a sufficient extent. Bribes can also be offered in the attempt to get them to leave the stage for a comfortable retirement. Certainly, though - and this has to be understood - their system is *permanently* predicated on the threat and actuality of violence: that is what the police, law courts and prisons are all about. It is also the case that the rich, the powerful, the well connected can usually manage to extricate themselves from any sticky situation simply by taking flight - along with as much of their ill-gotten loot as they can get away with.

XR clearly models itself on the US civil rights movement of the 1950s and 60s and the non-violent tactics of Martin Luther King. Other sources of inspiration are the suffragettes, Mahatma Gandhi, Occupy and Black Lives Matter - all with limited or vague aims. But XR wants to change the world.

Erica Chenoweth also provides statistical justification for XR's minority strategy:

Outcomes of over 300 non-violent and violent campaigns [against dictatorships, for secession or against occupation] from 1900-2006: none of the cases failed after achieving the active and sustained participation of just 3.5% of the population - and some of them succeeded with far less than that.¹⁷⁴

The notion is that the active involvement of such a tiny minority ("the movement") is, more or less, all that is required to swing over the non-committed (neutrals) and passive opponents in order to isolate "the opposition" and establish a new common sense.¹⁷⁵

Once again apples and pears. What might well work for same-sex marriage in the US is unlikely to work when it comes to replacing a socio-economic system based on production for profit with one based on production for need. After all, those with vested interests in the system not only have power, privileges and vast fortunes. Leaving aside the armed forces, the police and the secret state, they have a whole complex of other well tried and tested defences. Eg, in the UK, civil service mandarins, the law, monarchy, the privy council, the capitalist media, the paid persuaders in academia, the constitutionally loyal opposition, the established church, the trade union bureaucracy - all serve as "safeguards against democracy" (Richard Lowe).

What about autonomy and decentralisation? Even with the most modest campaign - saving the local library, exposing a corrupt MP, demanding the reinstatement of a sacked fellow trade unionist - decisions have to be made. When to launch, when to hold back, when to compromise, when to up demands, when to escalate actions, when to go for the final push.

With autonomy and decentralisation as another absolute principle comes the danger of falling into utter incoherence. When one part retreats, the other part attacks. When one part compromises, the other part goes for the final push. In other words, defeat is brought about through a division of forces and the failure to centrally coordinate.

Democracy is, in our view, the best, the most effective way to

achieve cohesion: ie, to use a frightening word - centralisation. Democracy is not only about regular elections and votes: there must be wide room for debate, formulating alternative ideas, the right to form factions if need be and the realistic possibility of one leadership replacing another. Cohesion and local autonomy should not, in fact, be counterposed. They can complement each other, work together. The principle should be subsidiarity: issues should be dealt with at the most appropriate level - from the local to the regional, to the national, to the international. The idea that global warming, for example, can be stopped merely through autonomous local decision-making is plainly risible.

It is either democracy, or - because it is objectively necessary - cohesion is achieved, brought about, using a different organisational model. At the risk of massive oversimplification, there are five other options: (1) the limited, the skewed, the fake, constitutional democracies seen in modern-day US, Britain, Japan, France, Germany, etc; (2) the personal dictatorships of the absolute monarchies, the Catholic Church, the fascist and Bonapartist regimes; (3) a variation of option two is the command-and-obey of the army, capitalist firms, charities and the mafia; (4) the bureaucratic centralism of the big trade unions, the confessional sects and 'official communism'; (5) despite claims of autonomy, breaking down hierarchies, equitable participation and organisational flatness, cohesion is achieved through an unaccountable, but nonetheless effective centre of authority.

We arrive at the secret dictatorships hidden behind the facade of anti-authoritarianism in movements as diverse as Mikhail Bakunin's International Alliance of Socialist Democracy, second-wave feminism and Occupy. Perhaps the most famous critiques were written by Friedrich Engels - *The Bakuninists at work* (1873) - and in more recent times the US feminist, Jo Freeman - *The tyranny of structurelessness* (1970). Either way, decision-making cannot be avoided.

That applies no less to XR. Clearly it has no sovereign conference with representative delegates, motions, amendments and debate, no binding resolutions, no elected and recallable leadership. Instead, there is a self-appointed clique that beguilingly, deceptively, talks of mitigating power. Meanwhile money pours in, and with it the

danger of going the same way as BLM.

Following the Chenoweth 3.5% formula, XR seems to believe that it can swamp the legal, court and prison systems through the willingness of a determined minority not only to risk, but to actively court, arrest. The dedication, the bravery, has been more than forthcoming. And it is often inspiring to witness. And, before a randomly selected jury, there has been a wonderfully pleasing list of ‘not guilty’ verdicts. But governments are more than capable of moving the goalposts through court injunctions on named individuals, imposing unlimited fines and imprisoning, if necessary, thousands upon thousands.

There are also dirty tricks. Sending in agent provocateurs to push XR into acts of sabotage that are guaranteed to trigger popular anger and play directly into government hands. Halting rail travel in London’s east end in October 2019 was a classic example: though in all probability it was brought about by nothing more sinister than pure stupidity, it might just as well have been planned, plotted and hatched by MI5 black ops.

The scene at Canning Town station was, as always nowadays, filmed on numerous smart phones. There was an XR activist planted on top of an early morning rush-hour tube train. People shout, call him names, throw coins at him before he is forcibly dragged down by an angry commuter. He falls into the midst of the crowd. He appears to have been pushed, shoved and even kicked. TfL staff intervene and save him from getting a real battering.¹⁷⁶ There were similar instances at Stratford and Shadwell.

The hostile reaction is quite understandable. Workers have to get to work on time, especially those on zero-hour contracts, and deeply resent what they see as middle class do-gooders disrupting their life and endangering their livelihoods. Ructions followed within XR’s ranks too.

A few days later, Sarah Lunnon, a member of XR’s ‘political circle’ (sounds very hierarchical), issued this navel-gazing apology:

There is absolutely no shrinking away from the fact that we have got to learn from what happened around the tube, most especially within our own internal decision-making. Obviously we did not get that right. People have given up their jobs to join

XR: for them to be so upset and so dismayed by the action is an absolute pointer to us that we have to look again at how we make those decisions.¹⁷⁷

Warnings about agent provocateurs need to be taken seriously. We now know that between 1968 and 2008 police agents from the so-called Special Demonstration Squad, working in conjunction with MI5, infiltrated more than 1,000 political, environmental and campaign groups. There is, of course, a long history of spycops going back to at least the 1790s and the London Correspondence Society.¹⁷⁸

Each SDS police agent “was specially trained and had an entire ‘legend’ (a believable back-story to go with their fake persona), as well as matching documentation, including driving licences, passports and bank accounts”.¹⁷⁹ Beginning with the infiltration of the Vietnam Solidarity Campaign in 1968, the SDS expanded its remit “far beyond the anti-war movement”. It was known as ‘The Hairies’ - because its agents grew their hair long to fit in with the youthful, rebellious, male fashion of the day.

Over the next 40 years, the SDS targeted groups spanning more or less the entire spectrum of leftish opinion: Animal Liberation Front, Red Action, CND, Communist Party of England (M-L), Revolutionary Communist Group, Revolutionary Communist Tendency, London Greenpeace, SWP, Anti-Nazi League, Anti-Apartheid Movement, Anti-Internment League, Independent Labour Party, Housmans Bookshop, Sinn Féin London, Young Liberals, Women’s Liberation Front, even the Wombles!

Many of the spycops entered, engaged in, “damaging” sexual relationships with female members of such organisations - yes, they were mostly men.¹⁸⁰ There were more than hurt feelings involved though ... there were children too.

As for the CPGB, once it was founded, in 1920, it had “the full panoply of state power swiftly arrayed against it”.¹⁸¹ A whole MI5 department, F division, was dedicated to securing detailed information, infiltrating, disrupting and securing a constant supply of well-placed turncoats.

True, the SDS was “wound down” in 2008, but its activities were continued by a very similar undercover ‘domestic extremism’ unit -

the National Public Order Intelligence Unit, founded in 1999.¹⁸²

And, remember this, the tsarist secret police, the *okhrana*, not only infiltrated the left: two of its agents - Evno Azef (St Petersburg) and Zinaida Zhuchenko (Moscow) - effectively took “control” of the Socialist Revolutionary Party’s armed wing, the Combat Organisation, which, beginning in 1902, carried out numerous shootings and bomb attacks on hated high officials (including royals).¹⁸³ Given Russian conditions, these acts of revenge excited people, evoked widespread sympathy and briefly fired hopes. Yet, the moment quickly passed. A new minister was duly appointed, life continued as before and, of course, police oppression grew more intense and more savage. After the round-up of dedicated militants, show trials, prison sentences and executions, demoralisation sank into SR ranks. No-one could trust anyone. The Combat Organisation was finally dissolved in 1911.

Frustration with the *failure* of sending letters, signing petitions, demonstrating and staging sit-downs on Thames bridges and symbolic West End spaces will provide the human raw material in what, unbeknown to them, could easily be (even if somewhere down the line) a deep-state operation specifically designed to isolate, discredit and finish-off “the movement”. Citing the need for urgent action, XRs co-founder, Roger Hallam, has already peeled off with Insulate Britain. Others to Just Stop Oil.

How to respond to the climate crisis? The danger is that leaders (including agent provocateurs) will demand ever more spectacular minority actions ... which lead either to the *growth* of passive and active opponents or, ironically, justification for a thoroughly statist climate socialism - along with the suppression of democratic rights and a new age of austerity for the great mass of the population.

Surely another course is needed.

On the dark side

Greenism often imagines itself appealing to the “ecologically aware” and going beyond antiquated modes of “debate” such as “left/right, poor/rich, north/south”.¹⁸⁴ While green intellectuals were doubtlessly amongst the forefront of those warning of an ecological crisis, they fail - as already noted - when it comes to offering a realistic social agent capable of carrying through the complete social transformation needed to achieve a sustainable balance between nature and human society.

As a result, greenism easily slips into Malthusianism, elitism, desperate sabotage actions and worse. From first-hand experience, Derek Wall - once joint principal speaker of the Green Party - warns that greenism is “ripe for *reappropriation* by softly-spoken Nazis, who articulate a rhetoric of decentralisation, justice and the rural, while seeking to build insular authoritarian communities based on atavistic notions of blood and soil and anti-Semitic hatred”.¹⁸⁵ Presumably, he had David Icke in mind - till 1991 one of four Green Party spokespersons. Of course, these days Icke attracts huge online audiences who appear to lap up his crazy stuff about the Illuminati, reptoid humanoids and blood-sucking, Satan-worshipping Rothschilds.

David Icke’s babblings notwithstanding, Wall’s statement might still appear strange. Even very strange. After all, today the Green Party sings from the standard soft-left hymnbook (though revealingly it has set aside its ecopacifist opposition to Nato given the war in Ukraine). Despite that, in terms of historical background,

class location and ideological outlook, there are numerous commonalities and connections that join greenism and the far right.

