“A US-designed robot called Baxter, which can handle a wide variety of tasks from loading to packaging, currently costs £19,000.” The Observer 30/11/15.

Just take a moment to think about that. For a lot less than the average annual salary, and not much more than one year's minimum wage, you can buy a robot which will perform most manual tasks. Manufacturing (etymology: from the Latin for 'make by hand') has already been largely automated, which is why - along with the shift of heavy industry to China and India - very few British people still work at it, but the use of robots opens up our much larger service economy to automation. This sector accounts for 70% of current UK employment, and almost all new jobs created in recent years. Now take another moment to consider the implications of robotisation: fully half of non-managerial/supervisory jobs in the advanced economies will disappear in the next decade.

They will most obviously go in retail and distribution: those legions of shop-assistants and van drivers who constitute 'the squeezed middle' or 'working poor' or 'hard-working families', with few assets and unable to save, responsible for school-age children and (increasingly) frail parents, a long way off pension-age themselves, contemptuous of 'them on benefits' and dependent on their recently threatened then temporarily reprieved working tax credits to make ends meet. The only reason supermarkets have not gone to wholly self-scanning checkouts is commercial respect for their elderly customers, who may not have many friends for company or family to care for them but have the most free time and disposable wealth of any old people in history. And the real impetus behind Google's driverless cars is not so we can all ride to the seaside with our arms folded, but cheap automated delivery of all that stuff we now buy online.

Other less obvious occupations and grades are under threat too. Any service which can be delivered by a screen rather than a person is cheaper, more reliable and arguably more 'expert'. Academic superstars can now teach tens of thousands of eager fee-paying students remotely and rather better than any humble lecturer (or the impecunious postgraduates who now do lots of university tutoring). There are computer programmes which generate and place 'news' straight online or into newspapers, and have the potential to replace almost all types and levels of journalists. And that's on top of the other outsourcing, short-term contracting, bogus 'consultancy' and self-employment arrangements that have created the scrambling, precariously employed 'precariat'.

The only thing holding back mass redundancy-by-robot is a certain squeamishness on the part of business and governments at its broader social and political consequences. Change is also being deferred by the initial costs of robotisation, which make it cheaper in the short-term to employ mostly foreign, sub-minimum wage labour to sort, package and dispatch by hand (the 'Sports Direct' model), or to use relatively primitive sensors and monitors - in a weird parallel with elite sport 'analytics' - to track your existing workforce ever more closely (the 'Amazon' model). These are the post-industrial equivalents to the Taylorist 'time and motion' management methods which were a key component of old-style manufacturing, and in return for relatively high wages and job-security (not much chance of that now) intruded on every aspect and moment of factory workers' lives. But why pay even sub-minimum wage labour when, after a year or two of conversion costs, you can get robots to do it for nothing?

American academics recently produced a list of 700 occupations, ranked in order of their invulnerability to robots. Elements of management and supervision in your job offer some protection, but the most secure occupations are those that necessitate complex interactions with other real live people. Second on the list, I was relieved to find, was my chosen profession of 'adult mental health social worker', not least because of the worldwide epidemic of mental illness caused by instability and social disintegration. The more disturbed and distressed people you deal with,
apparently, the better your job prospects after 'the fourth industrial revolution' of robotics (following
steam, mechanisation and IT).

'New Times': Know-How to Knowledge

The last time we saw technological change at this pace and on this scale was back in the 1980s, at
the height of the IT industrial revolution. It was characterised by the briefly influential magazine
Marxism Today as 'New Times' (see my book The Politics of New Labour (2011) for a fuller
account). At that point it wasn't robots, mobile and sensate and (once programmed) self-reliant, but
new computer systems and software, relatively static and requiring human operation. They enabled
a wholesale historic transition from the 'Fordist' era of mass production in huge factory complexes
to the newer, more retail-oriented 'post-Fordist' models pioneered in the 1970s in Germany, the US
and above all Japan.

 Initiative in the capitalist 'real' economy shifted decisively from producers to consumers,
productivism to consumerism; from big, established, hierarchical corporations to smaller,
innovative, 'flatter' and 'leaner', more adaptable and egalitarian enterprises; from the manufacture of
objects to the processing of information, 'know-how' to knowledge; from fixed, geographical
communities of place and class to mobile communities of interest and identity and effect (apart, that
is, from the many millions of people left behind in the giddy pell-mell of these new times, of whom
more later). In broader aesthetic terms, it took us from the lean straight lines and curves in
functional glass and steel of 'progressive' or 'scientific', linear modernity to the messy squiggles and
flippant 'anything goes' pastiche of postmodernism and 'the end of history'.