Let us start with the green primitivists - a viewpoint championed most famously by John Zerzan. Drawing on Theodor Adorno, amongst many others, he depicts human society as following a negative dialectic towards ever greater degrees of alienation.

Based on solid anthropological evidence, Zerzan writes that before the domestication of animals and sedentary agriculture, life was “largely one of leisure, intimacy with nature, sensual wisdom, sexual equality and health”. Abundance ruled. “This,” he says, “was our human nature ... prior to enslavement by priests, kings and bosses”.¹⁸⁶ Living ‘social fossils’ provide ample confirmation. Studies of the !Kung in Namibia and the Mbuti in the Congo reveal “economic, political and gender egalitarianism”.¹⁸⁷ Nor is there organised violence. Before the Upper Palaeolithic, society was, almost certainly, “warless”.¹⁸⁸ It is the domestication of animals, the growing of crops and the resulting social hierarchy which brings about territorial conflict, women’s oppression, slavery, mass killings and other such horrors.

A Maoist student in the 1960s, Zerzan arrived at anarchism in the 1970s. While he does not dismiss Marx entirely, he has no liking for “liberals, Marxists, members of left parties, Noam Chomsky, the anarchist left, the syndicalists, the Wobblies, all those people who think technology is fine and it just depends on how you use it and that there’s nothing wrong with development and the industrial system - it just depends who’s running it”.¹⁸⁹

Zerzan is one of quite a range of deep greens who refuse to condemn Theodore Kaczynski, the notorious Unabomber. During the 1990s the two regularly corresponded. Not that Zerzan condones Kaczynski’s violence against fellow living beings. Between 1978 and 1995 this Harvard graduate and mathematical protégé was responsible for a campaign of letter bombs, targeting people involved in high tech. Three died, another 23 were injured. Kaczynski thought he was about to trigger a revolution against industrialisation and ecological destruction. He issued a 35,000-word manifesto, *Industrial society and its future* (1995). Politically naive, it goes without saying. He had no time for “leftists”, whom he dismissed as “oversocialised” and suffering from “low self-

esteem".¹⁹⁰ Quite rightly though, Kaczynski refused to plead insanity at his trial. He took full responsibility for his actions.

Zerzan shot to fame in the aftermath of the 1999 Seattle World Trade Organisation protests. After that he found himself widely read, much sought after by mainstream journalists and even doing international speaking tours (otherwise Zerzan committed to the simple life: no car, no credit card, no computer). Not that he looked to protest demonstrations alone to usher in fundamental change. Amongst his models of how to 'crack the system' are the cynics of classical Greece and Rome. They ate discarded or begged food, slept in the open and defecated in public. Other inspirations include the pantheistic Brothers and Sisters of the Free Spirit of the 12th-15th centuries, the 17th century Levellers and Diggers and the 19th century Luddites.¹⁹¹

Recoiling from wage-slavery, the dehumanising kitsch of commercialism and capitalism's drive to ecocide, Zerzan, along with other green primitives, looks to the feral as the key to salvation - part elegy for a lost golden age, part ghastly future menace.

The promised land of green primitives is the endless wilderness. Suitably humbled, a repentant humanity returns to the Palaeolithic ways of our ancestors and lives in perfect harmony with nature. The goal is a near zero ecological footprint. Industry and even peasant agriculture are damned as unsustainable and unnatural.

To achieve their future, green primitives concoct various plans for a stage-by-stage escape from the "10,000 years of darkness and captivity".¹⁹² Zerzan proposes abandonments. The international trade in food gives way to local production; urban centres to living in the countryside; cold northern zones to migrating to warmer southern climes; the division of labour to self-reliant individualism; agriculture back to hunter-gathering.

Towards that end Earth First and Deep Green Resistance actively seek to dismantle industrial civilisation. There can be no slow or soft shift to a sustainable future. Mainstream ecological activism is dismissed as largely ineffective. Instead they started attacking the *things* that threaten the planet. Oil pipelines were blown up, logging companies disrupted, and power stations put out of action.

Subjectivism is, in general, the dominant narrative. The origins of the ecological crisis facing the planet lie in human belief systems,

be they religious, philosophical or scientific. The Judeo-Christian world view, dualist Cartesian philosophy and western science are said to foster a mindset that seeks to dominate nature. Having located the origins of the ecological crisis in the sphere of ideology, Zerzan dismisses the possibility of social causes as crude materialism.

Purportedly, humanity's fall from grace began with "symbolic culture" - language, art, religion, mathematics, etc.¹⁹³ So one madcap schema is to get back to when our species was not human: ie, not cultural, but animal. Implementing such a complete evacuation from the modern human condition in anything like a meaningful time span would, however, necessitate a reduction of the global population not by a half or two-thirds - pale green timidity! Rather what the green primitivists appear to have in mind is more like a 99% cull. Estimates, when it comes to the distant past, can only but be heroic guesses. That said, it is reckoned that in the Palaeolithic there were no more than 300,000 of us humans living across the whole of the planet.¹⁹⁴

Undaunted, green primitives ask us to open our machine-closed minds to the wonderful vistas of the past and make it our model for the future. Crystal-clean air without a hint or trace of industrial pollution; seas teeming with plankton, squid, fish, whale, dolphin, seal and turtle. Forests once again covering vast tracts of Eurasia and North America; they are home to abundant deer, elk, wild pig, bear and, at the top of the feeding chain, packs of wolves, prowling tigers and other big cats. In the African Savannah the grasslands are roamed by millions of elephants, rhinos, hyenas and lions and packed full of zebras, wildebeest and antelopes. In the lowland areas of Eurasia, stretching as far as the eye can see, there are reedy marshlands where, each spring and autumn, huge flocks of migrating birds turn the sky black in their uncountable numbers.

Wandering through this earthly paradise, organised in little tribal bands, are the descendants of the green primitives. Maybe 10 million, maybe 20 million of them. Living in tune with their environment, they are physically fit, consume a tremendous variety of different plants and animals and know none of our modern diseases, such as measles, smallpox or the common cold (in order to spread and therefore survive, the pathogens responsible for such diseases require a host population that is sufficiently numerous and

sufficiently concentrated¹⁹⁵).

Hunting and gathering occupy the band only for comparatively brief periods of time. Most of the day is taken up with cooking, eating, relaxing, sleeping and playing. Numerous dangers confront them. While life is on average relatively short, the pleasures and compensations are many.

However, what about those missing billions? The unchosen? Suddenly, it is not idyllic images that come to mind. Instead it is Dachau, Belsen and Auschwitz. Attempting to impose a primitivist solution on the unchosen, retracing even the first steps back to “Edenic beginnings”, requires hell.¹⁹⁶ A strong state would have to be made or captured; a fanatical cadre recruited and trained. Forced sterilisation and surely mass extermination follows. All the crimes of the murderous 20th century pale into utter insignificance. Without such a concentrated moment of horror, the utopian dreams of the green primitives will forever go unrealised.

According to Marxism, especially in the seminal writings of Leon Trotsky, the category ‘fascism’ specifically defines those parties or movements which recruit, or actively seek to recruit, a desperate, enraged and disorientated plebeian mass, crucially in order to fashion them into a counterrevolutionary battering ram: the overriding aim being to smash the organised working class.

Other usages are more casual. Far too casual. Fascist or fascism becomes a crude insult. A swear word. Donald Trump, Margaret Thatcher, Augusto Pinochet and Mustafa Kemal Atatürk have all been routinely labelled fascist. Old Etonian duffers and foul-mouthed Alf Garnetts, the police and prison wardens, even Fox News and GB News, become fascist too. The emotion, the desire to condemn, the righteous indignation are all there. But it hardly counts as Marxism.

If we put fascism back onto a proper, scientific footing, modernday organisations such as Golden Dawn in Greece, Turkey’s Grey Wolves and India’s Rashtriya Swayamsevak Sangh certainly fit the bill. But what about greenism?

Derek Wall has already been quoted. Then there is the leftist academic, Naomi Klein. This supposed intellectual ‘godmother’ of the Green New Deal fears that “unless something significant

changes in how our societies rise to the ecological crisis, we are going to see ... white-power eco-fascism emerge with much greater frequency, as a ferocious rationalisation for refusing to live up to our collective climate responsibilities”.¹⁹⁷

Leave aside the USA and its buzzing swarm of ‘back to nature’ militias, survivalists and preppers. Across Europe important sections of the far right are shifting away from the climate denialism of Donald Trump, Jair Bolsonaro and Nigel Farage. Instead, they are (re)learning the language of greenism.

In May 2019, Marine Le Pen issued a National Rally election manifesto calling for a Europe of nations to become the world’s “first ecological civilisation” (ironically a term first coined by Soviet “environmental experts” in 1984¹⁹⁸). The new Euro paradigm owes everything to the old nativist and localist paradigm, though. Ethnic minorities and migrants are pictured as a parasitic, invasive species. Ecoborderism is the solution ... or, as Le Pen’s spokesperson, Jordan Bardella, declared, “borders are the environment’s greatest ally ... it is through them that we will save the planet”.¹⁹⁹

The Freedom Party in Austria has undertaken a similar U-turn. Having become leader, Norbert Hofer declared that he wanted to recolour the FPÖ from blue to green and make it “the” climate protection party.²⁰⁰ Now the FPÖ website bluntly states that “climate change is reality and cannot be denied”.

Fidesz in Hungary, Lega in Italy, the National Alliance in Latvia and Vox in Spain - all have, to one degree or another, greened their xenophobic nationalism. Ominously, in the May 2019 European Union elections, the far-right Identity and Democracy bloc gained 73 MEPs and became the fifth biggest grouping in the European parliament.²⁰¹

Patriotic Alternative, Local Matters and Britain First certainly experience not the least trouble in demanding “resolute action to protect, nurture and preserve our native environment, countryside and areas of natural beauty”.²⁰² The British National Party even claims to be:

this nation’s only true green party, which has policies that will actually save the environment ... Unlike the fake ‘greens’, who are merely a front for the far left, the BNP is the only party

to recognise that overpopulation - whose primary driver is immigration, as revealed by the government's own figures - is the cause of the destruction of our environment.²⁰³

What about fascism *qua* fascism? There is, of course, a long history of feudal and conservative greenism tipping over into the politics of counterrevolution, including overt fascism. The Soil Association in Britain included Jorian Jenks amongst its core founders. He edited its journal *Mother Earth* till his death in 1963 and he is still considered something of a mentor even to this day. However, in the mid-1930s he became a regular contributor to the *Blackshirt* and stood as a candidate for the British Union of Fascists. He served as its advisor on agriculture: "fascism alone could make agriculture prosperous again".²⁰⁴ Jenks advocated autarchy and import controls. Owners who misused the land would find it subject to compulsory purchase. Throughout the rest of his life Jenks remained a close associate and disciple of Oswald Mosley.