The key text of 'New Times' was Robin Murray's 'Fordism and post-Fordism' (1989). It had a
similarly definitive feel to Eric Hobsbawm's 'The Forward March of Labour Halted?' (1978) and
Stuart Hall's 'The Great Moving Right Show' (1979), the two Marxism Today articles which had
announced the defeat of the left and the triumph of Thatcherism. Murray took the focus onto “a
quite new stage of capitalist production. In the USA it is referred to as 'flexible specialisation',
in France as 'neo-Fordism'.” It enables a closer fit between demand and supply, “market niching has
become the slogan of the high street,” as ever more aspects of life are commodified, and the new
'post-class' identities mined for profit. The most successful firms introduced post-Fordism into the
production process itself: “The line has become flexible. Instead of using purpose-built machines to
make standard products, flexible automation uses general-purpose machines to make a variety of
products.” To promote innovation and efficiency, workforces are engaged in “Quality circles... each
downbreak is seen as a chance for improvement.” The goods themselves are made to order and
delivered 'just in time', to cut down on warehousing costs and waiting times.

These developments were, crucially for Murray, not necessarily reactionary: “some are rooted in the
popular opposition to Fordism... which flowered after 1968 in the community movements and the
new craft trade unionism of alternative plans.” In tune with the generally open-ended tenor of 'New
Times', as it surveyed the wreckage and renovations of high Thatcherism with its atmosphere of
induced uncertainty and hazy contingency, radical individualism and the 'revolution of the subject',
Murray concluded that “things could go either way.” Thirty years on, this all might seem quaint,
arguably naïve (and still very much focused on the factory). But the same principles - constant
innovation through workforce engagement and “flexible specialisation”, consumer research and
brand adaptation, investment in the latest talent and technology - have driven almost every new
successful commercial development since; most notably in the 'creative industries' which now
(alongside financial services) constitute roughly half of the UK economy and a clear majority of its
exports.

The spread and amount of 'post-Fordism' may have been overstated by excitable commentators
(another phenomenon of late-20\textsuperscript{th} century culture). As Michael Rustin pointed out at the time, post-Fordism could easily co-exist with Fordism or even pre-Fordism. The rapid expansion of China into the world's leading capitalist economy has made astute and highly dirigiste use of all three variants. And the New Age US-based global giants Apple, Microsoft, Facebook and Google are still hierarchical corporations owned by obscenely wealthy individuals, no matter how informal their speech and attire. Their products might be designed by laid-back slackers and hipsters on sunlit green campuses, but they are still assembled by cheap labour in massive noisy factories.

It's always been easy to get carried away with the hype and overstate the effects, for good or ill, of technological change, which after all is superimposed on pre-existing social relations, ideologies and historical patterns, not to mention a troubled world of finite resources. Underneath all the dizzying innovation and relentless business, our class structures, cultural forms and political parties have got weirdly 'stuck' in stale forms and contents, endlessly recycling the same old ideas, riffs and slogans to diminishing effect. Men in particular get terribly excited at some new gadget, and forget that it's the same old people using it for the same old purposes of light entertainment, personal profit, conspicuous consumption and instant gratification.

Further, the products of the last wave of computerised innovation are all around us, and their practical application more open to scrutiny and question. What exactly have we gained from the internet, apart from cyber-crime and bullying, hacking and counter-surveillance, 'cute' kitten videos and one-click access to unlimited and unrestrained pornography? Where does all our compulsive gazing at mobile phones take us, except away from ourselves and each other? Are the habitual users of 'social media' any happier or more interconnected, or more isolated and anxious because of it? Do we understand ourselves and our world more deeply, or just the surface froth of Vice documentaries, wiki-facts and teenage 'likes'? A session of 'surfing', five minutes or two hours, always leaves me with a hollow, slightly soiled feeling. Its promises – more stuff, more freedom, more pleasure, more understanding – are rarely fulfilled. Personally, though I know this is not going to happen (unless the hackers get to it in the ultimate assisted suicide), I'd turn the whole bloody thing off.