Arthur Kenneth Chesterton, brother of the famous novelist, was likewise closely associated with far-right environmentalism during the 1930s. However, he concluded that Mosley had gone soft on the Jews and decided to go his own way. In 1938 he helped found the National Socialist League. Fittingly he was elected chair of the National Front at its foundation conference in February 1967.

Not surprisingly the example of Germany is especially instructive. In the late 19th century the country underwent a process of rapid industrialisation. That resulted in massive social dislocation and the ruination of a whole layer of the German middle classes.

One response to capitalist progress and the dreadful prospect of becoming a 'salary man', a mere dehumanised cog, was the 'back to nature' movement. Anti-capitalism interwove with rightwing *Volk* politics and ideas of a revived paganism. Young men, particularly students, joined the German Youth Movement, the Wandervögel (roughly 'free spirits' or 'rovers'). Membership rapidly grew and reached the tens of thousands. Trekking through forests, climbing hills and mountains, camping under the stars, linking arms and singing old German songs, these petty bourgeois rebels sought escape from the crushing conformity of capitalist society through the achievement of a mystical oneness with nature. There was a

strong undercurrent of homoeroticism. In this spirit they instituted the custom of greeting each other by proclaiming 'Heil'.

All in all, a hopeless escape attempt. The stress was always on individual transformation. Wandervögel was itself "a hodgepodge of counter-cultural elements, blending neo-romanticism, eastern philosophies, nature mysticism, hostility to reason and a ... search for authentic, non-alienated social relations". No wonder some wags have characterised it as an organisation of 'rightwing hippies'. That said, on the positive side, its back-to-nature cult "spurred a passionate sensitivity to the natural world and the damage it suffered".²⁰⁵

Many contemporary concerns were anticipated by Wandervögel's thinkers - Ludwig Klages being particularly notable. The extinction of species, upsetting the global ecological balance, deforestation, the destruction of natural habitats, urban sprawl, the disjuncture between humanity and nature and how 'civilisation' was finishing off aboriginal people in Australia, Polynesia and Africa were all excoriated. He even condemns the "destruction" wrought by the "tourist trade".²⁰⁶ All this before 1914!

But, as already suggested, there was, though, another, much darker side to Wandervögel. Most were overt racists and many viciously anti-Semitic. Klages's outrage against capitalism's degradation of nature certainly ran alongside an obnoxious anti-Semitism. Not without justification he has been credited with being the intellectual precursor of Nazism and the Third Reich.

Janet Biehl and Peter Staudenmaier, the Bookchinite authors of *Ecofascism* (1996) argue that any "wholesale indictment of reason cannot help but have savage political implications".²⁰⁷ By definition the door is slammed shut on democracy and any prospect of consciously reconstructing society and its relationship with nature. At the same time such irrationalism is prone to the most brutal anti-humanism.

With the outbreak of World War I, patriotic youth flocked to the colours and what they saw as a glorious national crusade. Wandervögel fragmented - along religious and political lines - but continued after the cataclysm. A few strands headed towards Marxism. There were social democratic and communist youth movements in the 1920s. However, most were irredeemably locked

into the orbit of the far right and eventually spiralled into the black hole of Nazism. Nature worship fused with Führer worship.

Wandervögel left a considerable ideological imprint in the collective imagination, which Adolf Hitler both psychologically internalised and successfully harnessed. He too spoke in the language of deep greenism.

Hitler took it for granted that humanity was biologically divided and destined to an eternal struggle of race against race, nation against nation. Biological categories were mapped onto social categories. History thereby became part of the “struggle for existence that produces the selection of the fittest”.²⁰⁸ Only the strongest races and nations survive. The weak must perish ... or be exterminated. Logically then, as politics is nature and nature is struggle, “it is useful to know the laws of nature - for that enables us to obey them”.²⁰⁹ That is why, for Hitler, class politics were such an abomination: class is pitted against class; the *Volk* is divided; the nation is weakened. That crime against nature’s immutable laws, which saw national humiliation in 1918, had to be finally ended.

The ethnocide perpetrated against the Jews was inevitably justified through biological determinism. Supposedly, the Jews were an alien species and were, as such, responsible for generating class politics: on the one side the politics of the workers’ movement and on the other side the politics of finance capital. Once a people rid themselves of the Jews, then it can “return spontaneously to the natural order”.²¹⁰

Undoubtedly the most sophisticated exponent of far-right greenism was the philosopher, Martin Heidegger (1889-1976). He is still widely celebrated as a precursor of modern ecological thinking. On the basis of his rejection of the cult of technology as an index of progress and denial of anthropocentric humanism, deep greens put Heidegger onto the pantheon of the giants.

A jaundiced critic of the Enlightenment, Heidegger preached the virtues of ‘authentic being’. His critique of humanism, his call to “let things be”, his notion that humanity is engaged in a “play” or “dance” with earth, sky and gods, his contemplative thoughts on the authentic modes of dwelling, his protest against industrial degradation of the planet, his stress on the importance of the local and the “homeland”, his call for humanity to protect and preserve

nature, instead of dominating it - all these aspects of Heidegger's thought have been used to support the claim that he is a foundational deep green.²¹¹

That despite the fact that in 1933 he became a card-carrying member of the Nazi Party! This was no calculated ruse designed to further an academic career. Tom Rockmore cuttingly points out that Heidegger stands absolutely alone "amongst the major thinkers of the 20th century" in being a "voluntary adherent of Nazism".²¹² He insists that Heidegger's philosophy and his Nazism were "inseparable".²¹³ Surely an overstatement ... not least given the intellectual inspiration he provided for decidedly anti-fascist thinkers, such as Hannah Arendt, Jean-Paul Sartre and Herbert Marcuse.

Hitler, of course, both fuelled and fed off rightwing philosophy and the claim that western civilisation obscured the true relationship between humanity and nature. Somewhere in the course of history, our knowledge and understanding of nature had supposedly gone astray. In Hitler's warped mind the culprit was Christianity (and by inference, of course, the Jews). He viewed the last two millennia as a denial of nature.

Privately Hitler railed against the evils of Christianity - often during one of his tedious dinner parties - and expressed his longing for a new faith rooted in nature. He fervently believed that humanity - authentic *Aryan* humanity, that is - must eventually take flight from Christianity and return to nature. His alternative religion would at last realise the unity between nature and the master race: "From now on in, one may consider that there is no gap between the organic and the inorganic world." Hence salvation was to be found in the close study of nature and a religious veneration of all its manifestations and beauties. It is only "possible", insisted Hitler, "to satisfy the needs of the inner life by an intimate communion with nature".²¹⁴

Hitler's agricultural expert, and later a Reichsminister, Walther Darré, was also a nature worshipper. No ignorant Nazi bonehead though, Darré was, in fact, a highly qualified agronomist and as such advocated organic farming and a balanced relationship with nature. More than a kernel of rationality, undoubtedly. After the 1933 Nazi (counter)revolution he initiated a campaign to introduce organic farming techniques, which involved both big estates and

many tens of thousands of smallholdings throughout Germany.

Yet, under circumstances of a pending war and the urgent need to boost food production, this experiment met with stiff resistance from other members of the Nazi hierarchy. Inevitably there existed a tension between the 'battle for production' and 'keeping the soil healthy'. Significantly, Darré, with the backing of Rudolph Hess and others, was able to maintain his policy until 1942 when he resigned as agriculture minister (ostensibly for private reasons).

Darré justified the Nazi agrarian programme with numerous references to '*Blut und Boden*' (blood and soil) - a slogan which, of course, implied the unity of the race, the *Volk* and its natural environment. Anti-working class, anti-liberal and anti-modern, Darré was, though, decidedly pro-nature. While Anna Bramwell perceptively writes of Hitler's "Green Party", her biographical account is marred by a general downplaying of Darré's fascism. She sees him as a misguided green. Revealingly she has even referred to him as the "father of the greens".²¹⁵ He was, of course, an ecofascist or - put another way - a green Nazi.

Darré came to Hitler's attention after writing *The peasantry as the life source of the Nordic race* (1928) - a book which combined social-Darwinist racial theories with an idealisation of rural life. Darré advocated an organised evacuation from the swollen, heaving, suffocating cities, which were supposedly destroying the organic link between the *Volk* and nature. Other neo-pagan figures in the Nazi leadership such as Heinrich Himmler, Rudolf Hess, Fritz Todt and Alfred Rosenberg depicted cities in similarly negative terms. Urban life meant rootlessness, the intermixing of races and fomenting the *revolutionary* class struggle. Hence for Darré there had to be a systematic return to the countryside. The Nazis envisaged a re-agarianisation of greater Germany.

Peasants were lauded as the bedrock of the German race. Hitler actively sought to resuscitate this historically doomed class. Agricultural prices were fixed. Aryan farms were decreed as unalienable. Then there was the policy of territorial expansion. In December 1942 the Nazi regime issued a characteristic decree, 'On the treatment of the land in the eastern territories' - a reference to the newly annexed portions of Poland.

It read in part: "The peasant of our racial stock has always

carefully endeavoured to increase the natural powers of the soil, plants and animals, and to preserve the balance of the whole of nature.” For Hitler, respect for “divine creation is the ‘measure of all culture’”.²¹⁶

Unwilling to break up the great Junker estates in Prussia, Hitler promised still further *Lebensraum* (living space) deep into Russia as far as the Urals (Germany’s ‘India’). Conquered lands would be cleared of Slavic *Untermenschen* and planted with a new generation of Aryan farmers. According to Nazi ideology, this would guarantee the naturalism and racial regeneration of the German nation.

The lived experience of Germany amply illustrates the potential dangers of green politics. It is not that concerns for the environment inevitably result in rightwing or fascist conclusions. Of course not - nothing could be further from the truth. There are many possibilities.

The past as the future

Almost without exception, greens of every stripe, variety and hue display a romantic fondness for the past. They did things better then.

Modern feudal greens such as Edward Goldsmith imagined an England returning to the purported social stability and ecology of contented serfs, loyal vassals, chaste damsels, gallant knights, Christian alms-giving and strong monarchs. Essentially, an echo of the already mentioned Young England movement in the 19th century:

Each knew his place - king, peasant, peer or priest -
 The greatest owned connection with the least;
 From rank to rank the generous feeling ran,
 And linked society as man to man.
 (Lord Manners *England's trust* 1841)²¹⁷

Feudalism's inherent split between the lords secular and the lords spiritual, the endemic conflict between landholder and peasant, the incessant warfare, recurring famines, devastating outbursts of plague, the social explosions, the transmission of communistic ideas through countless hedgerow priests - all that is forgotten, overlooked or denied. True, 19th century capitalism is denounced because of slums, social dislocation and ecological destruction. But equally, feudal greens castigate mass migration, the spread of irreligion, trade union strike action and the countervailing power of working class socialism. Humanity must obey nature's iron laws ...

which seem to have been fixed some time in the 13th century.

Ecofascism adheres to a not dissimilar agenda. Alike, Britain First, Patriotic Alternative, National Action, the National Front and the BNP want to put an end to black and brown migration, red subversion and politically correct, white-liberal guilt. That way, the destruction of so-called traditional industry and traditional farming by cosmopolitan finance capital will be stopped and reversed. That way, Britain will be made great again.

The Green Party likewise aspires to slay the cosmopolitan dragon. It is the local which is venerated and must be preserved. In the name of sustainability the ideal is small shops, small farms and small-scale artisan production. That way, the country will be made eco-friendly.

Then there are the nature-worshipping deep greens. At least their immediate perspectives are not confined by suffocating national boundaries. Industry, agriculture, science and civilisation itself are all denounced as crimes. The solution is global. But the final destination is decidedly parochial - back to Mother Earth's womb.

Dropping out, squatting, heading off from one protest action to another, volunteering for an international NGO, spending the winter somewhere warm to stop forest destruction - all are lauded as admirable life-style choices by deep greens. Hardly practical, though, for the vast majority of the population. Nonetheless, a withdrawalist minority go still further. The Gandhian writer, Mark Boyle, boasts of doing without modern gadgets, the national grid, conventional medicines, credit cards and money, in books such as *The moneyless man* (2010) and *The way home* (2019). Others mimic the ceremonies, trappings and belief-systems of imagined Druids, nomadic Africans or native North Americans - a dippy, mad-cap, entirely unconvincing return to the past. Animals, plants, the rocks themselves, are once again ascribed human qualities and feelings. A new paganism, but entirely fake. Anthropologists write of "fiction, parody and play".²¹⁸

With a yawning predictability, Earth First! presents itself *not* as a "formally organised group", but an "anti-hierarchical" movement, based on the hunter-gather "tribe". In fact, behind the horizontal facade, two, ludicrous, "governing structures" operate: (1) the Circle of Darkness, consisting of 12 individuals; (2) *La Manta*

Mojada, made up of eight advisors to the Circle, who, because they come from “moderate conservative groups”, keep their names secret.²¹⁹ A deep-green version of Mikhail Bakunin’s hand-picked, invisible and entirely unaccountable revolutionary “general staff”.²²⁰

Some green primitives look back further still. Much further. The Upper Palaeolithic and maybe even before that. Before language. Before symbolic culture. Either way, the past is upheld as a shining example to strive towards. The supposed harmony of prehistoric hominids with their environment is enthusiastically contrasted with capitalism’s inherent short-termism. Whereas capitalism affords nature no value, the life of our long-gone ancestors is praised as having the lightest of light ecological footprints.

A couple of examples will suffice to underline the point. David Orton (1934-2011) - former Maoist and founder of ‘left-biocentrism’ - advocated “the necessity for an Earth-centred spiritual transformation”, so that human interests are placed in a context of “respect for all other species and using past animistic societies as possible models, from which much can be learnt”.²²¹ In particular, he has the North American native populations in mind.

Likewise, according to ecofeminist Charlene Spretnak,

The roots of green in American culture reach back to our earliest origins. For more than 20,000 years native Americans have maintained a deeply ecological sense of the subtle forces that link humans and nature, always emphasising the need for balance and for reverence toward mother Earth.²²²

Essentially, the claim is that native American religion and its shamans interpreted/resolved problems encountered with the environment. Hence, it is said that animals possess a spirit which has to be respected. If appropriate rituals are observed, they will freely give themselves to hunters. There existed a paralysing fear of ‘spiritual reprisal’ if rituals were not followed. This limits the take. Some greens admiringly call this ‘deep stewardship’. A term dismissed as “arrogance” by the deepest of deep greens.²²³

Besides native North Americans, praise is lavished on native Hawaiians, Amazonian Amerindians, Australian aborigines and the indigenous peoples of just about every continent, country and

region. There is no need to further quote the academic champions and deep-green admirers. The claim that the ‘noble savage’ lived in near perfect balance with nature and should therefore be considered some kind of model is widespread and well known.

Philosophically, the idea of the noble savage has a long history, but surely the most celebrated comes with the works of Jean-Jacques Rousseau (1712-78). For him the family and society of tribal peoples is the “only one that is natural”.²²⁴ There were others, of course, before him who attempted to describe human beings in their ‘natural state’ - Thomas Hobbes (1588-1679) and John Locke (1632-1704) being particularly notable, not least because they appear at first glance to represent polar opposites.

The accounts of both Hobbes and Locke rely on discovering - or more accurately, logically making a case for - humanity in its primeval or pristine state. The claim being that this would reveal the human essence; what is fundamental, what is universal and what is unchanging about our species. Suitably informed, the great thinkers could then loftily recommend, announce, which form of governance best suits human society.

In *Leviathan* (1651) Hobbes proposes that humans are naturally selfish - everyday experience told him that. People lie, people cheat, people even kill each other for seemingly trivial reasons. Without the order brought about by the invention of the state and its laws there is a war of ‘each against each’ and ‘each against all’. Life under natural conditions is therefore “poore, nasty, brutish and short”.²²⁵ This idea is given ‘scientific’ credentials nowadays by evolutionary psychologists such as Harvard professor Steven Pinker: the “logic of violence” pervades human affairs, and humans have spent almost their entire time on this planet locked into violent struggle. Invoking Hobbes, Pinker agrees that the “natural state of men, before they entered into society, was a mere war, and that not simply, but a war of all men against all men”.²²⁶ Bluntly, for Pinker, the state serves to rein in innate *male* aggression. As a result of its benevolent role, human societies become increasingly peaceful.

Actually the evidence shows exactly the opposite picture. In their African homeland hunter-gatherer societies engaged in no organised violence. They were “warless”.²²⁷ It is the decay of egalitarianism, the oppression of women, the emergence of private

property, slavery, classes and the state which brings war.

Hobbes advocated an absolute monarchy ... albeit with sneaky caveats that conceivably left the door ajar for corrective revolutionary action. No wonder he was celebrated as the pre-eminent philosopher by neocons such as Paul Wolfowitz, Richard Perle and Lewis 'Scooter' Libby in the United States. Hobbes did not claim that his state of nature ever existed: it was the human condition without a sovereign. Thankfully, throughout history, those exercising power imposed the necessary restraints on humanity's savage impulses. Adam was monarch of all he surveyed. So too was Noah. So too was the USA post-1989-91. At least that is what Donald Rumsfeld and the neocons thought before the Iraq quagmire revealed the limits of American power.

For Locke, people in their natural state exist in "a state of perfect freedom".²²⁸ Fundamentally they are interdependent and have a natural right to life, liberty and possessions. However, in *Two treatises of government* (1689) Locke argues that the state was necessary to prevent the triumph of narrow, sectional interest over the common good - an arrangement that has to rest on consent. The state should certainly not behave in an arbitrary manner. If it goes beyond the "law", that is when "tyranny begins". The obedience subjects owe to the state can be legitimately revoked - unlike in the more rigid account of Hobbes. To the degree that the state ceases to stand guard over natural human rights - above all property - "revolutions" find their justification for Locke.²²⁹

All in all, Locke provides a sophisticated and open-ended legitimisation of the class compromise cemented between the Williamite monarchy and the landlord and capitalist appropriators of surplus value, brought about through the 1688 Glorious Revolution. But Locke's ideas have a significance beyond their particular time and the class interests that produced them. His stress on natural rights proved of particular inspirational value for the next generation of bourgeois radicals: the impact of such ideas on the American revolution of 1776 and the French revolution of 1789 is hard to overestimate.

Three things were crucial for the rising bourgeoisie. First, ending the privileging of aristocratic blood over the talent to use money to make money. Secondly, a legal (ie, through a rule-based system

backed by force of arms) defence of accumulated wealth against arbitrary extractions or confiscations by government. Thirdly, defence of that wealth from the men with no property - the levelling people, the mob, the *demos*. That is what the bourgeoisie means by liberty.

Seen in that light, the ground separating Hobbes and Locke diminishes. It is by no means as wide as it might initially appear. When all is said and done, they defend property from two different angles, advocate two different means to achieve more or less the same end. Whereas Hobbes calculated that the best guarantee for property was the order and continuity provided by the absolutist state, Locke trusted in liberalism and law itself. However, what concerns us here is not how to defend private property, but human nature itself. Over to Rousseau.

He provides his fullest account of the natural human being in his *Discourse on the origin and foundations of inequality among men* (1754). Along with Hobbes, Rousseau disagrees with the classical assumption that human beings were from the beginning social. Eg, Aristotle claims that society and the state “were natural”.²³⁰ Rousseau knows that society, above all the state, are constructs.

Like Hobbes and Locke, he too tries to discover the true nature of human beings by stripping away all the attributes commonly associated with society and the state. Human nature is equated with what humans are in a pure state of nature.

Rousseau provides an account that within itself contains two distinct arguments. On the one hand, he treats his claims for natural human beings as a metaphor. Opening his *Discourse*, Rousseau says it is unlikely that humanity ever existed in the “pure state of nature” ... though possibly they “fell back into it from some very extraordinary circumstance”.²³¹ As ‘proof’ he cites biblical revelation and the *Genesis* story where god bestows understanding upon Adam. This genuflection before orthodox Christianity is surely a safety device. Blasphemy charges were a real and ever-present danger. Despite Adam, Rousseau says he will treat humanity in the “pure state of nature” ... as a hypothesis: merely as a means of presenting his case and furthering the argument.

On the other hand, Rousseau claims that his account is genuinely historical. He cites reports of so-called savage peoples, particularly

in the Americas, relayed by explorers, traders and colonists. Amongst them, their original state, along with the first stirrings which progress humanity from nature to civil society, are, he says, empirically observable.

Rousseau then disagrees with Hobbes. After he had mentally stripped humanity of the attributes of civilisation - laws, state, tools and machines - all that was left in Hobbes's mind was brutality and constant warfare. Not for Rousseau. Brutality would mean classifying human beings *beneath* other animals. Mothers - be they human, horse or hound - exhibit the most tender feelings towards their offspring. Animals also show, says Rousseau, empathy for the sufferings of other members of their own species.

War, he further reasoned, necessitates language, pre-planning, jealousy and notions of property. Quoting the "wise" Locke, Rousseau says: "There can be no injury where there is no property."²³² Natural humanity did not possess any of these above-mentioned features, reckons Rousseau. Language, jealousy and property come not directly from nature: they develop historically. Once again in contradistinction to Hobbes, Rousseau describes natural humanity as gentle, compassionate and yet without the foresight needed to worry about what the future will bring. As for language, all they had by way of communication was the "cry of nature": grunts, screams and gestures.²³³

Not that Rousseau fails to differentiate natural human beings from other animals. Humans have free will and the capacity to progress. So in their natural condition they are animal-like, but show inklings that eventually lead towards civilised society. First, there is the patriarchal family and married love, then the hunting band and cooperation, then villages and commerce ... finally, after many thousands of years, there comes enlightened freedom. Once the circumstances arise that trigger reason, humanity begins to slowly grope towards its destiny. In this process Rousseau gives pride of place to the smelting of iron and the cultivation of corn. But there is a sting in the tail: together, iron and corn "civilised men, and ruined humanity".²³⁴ With civilisation (industry and agriculture) there arises inequality and egoism, the division of labour and property, social classes and war.