This scepticism is born partly of a certain rueful realisation of where 'New Times' and the project of 'political renewal' around the latter-day Marxism Today actually got us. Its main historical function - aside from sounding the death-knell of the Communist Party - was as a tributary of the rather less expansive and ambitious 'project' of New Labour, which took the rhetoric of technological, social and cultural change and reduced it to a narrow electoral and parliamentary manoeuvre, not so much escaping its own historical roots as trampling them underfoot and in the process getting tangled up and trapped. As early as 1998, in a special edition of Marxism Today, the authors of 'New Times' were shouting 'Wrong!' at Blair and New Labour's loss of perspective and ambition. Two years earlier still, Mike Rustin called it “an exercise in calculated hypocrisy”; in both private and public sectors, “coercive and finance-driven management styles” still predominated (The Politics of Attachment, London 1996: 224/6).

We heard little more, at least in a party political context, of post-Fordism, of flatter and leaner and more egalitarian capitalism, or of the 'liberating potential' of new technology. 'Contingency' went the wrong way, towards falling taxes and safe havens for the world's dodgy money, remorseless cutbacks and vilification of the public sector, privatisation and (much more insidious) outsourcing of state utilities and assets, including vulnerable people dependent on state support. In 1992, shortly after 'New Times', 2\% of home and residential care was provided by private companies; it is now 92\%. The frail elderly are valuable commodities to be traded around the care economy, especially if they have expensive homes to sell, while the most unruly young people in secure care are worth more than £250,000 p.a. Each.
'Big Society'-style volunteering, supposed to fill the gap left by cut and closed public services and dispersed families, has collapsed, in part because people wonder why they should do something for nothing when they see private companies and charities making fortunes out of the same services. A further problem is that only a small part of the population requires social care at any one time, around 1.5 million; this keeps it out of the public domain until crisis or scandal erupts, which is almost invariably resolved by further trashing of the service. This in turn makes the rest of us more reluctant to use it, and when the need arises more inclined to go private.

But this robot stuff is different, because it directly impacts on the way all of us earn our living and find meaning and purpose in our daily lives, and makes very few concessions to human agency or well-being. It begins to feel like a truly decisive shift in historic balance, a tipping-point in the conditions of ordinary everyday life. In a certain basic sense, which transcends the wildest imaginings of science fiction or futurology, it means that computers can exercise more personal autonomy than we can, that they can use and direct us rather than the other way round. At the more mundane level of those 'stuck' social relations of global capitalism, it accelerates the shift of power and wealth and (yes, that key word again) purpose towards the already powerful, wealthy and purposeful. The *haute bourgeoisie* have a new ally, artificial intelligence, in the class war.

The rest of us face a future akin to those pariahs of the deindustrialised north and the sink council estates of Benefits Britain, the 'useless men' loosely attached to the hard-faced women who at least have their kids to get up for, with one hand held out in supplication and the other raising a tube of strong lager or a spliff to their lips. From the comfort and detachment of secure 'educated middle class' jobs and homes and families, it's easy to fret about the societal effects of poverty, malnourishment and poor housing. Up closer, it looks like indolence or competition; our social liberalism is being put to the test. With an ever-widening interval between effective retirement and death, we are left to 'scrounge' and scavenge on the bones of our post-industrial, market stall and car boot sale economy. In Antonio Gramsci's resonant phrase for the idle gentry and sinecured clerks hanging around the village squares and bars of Southern Italy in the 1900s, we are becoming “pensioners of economic history”. The overwhelming popular mood - especially among the key demographic of the greying West, the 'active elderly', stripped of the traditional consolations of religion and kinship – is a sense of futility, with so much life left to live and so little to do with it.

*The Meaning of Work*

Why are we here? What's the point of us? And, to cite David Bowie's last great song, where are we now? For much of the last two to three hundred years, at least since the onset of the first industrial revolution and our advance from a predominantly rural subsistence economy, most men would have placed their work at the centre of their lives, as their principal daily activity, the means of winning their family's bread, and the core of their personal identity. Within the rules and routines of industrial labour, there was always scope for personal and collective rebellion. Even the most mundane industrial jobs brought forth a degree of creative resistance, in the form of factory banter and folklore; of self-affirming subversion, petty pilfering and minor sabotage; ancillary cultural pursuits and recreations like pigeon-fancying, fishing or football; union organisation, class solidarity and collective bargaining; or simple human companionship. At its 1914 peak the British industrial economy employed 70% of the workforce in weekly-waged manual labour, with over a million in coal mining alone. They constituted the proportionately largest, most culturally autonomous and socially self-confident (though curiously anti-political, and resolutely unskilled and uneducated) proletariat in the world.