Rousseau's 'noble savage' is one of those widely misunderstood

phrases. It surely rates alongside Marx's humorous put-down of Paul Lafargue, his son-in-law, that if what he was saying was Marxism then he was no Marxist: "*Ce qu'il y a de certain c'est que moi je ne suis pas Marxiste*".²³⁵ Lafargue and other socialists in France had in the name of 'Marxism' been peddling a particularly vulgar form of materialism, which posited various opportunist short cuts to socialism. Out of such scraps various Marxologists have created a whole system, whereby the use of the term 'Marxist' becomes unMarxist.²³⁶

Rousseau conceived humanity as being naturally good; the 'noble savage' is free from the vices that plague his society. However, and this needs emphasising, Rousseau is not advocating a return to nature - a viewpoint attributed to him by others, including contemporaries such as Voltaire (1694-1778). Human beings in the state of nature are amoral. They are childlike; neither virtuous nor vicious. Humans develop civilisation stage by stage ... thereby they can proceed from "no moral relations" to becoming a "moral being" - a theme elaborated in *The social contract* (1762).

Nevertheless, according to Rousseau, during the first stages of civilisation those who had most - and most to lose - supposedly offered a deal to protect everyone. A cynical trick: it proved to be nothing more than a ruse whereby the powerful keep their riches by fooling the rest into accepting unfreedom. Rousseau imaginatively pictures the scene:

All ran headlong to their chains, in hopes of securing their liberty; for they had just wit enough to perceive the advantages of political institutions, without experience enough to enable them to foresee the dangers. The most capable of foreseeing the dangers were the very persons who expected to benefit by them; and even the most prudent judged it not inexpedient to sacrifice one part of their freedom to ensure the rest; as a wounded man has his arm cut off to save the rest of his body.²³⁷

Rousseau outlined a new, just social contract: an abstract one. His benign state reflects the general will and plays a vital role in securing liberty and equality. However, capitalist exchange continues unaffected, as does the master-servant relationship. He

also - conveniently, understandably but egoistically - elevates the educator above society. Rousseau's social contract is, therefore, in the final analysis, revolutionary-conservative. Certainly what is lacking is a viable social agent for change. Rousseau's approach reflects the frustrations, contradictions and limitations of his own social position: well-connected with those above, who considered him their social inferior; isolated from those below, whom he considered his social inferiors.

Many rightwing ideologues take an almost puerile delight in making the claim that there exists some unbroken thread joining "Rousseau's appeal for a return to nature" with the Marx-Engels team. The Anglo-Austrian exponent of so-called free-market capitalism, Friedrich von Hayek (1899-1992), being not the least amongst them.²³⁸

True, both Rousseau and Marxism dismiss the 'natural' claims of property; true, both Rousseau and Marxism hold that society is the main cause of social ills. Logically that posits social solutions. But Marx and Engels did not believe in Rousseau's 'noble savage', nor the idea that humanity begins as a *tabula rasa*. They mocked all such 'just-so stories'. Marx dismissively called them "Robinsonades".²³⁹

Marx and Engels did write about "human nature" and "species being". Such phrases, or their near equivalent, pepper their works from the *German ideology* to *Capital* (they produced no systematic account). But for Marx and Engels these concepts are not spun out of thin air. Nor are they inherited unchanged from the speculations of their philosophical predecessors. Marx and Engels do not rely on a primordial account of the first humans as being either horribly selfish or marvelously altruistic. Rather what is being referred to when they write of human nature is needs, desires, abilities, interrelationships and potentialities.

Like animals, humans are flesh, blood and bone, must regularly drink and consume food; they too have a sex drive and reproduce according to the basic laws of mammalian biology. In that sense alone human nature lies outside history. However, the needs, desires, abilities, interrelationships and potentialities of humanity distinguish it from other animals. As conscious beings there is nothing fixed about human nature. Needs, desires, abilities, interrelationships and potentialities are malleable, can be extended and become something

else. Humans make themselves through practice and they do so within the whole matrix of historically determined circumstances. Each epoch, each social formation has its own particular effect.

History is therefore the continuous transformation of human nature - something which by definition concerns both human beings themselves and the objects they make and use. Eg, all human beings have a vital requirement to eat food. But there is a huge difference between a little group of *Homo erectus* hunter-gatherers huddling around a protective camp fire and cooking bits of scavenged meat, and modern-day city dwellers sitting in front of a wall TV and ordering pizza over their smart phone.

Human nature is fluid and is realised through society and a transformed nature. Between humanity (itself part of nature, of course) and the objects it fashions there is an *internal* relationship. This is what Marxism understands by human nature and why human nature involves the relationship between the individual and nature, and the individual with society.

Each individual member of the human species is conscious of themselves as a member of that species and relies upon others for their humanity - therefore humanity is fundamentally sociable. However, private property distorts individual and collective development. It makes humans one-sided. Possession becomes the main goal of life. Once money becomes capital, the human personality is further impoverished. What is innate is subordinated, put into the service of the outward world of accumulation and narrow self-interest.

The supersession of capital is therefore the “complete *emancipation* of all human senses and qualities, but it is this emancipation precisely because these senses and attributes have become, subjectively and objectively, human”.²⁴⁰ Marx tellingly remarks that the human senses under communism become in their practice *theoreticians*. Correspondingly, the objects of nature are viewed as themselves - not simply as a way of taking possession of them. Egoism gives way to the full richness of the human personality. To become fully individual is therefore to become fully social and vice versa. Marx says that communism, as the positive transcendence of alienation, is the “complete return of man to himself as a social (ie, human) being”. A return which genuinely resolves the “conflict between man and nature and between man

and man”, and the individual and society.²⁴¹

This return is not a going backwards. It is a dialectical return that resembles a spiral: hence it is a return, but on a higher level. A crucial point. Class bias, intellectual prostitution or sheer stupidity (sometimes they amount to the same thing) sees a widespread failure to grasp this elementary proposition of Marxism. Hence the doubly ignorant rightwing accusations of Rousseauism - doubly ignorant because Rousseau is himself charged with wanting to go backwards.

Breezily, the same critics of Marxism tell us with the utmost self-assurance that there can only be further progress on capitalist terms. Egoism is accepted as natural (a baseless ideological assumption). More than that, egoism is celebrated as the main motor of wealth generation. By the same measure, empty promises are made that third-world poverty will be made history if only their governments obey the diktats of the International Monetary Fund and World Bank (that or buy into China’s neo-imperialist Belt and Road initiative).

Either capitalism, we are told, or a violation of the laws of nature. The dialectical view of history completely passes them by: dismissed as impossible to understand, utopian dreamery or more often than not cynically, dumbly, attacked as a wish to re-enact Stalin’s gulags, Mao’s great famine and Pol Pot’s killing fields.

Marxism is a project to return humanity to humanity, yes, but that neither posits nor implies a return to the past. Marx-Engels expressed a definite - even a glowing - admiration for many features of primitive (ie, original) communism. But they had no wish to relive humanity’s past. That prospect is entirely illusory. As Marx wrote in the first version of *Capital* (1857-58),

An adult cannot become a child again or he becomes childish. But does not the naivete of the child give him pleasure? ... Why should not the historical childhood of humanity, where it attained its most beautiful form, exert an eternal charm as a stage that will never recur?²⁴²

In that spirit, Engels, following the anthropologist, Lewis Henry Morgan, says this in his *Origin of the family, private property and the state* (1884):

The shabbiest police servant in the civilised state has more ‘authority’ than all the organs of gentile society put together; but the most powerful prince and the greatest statesman or commander of civilisation might envy the humblest of the gentile chief for the unforced and undisputed respect paid to him. The one stands in the midst of society; the other is forced to attempt to represent something outside and above it.²⁴³

Original communism knows no standing army or tax-collecting officials, no laws or lawyers, no judges or police, no prisoners or prison walls - the basic apparatus of the modern state. Nevertheless, though lacking these Hobbesian restraints, there was neither hopeless disorder nor an unending war of each against all. Society functioned, and functioned perfectly well, for many tens of thousands of years. For the vast bulk of humanity’s time on this planet we lived under conditions of plenty, moving on when conditions required and doing relatively little necessary labour. It was all done peacefully and very successfully. It was communist humanity which danced, sang, invented language and fanned out from the African Eden into Asia, Australia, Europe and finally the Americas.

The human revolution triumphed some 250,000 years ago - a defining social moment, albeit taking some time to finally complete. It was in all probability led by women, acting in conjunction with their brothers and sons. The hitherto existing system of alpha-male domination was overthrown.²⁴⁴

Unsurprisingly, therefore, the individual under original communism did not act without restraint. They did not have individual free choice over every aspect of their life, true - a bourgeois illusion. There were definite boundaries in terms of behaviour, often established through restrictive customs and taboos, along with a deeply ingrained moral sense of what is right and what is wrong.

Nor did original communism enjoy ‘natural’ Lockean private property. Land was viewed as no different to the air and sky. Hunting was done by adult males in the group and the kill was handed over to the women for cooking and then divided. The best hunters were often served last. A militant egalitarianism ruled. Eating your own

kill before it was cooked by the women was certainly taboo.

The community of women was central. Married couples cohabited - in women's spaces - for a couple of weeks in life's moon-governed monthly cycle. Not surprisingly then, women were more than respected. They played the lead role in festivals, marriage arrangements and making group decisions. Similarly, their children, according to this same, communist ethos, were not thought to be the possessions of their fathers, but rather of the community of women (till, with males, adulthood).

Is this not an example of worshipping the 'noble savage' and wanting to return to the past? Obviously not. Marxists are well aware of the material limitations of original communism. Conditions permitted only the partial development of the individual personality. In fact, in terms of potential, they were stunted, and that necessarily meant relations between human beings and nature achieved some kind of sustainable balance only through a process of, often hugely destructive, trial and error.

Australia's wise aboriginal ecologists, the Amerindian nature-lovers and all the other native peoples who lived in perfect harmony with their environment are in many ways creations of the green imagination. Upon closer examination they turn out to be altogether more problematic.

Nothing in prehistory remotely compares with capitalism's rape, pillage and ruination of nature. Yet pre-capitalist societies, including communistic tribal peoples, were quite capable of inflicting the most horrendous damage upon their newly discovered environments. There was overhunting, fire-stick burning, deforestation, the depletion of the soil ... and population collapse. Tribal people often managed to develop sophisticated religious myths, customs and social structures which eventually helped establish a sustainable balance between themselves and the rest of nature. Yet this - often because of their own previous actions - resulted in a much reduced and impoverished environment, which threatened their very existence. It is therefore foolish in the extreme to present tribal peoples as model stewards.