The experience of women was obviously very different, employed in light industrial tasks or domestic service until they married, when they were expected to bear children and keep house, unless they took on the distinctively 'women's work' of nursing or school-teaching. But their work,
whether in the factory, hospital, classroom or the home, formed a crucial part of the structured, settled, inter-connecting, organised and managed, daily routine of human activity. Industrial society heaved and hummed to the same mechanical rhythms as the engines and furnaces that powered it. Its politics, such as they were, were expressed in emergent Labourism, with its roots in the organised militancy of the trades unions and its ultimate threat of the withdrawal of labour, and the aim of extracting as much as possible through 'free collective bargaining' from the profits of capitalism, along the way (and still the basic point of the Labour Party) getting 'our men' elected.

The ideology of work was central to this industrial settlement, and expressed in the rhetoric of 'a fair day's pay for a fair day's work', 'taking pride in your work' and 'if a job's worth doing it's worth doing well'. You still hear faint echoes of it in politicians' concerns about the social and moral effects of unemployment, and popular discourse about benefits and 'dependency'. Work provides social meaning, personal identity and external structure. We still ask “And what do you do?” at an early stage of introductory conversation. It stands in the way of the single most effective and radical proposal for overhauling the welfare state, the Citizens Income, because we should 'earn our living' and not 'get something for nothing'. But what if there is less or even no work left to do? In our personal lives this would be the signal to put our feet up, but in our social lives it causes misery and panic.

The Decline of Work

We are constantly told by government, business and the media that there are more people in work than ever before. Ostensibly this is true: of the population of 'working age', between 16 and 64, just over 30 million are employed (all figures ONS). At any one time, just under 2 million people are unemployed, but the majority are temporarily between jobs. Less than a million are unemployed long-term, by which is meant six months or more; these are the focus of the Department for Work and Pensions best efforts, harrying and sanctioning them to applications and interviews, dubious training courses and makework schemes, and generally punishing indolence and inadequacy. So far so self-congratulatory and apparently, under the terms of the lingering ideology of Labourism and its contempt for the undeserving and idle, popular.

But there are a further 9 million people of working age judged 'economically inactive', for one reason or another not 'seeking work'. Of these around a million are young 'NEET'-s, under 21-year-olds not in education, employment or training, seriously disadvantaged and disaffected, and apparently bound for life on the margins. Around 3 million people are early retired on private pensions, or living on some other kind of private income (including the growing band of small buy-to-let landlords). This still leaves around 5 million people in between who are not engaged in any kind of paid work, dodging and weaving, scraping by; what we might call the 'car-boot sale economy'.

These people have nothing to gain (or perhaps to lose either) from technological progress in the 'formal' economy; they are, in the brutally accurate language of Karl Marx on his own era's underclass, *lumpen* or *declasse* “leftovers” from a previous epoch, the human surplus of the industrial revolution. There is also clear evidence of the geographical concentration of 'economic inactivity', 'futility' in politer terms and 'uselessness' in rather less. It's clearest in Northern England, with pockets around any former centre of manufacturing industry (on the full spectrum from 'light' to 'heavy', so parts of the south are blighted too). When J.B. Priestley toured the country in the midst of the 1930s Depression (*English Journey*, 1934), he worried about places which had a culture of hard work and precious little else, leaving “a crowd of bewildered, resentful or indifferent idlers who have lost the decent boyhood we gave them only to drift towards a shady and shiftless manhood.” (235) We might wonder now how large parts of the country will react to the steady disappearance of any kind of work.
The decline of work becomes most apparent when you look at the category of working age people classed as 'self-employed'. In 2014, there were 4.6 million fully self-employed, and a further 356,000 partially self-employed. This, at around 16% of the British workforce, is the highest proportion for over forty years (since the last great splurge of public sector recruitment, to be exact, which took up much of the slack of mid-1970s recession and redundancy, and was only recently reversed) and accounts for most of the rise in employment since the crash in 2008. The majority of these 5 million self-employed people are in construction or taxi-drivers, with a rapid recent rise in 'management consultants'. This is classically short-term and unorganised, with very little security and support from the organisations employing them. Of course it suits some to be self-reliant and not dependent on any single employer or customer, but by relieving grateful employers of their obligations to them, most of these people end up exploiting themselves, isolated, anxious and permanently resentful.

But the really telling statistic is this: the average income from self-employment is down 22% since 2008/9. In other words, the boom in self-employment is for the most part an exercise in phased voluntary redundancy, whereby people gradually withdraw from the formal, productive economy of paid, fulfilling, socially organised and recognised work. Millions of people are slowly, effectively taking early retirement.

Newer Times?