Moving out of Africa - the planet's most humanised continent, which still boasts in *comparative terms* a rich and relatively robust environment - about 80,000 years ago, we humans wrought havoc

wherever we went. Animals - unused to and unafraid of us - were slaughtered on a huge and abhorrent scale. Easy meat. Whereas in Africa humans and nature coevolved over a considerable, drawn out period, once we crossed over into Asia and from there pushed into the other four habitable continents, our ancestors amounted to a hugely destructive - yes, alien - species.

The first humans reached northern Australia from Timor about 65,000 years ago.²⁴⁵ By the time the whole continent had been colonised from shore to shore, it had been thoroughly - negatively - transformed. Before human habitation Australia had been home to an astonishing variety of now extinct megafauna. Amongst them were some of the biggest reptilian and mammalian carnivores the planet has ever seen. Eg, a marsupial lion, *thylacoleo carnifex*, weighed about 160kg - the equivalent of the sabre-toothed tiger. The *thylacoleo carnifex* seems to have specialised in hunting marsupial herbivores, such as the diprotodon - an animal as big as the modern rhinoceros. Another species was the enormous wombat, *phascolonus gigas*. There was also a huge bird, over eight foot tall, commonly called the thunderbird, the dromornithid, which weighed up to 240kg.

Why did these animals suddenly become extinct? Some have blamed climate change. But Australia's climate was relatively mild and wet some 50,000 years ago. So aridity was not the cause. Most experts pinpoint us humans. We were responsible for wiping out most of the megafauna. Of course, there have always been extinctions. But the first humans in Australia had an effect similar to an asteroid strike. The extinction rate was speeded up a thousandfold.

What went for the megafauna also went for the flora. Australia's aborigines regularly burnt whole chunks of the landscape. That encouraged new, verdant growth of certain plants and attracted desired game animals. However, it simultaneously saw a general degradation. A whole range of trees and shrubs *entirely* disappeared. Moreover, given Australia's thin soils and precarious ecosystem, there was rapid erosion of the topsoil and a resulting desertification throughout the western continental interior.²⁴⁶

In this continent of ghosts, the 'first nation' aborigines cleverly learnt to survive by preserving what remained - albeit through

carrying out a counterrevolution within the revolution. Males seized hold of female magic; women were oppressed; the sacred monthly hunting cycle was overthrown - otherwise there would have been extinction. Australia's tribes henceforth religiously copied the newly established ways of their male ancestors. Life was thereafter circular and customary, not innovative and expansive.

This was the impoverished, but relatively stable, situation encountered by 19th century British migrants. Into the empty ecological spaces created by the aboriginal entry millennia before, they consciously or accidentally introduced rats, foxes and rabbits into the wild (and farmed masses of domestic sheep). All this significantly further degraded the environment. With plenty of vacant niches, and a degraded new equilibrium, the ecosystem was extremely vulnerable to any sudden disturbance.

To get an idea of why rats, foxes and rabbits have impacted on Australia in such a way, take the Serengeti in Africa today. Probably central Australia looked something like that before we humans arrived. Imagine what would happen if rats, foxes or rabbits were introduced into the Serengeti environment today. They would surely quickly perish. Long before they could reproduce, the chances are that they would be sniffed out, chased down and gobbled up as an easy meal. Everything tells us that they would be comprehensively outcompeted by the imbedded native species, which are far better adapted to the environment.

But remove the Serengeti's jackals, lions, leopards and cheetahs and all of a sudden there would be the wide spaces needed for an explosion in rat, fox and rabbit numbers. That is what happened in Australia and a similar story can be told for the Americas. There, the arrival of migrating humans from Asia was accompanied by the mass extinction of the Pleistocene megafauna (not only horses, camels, ground sloths and mammoths, but lions, sabre-tooth cats and many wolf species too). Scientific studies also show that the mass extinction and near-extinction did not finish with the disappearance of the megafauna. Local and regional extinctions, linked in many cases to human activity, continued, albeit at a slower rate.

For example, when American adventurers and trappers arrived in California during the late 18th and early 19th century, they were amazed by the superabundance of birds, elk, deer, marine mammals

and other wildlife. Scouring their books, journals and letters, greens assume that such richness represented California's natural condition - a product of the 'noble savage' and their respectful/reverential attitude towards nature and empathy for its flora and fauna.

Such a cosy assumption has been undermined by archaeological studies, which show that, far from native Americans presiding over an ecologically self-sustaining system, in which humanity and nature existed in perfect harmony because of their deep stewardship, there is another explanation. Eg, from 2,600 to around 500 years ago, some species were hunted to local extinction. Wildlife only returned in superabundance to places like California after European diseases, such as smallpox, malaria and influenza, decimated the Amerindian populations, starting in the 16th century. Around 90% of them died. Hunting pressures thereby diminished considerably. By the mid-19th century, geese and duck were so numerous that they could be killed simply by firing a random shot into the air. Or so the story goes.

Either way, there is only a *dialectical* future in the past. We must go forward.

Appendix

CPGB *Draft programme* Section 1.4. Nature

Nature is accorded no value by capital, which has but one interest - self-expansion. Capital has no intrinsic concern either for the worker or nature. Nature and the human being are nothing for capital except objects of exploitation.

Because of its never satisfied lust for profit capitalism results in the concentrated degradation of nature. Countless species of plants and animals have been driven to extinction. Many more are endangered. Deforestation, erosion of top soil, spread of deserts, overfishing of seas and oceans and anthropogenic air and water pollution have grown apace. In third-world cities that means deadly smogs, chronic bronchitis, emphysema and asthma. Huge numbers have no proper sanitation facilities and no ready access to clean drinking water.

Instead of cherishing the resources of nature there is plunder, waste, depletion and irresponsibility. Oil is criminally squandered through the car economy, huge areas of land are given over for growing biofuels, air travel booms, while public transport is typically neglected, and nuclear power is presented as the solution to global warming and the danger of runaway climate change.

Communists reject the claim that workers create all wealth under capitalism. There is also the wealth that comes from the labour of peasants, the petty bourgeoisie and middle class strata. Above that there is nature too.

Working class power presents the only viable alternative to the destructive reproduction of capital. To begin with as a countervailing force within capitalism that pulls against the logic of capital. The political economy of the working class brings with it not only higher wages and shorter hours. It brings health services, social security systems, pensions, universal primary and secondary education ... and measures that protect the environment.

As well as being of capitalism, the working class is uniquely opposed to capitalism. The political economy of the working class more than challenges capital. It points beyond: to the total reorganisation of society and with that the ending of humanity's strained, brutalised and crisis-ridden relationship with nature.

CPGB *Draft programme* Section 3.3. Environmental crisis

Global warming and the danger of runaway climate change have to be dealt with as a matter of extreme urgency. But we should be on guard against pseudo-solutions. Carbon offsets and carbon trading amount to greenwashing capitalism. Blaming population numbers in poor countries easily leads to Malthusian programmes and terrible human suffering. Launching reflective aerosols into the stratosphere, ocean mirrors, cloud thinning and space sunshades would, quite probably, lead to unintended, potentially irreversible, consequences.

Instead communists present these demands:

- Rapidly transition away from coal, oil, gas and nuclear power towards wind, tidal, solar, geothermal and other renewables.
- Reduce energy demand: bring home and work closer together, support workers who want flexible working arrangements; encourage online meetings, cycling, walking and staycations; introduce free local and urban public transport; discourage the consumption of meat and dairy products; put limits on air travel and car use; ensure that the existing housing stock is radically upgraded and exacting building standards are enforced; impose swingeing taxes on big scale polluters.
- Aim to go beyond carbon neutral as soon as possible.
- Where feasible, rewild: forests, natural floodplains, marshes, fens and heath land should be re-established. Strive to reintroduce the full array of native flora and fauna. Grouse moors, deer-stalking estates and upland sheep runs would be prime targets for returning to nature.
- Concrete jungles, urban sprawl, using rivers and seas as common sewers, huge farms and intensive meat and dairy production result in substantial damage to the biosphere. Nationalise the land and waterways.
- Towns and cities should be full of trees, roof gardens, planted walls, allotments, wild parks and small-scale cooperative farms.
- Destructive fishing practices such as bottom trawling should be banned. Inshore seas must include wide no-catch areas. The aim should be to fully restore marine life and thus create a sustainable fishing industry.

Notes

1. www.carbonbrief.org/analysis-when-might-the-world-exceed-1-5c-and-2c-of-global-warming/.
2. en.wikipedia.org/wiki/Hadean.
3. sciencing.com/earths-first-atmosphere-contained-gases-2034.html.
4. Atmospheric pressure is measured according to a bar unit. At sea level the average atmospheric pressure on Earth today is roughly 1.013 bar and on Venus around 90 bar. See pubsapp.acs.org/subscribe/archive/ci/30/i12/html/12learn.html.
5. See en.wikipedia.org/wiki/Primordial_soup#Heterotrophic_theory; AI Oparin *The origin of life* Mineola NY 2003; S Tirard, 'JBS Haldane and the origin of life' *Journal of Genetics* November 2017.
6. See www.nature.com/articles/nrmicro1991.
7. forces.si.edu/atmosphere/02_02_03.html.
8. See www.albany.edu/faculty/rgk/atm101/ozone.htm.
9. SJ Gould *Wonderful life: the Burgess shale and the nature of history* London 1990, p24.
10. en.wikipedia.org/wiki/Geologic_temperature_record#/media/File:All_palaeotemps.svg.
11. www.nhm.ac.uk/discover/news/2018/february/plant-life-on-earth-is-much-older-than-we-thought.html.
12. www.nature.com/articles/s41586-020-2617-x.
13. J Adams, M Maslim and E Thomas, 'Sudden climate transition during the Quaternary' *Progress in Physical Geography* March 1999: www.esd.ornl.gov/projects/qen/transit.html.
14. www.climate.gov/news-features/understanding-climate/climate-change-global-temperature.
15. www.metoffice.gov.uk/weather/climate-change/causes-of-climate-change.
16. www.campaigncc.org/aboutus/missionstatement.
17. oilprice.com/The-Environment/Global-Warming/Carbon-Emissions-On-Track-To-Reach-An-All-Time-High.html.
18. web.archive.org/web/20070621060432/www.beloit.edu/~SEPM/Earth_Works/Plate_Movements.html.
19. www.esd.ornl.gov/projects/qen/transit.html.
20. physicsworld.com/a/syukuro-manabe-klaus-hasselmann-and-giorgio-parisi-win-the-2021-nobel-prize-for-physics.
21. See K Marx and F Engels *CW* Vol 25, London 1987, p356.
22. I Newton *The mathematical principles* New York 1846, p385.
23. J Bellamy Foster *Marx's ecology: materialism and nature* New York 2000, p30, 179.
24. C Darwin *The origin of the species* Harmondsworth 1972, p435.
25. For a looking back - N Eldredge and SJ Gould, 'Punctuated equilibria: the tempo and mode of evolution reconsidered' *Paleobiology* Vol 3, No2, spring 1977, p148. For the original essay - N Eldredge and SJ Gould, 'Punctuated equilibria: an alternative to phyletic gradualism' in JTM Schopf (ed) *Models in paleobiology* San Francisco 1972, pp82-115.
26. J Gribbin and J Cherfas *The first chimpanzee: in search of human origins* London 2011, p217.
27. See S Oppenheimer *Out of Eden* London 2003.
28. See S Mithen *After the ice: a global human history 20,000-5000 BC* London 2003.

29. [www.ncei.noaa.gov/sites/default/files/2021-11/7 Drought and the Ancient Maya Civilization - FINAL OCT 2021.pdf](http://www.ncei.noaa.gov/sites/default/files/2021-11/7_Drought_and_the_Ancient_Maya_Civilization_-_FINAL_OCT_2021.pdf). See also RB Gill *The great Maya droughts: water, life and death* Albuquerque NM 2000.
30. Matt Ridley 'Why climate change is good for the world' *The Spectator* October 19 2013; 'Why climate change is good for us' *Spiked* February 15 2022.
31. IPCC *Climate change 2021: the physical science basis* p28.
32. www.technologyreview.com/2021/07/10/1028172/climate-change-human-body-extreme-heat-survival.
33. ox.ac.uk/news/2021-08-09-oxford-climate-scientists-no-doubt-about-climate-change.
34. K Marx *Capital* Vol 1 London 1970, p595.
35. *Socialist Appeal* September 2019.
36. *Socialist Worker* September March 26 2019.
37. *The Socialist* September 15 2021.
38. socialistworker.org/where-we-stand.
39. marx21us.org/about.
40. www.socialist.ca/ourstand.
41. www.solidarity.net.au/about-us.
42. pracownikzademokracja.org/?page_id=372.
43. Presumably our repeated polemics had an effect. A few years ago there was a forced tweak in *Socialist Worker*. Its 'What we fight for' column now reads: "Under capitalism workers' labour creates all profit. A socialist society can only be constructed when the working class seizes control of the means of production and democratically plans how they are used." Hence nowadays the SWP mothership has one formulation, but meanwhile its clones maintain their old versions. Either way, both are wrong in terms of Marxism and are eloquent testimony to the complete lack of seriousness the IST has, when it comes to its stated principles.
44. It was, therefore, disappointing to read former SWP loyalist Colin Barker. Tasked with defending the 'Where we stand' column, he wrote a 19-part series in *Socialist Worker* over December 6 2003-June 26 2004. Naturally he began with proposition one, but - guiltily - he steered clear of nature. He broke with the SWP in 2014 - not over the Respect popular front or even nature: no, it was the rape allegations against former national organiser Martin Smith. Not that Martin Empson's pamphlet *Marxism and ecology: capitalism, socialism and the future of the planet* was any better (2009). As an SWP loyalist, Empson tried to do the impossible: square the old 'Where we stand' statement on wealth with the Marxism of Marx and Engels.
45. F Braudel *Civilization and capitalism* Vol 3, Berkeley CA 1992, p22.
46. See I Hay and JV Beaverstock *Handbook on wealth and the super-rich* Cheltenham 2016.
47. See P Babiak and RD Hare *Snakes and suits: when psychopaths go to work* New York NY 2007.
48. www.worldbank.org/en/news/press-release/2018/10/17/nearly-half-the-world-lives-on-less-than-550-a-day.
49. www.who.int/news/item/18-06-2019-1-in-3-people-globally-do-not-have-access-to-safe-drinking-water-unicf-who.
50. K Marx *Capital* Vol 1, Moscow 1970, p35.
51. See G Reith *Addictive consumption: capitalism, modernity and excess* London 2018.
52. See T Veblen *The theory of the leisure class* Mineola NY 1994, p20.

53. In 2021, 5.5 million in fact - see www.fsb.org.uk/uk-small-business-statistics.html.
54. K Marx and F Engels *CW* Vol 24, London 1989, p81.
55. K Marx and F Engels *CW* Vol 26, London 1990, p500.
56. dwardmac.pitzer.edu/bakunin/marxfree.html.
57. See www.marxists.org/archive/marx/works/1872/housing-question/ch02.htm; the official K Marx and F Engels *CW* Vol 24, London 1988, p364 leaves "bodyguard" out of its text.
58. K Marx *Capital* Vol 1, Moscow 1970, p43.
59. M Lebowitz *Beyond Capital* Basingstoke 2003, pp130-31.
60. K Marx *Capital* Vol 1, Moscow 1970, pp505-6.
61. JB Foster *Marx's ecology: materialism and nature* New York NY 2000, piv.
62. R Carson *Silent spring* Harmondsworth 1991, p87.
63. *The Observer* October 10 2021.
64. K Marx *Capital* Vol 3, Moscow 1971, p101.
65. *Financial Times* October 25 2021.
66. www.caranddriver.com/news/a39998609/electric-car-sales-usa/#:~:text=What Percentage of New Car Sales are Electric.
67. www.carbonbrief.org/factcheck-how-electric-vehicles-help-to-tackle-climate-change.
68. www.carbonbrief.org/factcheck-how-electric-vehicles-help-to-tackle-climate-change.
69. www.wired.co.uk/article/ev-battery-recycling-cobalt.
70. hedgescapcompany.com/blog/2021/06/how-many-cars-are-there-in-the-world.
71. nucleationcapital.com/ocasio-cortez-green-new-deal-leaves-the-door-open-to-nuclear.
72. www.reuters.com/article/us-energy-nuclearpower-idUSKBN1W909J.
73. www.nrc.gov/reading-rm/doc-collections/fact-sheets/radwaste.html.
74. D Jassby *Bulletin of the Atomic Scientists* April 19 2017.
75. theconversation.com/all-at-sea-making-sense-of-the-uks-muddled-nuclear-policy-48553; braveneweuropa.com/andrew-stirling-phil-johnstone-why-is-support-for-nuclear-power-noisiest-just-as-its-failures-become-most-clear; and www.sgr.org.uk/resources/hidden-military-implications-building-back-new-nuclear-uk.
76. www.shell.com/business-customers/catalysts-technologies/licensed-technologies/refinery-technology/shell-blue-hydrogen-process.html.
77. royalsocietypublishing.org/doi/10.1098/rsfs.2019.0065.
78. www.sciencedaily.com/releases/2020/04/200420125510.htm.
79. www.statista.com/statistics/268750/global-gross-domestic-product-gdp.
80. www.politico.com/newsletters/power-switch/2022/07/12/this-climate-techno-fix-is-back-in-vogue-00045297.
81. PJ Crutzen 'Albedo enhancement by stratospheric sulphur injections: a contribution to resolve a policy dilemma' *Climatic Change* No77, July 25 2006, pp211-19.
82. www.scientificamerican.com/article/the-hidden-dangers-of-geoengineering.
83. E Kolbert *Under a white sky: the nature of the future* London 2021.
84. CH Trisos et al, 'Potentially dangerous consequences for biodiversity of solar geoengineering implementation and termination' *Nature Ecology and Evolution* March 2018.
85. www.scientificamerican.com/article/the-hidden-dangers-of-geoengineering.
86. M Huesmann and J Huesmann *Techno-fix: why technology won't save us or the environment* Gabriola Island BC 2011, pxxx.

87. www.vice.com/en/article/ppxpdm/luxury-communism-933.
88. L Trotsky *Literature and art* - see: www.marxists.org/archive/trotsky/1924/lit_revo/ch08.htm.
89. K Marx *Capital* Vol III, Moscow 1971, p121.
90. TD Lysenko *The situation in biological science* Moscow 1951, p24.
91. See: www.marxists.org/archive/haldane/works/1940s/lysenko.htm. For Haldane's MI5-bugged exchanges with CPGB tops see: blogs.ucl.ac.uk/sts-observatory/2017/07/26/science-and-the-cold-war-at-ucl-1-surveillance.
92. JBS Haldane *The causes of evolution* London 1932. The title deliberately included the plural. See: jbshaldane.org/books/1932-Causes-of-Evolution/haldane-1932-causes-of-evolution-flat.pdf.
93. SJ Gould *Hen's teeth and horse's toes* New York 1983, p135.
94. R Sakwa *The rise and fall of the Soviet Union 1917-1991* London 1999, p304.
95. NM Dronin and EG Bellinger *Climate dependence and food problems in Russia, 1900-1990* Budapest 2005, p223.
96. PR Johnson, 'Atomic-powered communism: nuclear culture in the post-war USSR' *Slavic Review* summer 1996, pp297-324.
97. M Gorbachev *Political report of the CPSU Central Committee to the 27th Party Congress* Moscow 1986, p39.
98. N Ryzhkov *Guidelines for the economic and social development of the USSR* Moscow 1986, p59.
99. Figures from M Lemeshev *Bureaucrats in power - ecological collapse* Moscow 1990, p194.
100. *Ibid* p177.
101. AJ Weis *The global food economy* London 2007, p55.
102. www.sustainabletable.org/207/soil-quality.
103. policy.greenparty.org.uk/pp.html.
104. cortescurrents.ca/cop-26-is-a-waste-of-time-says-environmentalist.
105. A Thornett *Facing the apocalypse: arguments for ecosocialism* London 2019, pp161-62.
106. *The Guardian* March 12 2019.
107. K Marx *Capital* Vol 1, London 1970, p616n.
108. TR Malthus *An essay on the principle of population* Oxford 2004, p61.
109. socserv2.socsci.mcmaster.ca/~econ/ugcm/3ll3/malthus/popu.txt.
110. P Ehrlich *The population bomb* New York NY 1969, pp66-67.
111. *Ibid* pxi.
112. *Ibid* pxi.
113. *Ibid* pp166-67.
114. populationmatters.org/the-facts.
115. *Open Democracy* September 23 2016.
116. populationmatters.org/our-patrons.
117. Population Matters *Annual report July 2018-June 2019* London 2019, p9.
118. P Ehrlich *The population bomb* New York NY 1969, pxi.
119. S Campbell Bartoletti *Black potatoes: the story of the Great Irish Famine, 1845-1850* Boston MA 2001, p1.
120. K Marx and F Engels *CW* Vol 20, Moscow 1985, p27.
121. K Marx *Capital* Vol 1, London 1970, p616n.
122. K Marx *Theories of surplus value* Part 3, London 1972, p61.
123. classics.mit.edu/Plato/critias.html.
124. www.themonthly.com.au/issue/2010/june/1276143335/anne-manne/gendecide.

125. ourworldindata.org/sex-ratio-at-birth.
126. www.statista.com/statistics/1033074/fertility-rate-uk-1800-2020.
127. news.bbc.co.uk/1/hi/business/4482441.stm.
128. www.statista.com/statistics/280749/weekly-hours-of-work-in-the-uk-by-gender.
129. *Ibid.*
130. www.statista.com/statistics/1033074/fertility-rate-uk-1800-2020.
131. www.bbc.co.uk/news/health-46118103.
132. www.un.org/development/desa/en/news/population/world-population-prospects-2017.html.
133. K Marx and F Engels *CW* Vol 4, London 1975, p380.
134. www.forbes.com/billionaires.
135. unacademy.com/content/general-awareness/list-of-20-richest-people-in-the-world.
136. *The Guardian* August 16 2018.
137. Apart from PR, all were exorcised, come 2019: www.greenparty.org.uk/assets/files/gp2017/greenguaranteepdf.pdf; [www.greenparty.org.uk/assets/files/Elections/Green Party Manifesto 2019.pdf](http://www.greenparty.org.uk/assets/files/Elections/Green%20Party%20Manifesto%202019.pdf).
138. www.greenparty.org.uk/assets/files/gp2017/greenguaranteepdf.pdf.
139. [www.greenparty.org.uk/assets/files/Elections/Green Party Manifesto 2019.pdf](http://www.greenparty.org.uk/assets/files/Elections/Green%20Party%20Manifesto%202019.pdf).
140. www.brightonandhovenews.org/2021/06/06/evidence-suggests-that-its-a-green-council-in-name-only.
141. My emphasis - www.bbc.co.uk/news/uk-politics-58761003.
142. www.indiegogo.com/projects/republic-in-parliament-campaign.
143. electronicintifada.net/blogs/asa-winstanley/uk-green-mp-stops-motion-against-bogus-anti-semitism-definition.
144. *The Guardian* June 13 2011.
145. www.glassdoor.co.uk/Salary/Greenpeace-Salaries-E9123.htm.
146. See R Scruton *How to seriously think about saving the planet* Oxford 2012; Z Goldsmith *The constant economy* London 2009; and: brightblue.org.uk/about.
147. R Harris (ed) *The collected speeches of Margaret Thatcher* London 1997, p341.
148. See J Morrow (ed) *Young England* Leicester 1999.
149. T Carlyle *Chartism* London 1840, p4.
150. news.sky.com/story/cop26-prince-charles-tells-g20-world-leaders-the-future-of-humanity-and-nature-herself-are-at-stake-12456102.
151. HRH Charles, T Juniper and I Skelly *Harmony: a new way of looking at our world* London 2010. Downloadable as a pdf from: media.oiiipdf.com/pdf/d2a72f67-c6d9-4168-9857-d662e09a73f6.pdf.
152. R Scruton *How to seriously think about saving the planet* Oxford 2012, p19.
153. See E Goldsmith and R Allen *A blueprint for survival* Harmondsworth 1972.
154. en.wikipedia.org/wiki/History_of_the_Green_Party_of_England_and_Wales.
155. J Porritt *Capitalism, as if the world matters* London 2011, p87.
156. www.forumforthefuture.org.
157. www.forumforthefuture.org/who-we-work-with.
158. EF Schumacher *Small is beautiful* London 1993, pp68-69.
159. *Ibid* p72.

160. A Drengson (ed) *The selected works of Arne Naess* Vol 1, Dordrecht 2005, p18.
161. A Naess *Ecology, community and lifestyle: outline of an ecosophy* Cambridge 2001, p166.
162. J Lovelock *The ages of Gaia: a biography of our living planet* Oxford 1995, p198.
163. See: rationalwiki.org/wiki/Hard_green.
164. See CD Stone *Should trees have standing?* Los Angeles 1974.
165. See M Mies and N Shiva *Ecofeminsim* London 1993.
166. www.fritjofcapra.net.
167. F Capra *Hidden connections* London 2003, pvii.
168. rebellion.global.
169. 'Demands' *Extinction Rebellion US*: extinctionrebellion.us.
170. xramerica.org/who-we-are.
171. See E Chenoweth and MJ Stephen *Why civil resistance works: the strategic logic of non-violent conflict* New York 2011. E Chenoweth *Rethinking violence: state and non-state actors in conflict* Oxford 2021.
172. *Foreign Policy* December 12 2013.
173. E Chenoweth and MJ Stephen *Why civil resistance works: the strategic logic of non-violent conflict* New York 2011, p229.
174. by2020weriseup.net/assets/presentations/Presentation-momentum-driven-organising-EN.pdf.
175. *Ibid.*
176. *Evening Standard* October 17 2019.
177. *The Observer* October 20 2019.
178. See D Woodman *Spycops in context: a brief history of political policing in Britain* London 2018.
179. A Winstanley *Daily Maverick* March 16 2021: www.dailymaverick.co.za/article/2021-03-16-britains-secret-political-police.
180. www.ucpi.org.uk/who-is-involved.
181. See D Woodman *Spycops in context: a brief history of political policing in Britain* London 2018, pp11-13.
182. A Winstanley *Daily Maverick* March 16 2021: www.dailymaverick.co.za/article/2021-03-16-britains-secret-political-police.
183. core.ac.uk/download/pdf/9049957.pdf.
184. G Talshir *The political ideology of green parties* New York 2002, p137.
185. D Wall, 'Darker shades of green' *Red Pepper* August 23 2000 (my emphasis).
186. J Zerzan *Future primitive revisited* Port Townsend WA 2012, p2.
187. RR Grinker and CB Steiner (eds) *Perspectives on Africa: a reader in culture, history and representation* Chichester 2010, p169.
188. RC Kelly *Warless societies and the origin of war* Ann Arbor MI 2000, p51.
189. *The Guardian* April 18 2001.
190. T Kaczynski *Industrial society and its future* Olympia WA 2016 - or: editions-hache.com/essais/pdf/kaczynski2.pdf.
191. See J Zerzan *Future primitive revisited* Port Townsend WA 2012, pxxvii, n1.
192. J Zerzan *Running on emptiness: the pathology of civilization* Port Townsend WA 2002, p116.
193. J Zerzan *Future primitive revisited* Port Townsend WA 2012, pp1-25.
194. en.wikipedia.org/wiki/Estimates_of_historical_world_population#Deep_prehistory.
195. See AP Dobson and ER Carper, 'Infectious diseases and human population history' *Bioscience* Vol 46, No2, January 1996, pp115-126.

196. J Zerzan *Why hope?: the stand against civilization* Townsend WA 2015, p4.
197. N Klein *On fire: the (burning) case for a Green New Deal* New York 2019, p45.
198. en.wikipedia.org/wiki/Ecological_civilization.
199. www.france24.com/en/20190420-le-pen-national-rally-front-environment-european-elections-france.
200. orf.at/stories/3125788.
201. www.greeneuropeanjournal.eu/nationalising-the-climate-is-the-european-far-right-turning-green.
202. www.britainfirst.org/principles.
203. bnp.org.uk/policies/environment.
204. Quoted in PM Coupland *Farming, fascism and ecology: a life of Jorian Jenks* London 2017, p95.
205. J Biehl and P Staudenmaier *Ecofascism: lessons from the German experience* Chico CA, 2011: theanarchistlibrary.org/library/janet-biehl-and-peter-staudenmaier-ecofascism-lessons-from-the-german-experience.
206. L Klages *The biocentrist worldview* London 2013, p33.
207. See J Biehl and P Staudenmaier *Ecofascism: lessons from the German experience* Chico CA, 2011.
208. HR Trevor-Roper (ed) *Hitler's table talk: 1941-1944* London 2000, p104.
209. *Ibid* p109.
210. Quoted in D Gasman *Scientific origins of National Socialism* London 2007 p165.
211. L Embree et al *Encyclopedia of phenomenology* Boston MA 1996, p137ff.
212. T Rockmore *On Heidegger's Nazism and philosophy* Hemel Hempstead 1992, p25.
213. *Ibid* p283.
214. HR Trevor-Roper (ed) *Hitler's table talk: 1941-1944* London 2000, p48.
215. See A Bramwell *Blood and soil: Walther Darré and Hitler's 'Green Party'* Bourne End, 1985, pv.
216. Quoted in KB Napier *Dead green roots: green and fascist socialism* Swansea 2018, p79.
217. J Manners *England's trust and other poems* London 1841, p16.
218. See SJ Sutcliffe and CM Cusack (eds) *The problem of invented religions* Abingdon Oxon 2016.
219. G Nagtzaam *From environmental action to ecoterrorism? Towards a process theory of environmental and animal rights oriented political violence* Cheltenham 2017, pp134-35.
220. See Bakunin's June 1870 'Rebuke of Nechayev' - public-library.uk/ebooks/80/86.pdf.
221. D Orton, 'Economic philosophy and green electoralism' *Synthesis/Regeneration* No37, spring 2005.
222. www.context.org/iclib/ic07/spretnak.
223. A Naess *Ecology, community and lifestyle: outline of an ecosophy* Cambridge 2001, p183.
224. J-J Rousseau *The social contract* Woodstock 2016, p23.
225. T Hobbes *Leviathan* New York 2004, p90.
226. S Pinker *The better angels of our nature* London 2011 pp32-34.
227. See RC Kelly *Warless societies and the origin of war* Ann Arbor 2000.
228. J Locke *Two treatises of government* London 1821, p189.
229. *Ibid* p381.

230. Aristotle *The politics* London 1992, p59.
231. V Gourevitch (ed) *Rousseau: 'The discourses' and other early political writings* Cambridge 2007, p132.
232. *Ibid* p168.
233. www.gutenberg.org/files/46333/46333-h/46333-h.htm.
234. *Ibid*.
235. F Engels, letter to C Schmidt, in K Marx and F Engels *CW* Vol 49, New York 2001, p7.
236. Eg, Maximilien Rubel's essay, 'The legend of Marx, or "Engels the founder"' (1970). See: marxists.org/subject/marxmyths/maximilien-rubel/index.htm. Doubtless, not wishing to be seen as a swellhead, Marx had no wish to describe himself as a 'Marxist' anyway (nor did Lenin describe himself as a Leninist, or Trotsky describe himself as a Trotskyist). Opponents did though. And, following them, so did friends. Hence, Engels had no trouble describing himself as a Marxist. In *Ludwig Feuerbach and the end of classical German philosophy* he makes the obvious point: "Without him [Marx] the theory would not be by far what it is today. It therefore rightly bears his name" (K Marx and F Engels *CW* Vol 26, London 1990, p382n).
237. J-J Rousseau *The social contract* Woodstock 2016, p117.
238. FA Hayek *The fatal conceit: the errors of socialism* London 1988, p153.
239. K Marx and F Engels *CW* Vol 28, Moscow 1986, p17.
240. K Marx and F Engels *CW* Vol 3, London 1975, p300.
241. *Ibid* p296.
242. K Marx and F Engels *CW* Vol 28, Moscow 1986, pp47-48.
243. K Marx and F Engels *CW* Vol 26, London 1990, p270.
244. For the seminal work of the revolutionary school of anthropologists who updated Engels, see C Knight *Blood relations* London 1995.
245. C Clarkson *et al*, 'Human occupation of northern Australia by 65,000 years ago' *Nature* July 2017.
246. See T Flannery *The future eaters: an ecological study of history of Australian lands and people* Port Melbourne 1994.

ISBN 978-147098096-2



£6.99