The original Marxism Today 'New Times' debate was a determined attempt to cheer up after the crushing defeats and headlong retreats of the 1980s, to seek glimpses of hope in the newly deregulated, globalised economy of creative 'hustle', personalised 'choice' and sensual 'pleasure'. It rather looks now like false optimism. These 'newer times' are altogether bleaker, especially in this fractious and fragmenting, offshore and reluctantly European country of ours. Leaving aside our creaking, property and finance-dependent economy, or our polluted and exhausted environment, what can we say about our society, about our people? Here we stray into territory the political left has always been reluctant to enter, because it involves critical judgment of our fellow citizens, usually the preserve of the right, what Gramsci called (approvingly) "social moralism".

First some historical observations. Britain has always been a low-wage, low-skill, low-investment, low-productivity economy, a truly 'low' country. This served it well in the early, crucial stages of the industrial revolution, when labour was cheap and plentiful (and mostly manual), fuel and materials easily available, and technology relatively simple. Late-Victorian foreign wars and imperial expansion papered over the cracks, but into the 20th century it became increasingly obvious that Britain was internationally 'non-competitive'. By the mid-1970s British capitalism was not making any profit, which rather removes its point. That's what did for the welfare state, because the ruling class decided it no longer could or wanted to afford it, and withdrew from the great British historic compromise of the 'social-democratic consensus'.

More recently, the global dominance of the City of London – the 'square mile' which with its Canary Wharf offshoots accounts for fully one-fifth of the British economy – has kept the wolf from the door, but pretty much everyone agrees that our social and geographical distribution of wealth and power and work are seriously imbalanced. However seriously we take it, Osborne's 'Northern Powerhouse' is at least some recognition of this, not to mention the blind eye turned to the Scottish government's debt-fuelled splurge in public spending. And relentless austerity is not just a chance for some late-Thatcherite pruning of the state and public services, or even to pander to the ideological right who still make much of the running in the Conservative Party, but an attempt to protect British capitalism from the next, inevitable and probably much more damaging banking collapse just around the corner.
How does this reveal itself in the mood of the people? Put simply, we don't appear to like each other very much. A comment I overheard from an elderly man the other day, to an East European Big Issue seller, illustrates the point: “As if we haven't got enough unemployed of our own…” We are a surly, sour bunch; fearful and impatient; ignorant and insular; monoglot and unread; anti-scientific and uncultured; unable to measure risk and decide rationally the course of our everyday lives; humourless and sneering; gullible and sentimental (vide Gogglebox, TV showing people watching TV, the greatest social document of our time). And when you consider the nature of the work that most of us do, dull and repetitive, narrow and stressful, devoid of initiative and responsibility, overseen by managers who are barely more competent than ourselves, and in many cases less so, but nonetheless have the power to hire and fire, it's hardly surprising. If you're unfamiliar or uncomfortable with this uncomplimentary snapshot of the British people, you need to get out more, specifically to continental Europe, where the values of Enlightenment still just about prevail, and people are just more simply nice to each other. And if you need a view on where we're heading, people and economy and all, head to America. Where, incidentally, most robots come from.

What can we do about it, in these 'Newer Times'? And how specifically do we respond to the march of the robots? There is no obvious quick fix, aside from the usual common sense of personal adjustment to historic technological change: slow down, enjoy life more; cherish your loved ones, pay more attention to them and invest more time in them; take less notice of the 'news' and more of the world; value quality over quantity; consume less and more satisfactorily; go 'up-market' and look to the longer-term. As more work is done by less humans, be more human in your own free time; retrain and do something new, not necessarily for vocational reasons but whatever takes your fancy. Your most valuable resource is yourself, make the most of it; confront your personal limits and demons; surprise, even occasionally scare, yourself; be nicer to other people. God, it's so bloody obvious, why can't we do it? The single biggest problem is that we have no collective means to make those transitions, primarily because of the bankruptcy of our political culture. In the face of that, the truly overwhelming feature of the popular mood is apathy and resignation, confirmed in a recent British Social Attitudes survey finding that most people have no secure faith in the capacity of state institutions or democratic politics to exercise any positive influence over the future. How can we restore that faith?

The most decisive, large-scale and permanent historic progress in modern Britain has always come about through dialogue and cooperation between the educated middle class and the organised working class, 'brains and brawn' in sympathy and harmony. Universal suffrage, employment protection and out-of-work benefits, the welfare state and the NHS, comprehensive schooling, state subsidy for the arts and popular culture, half-way decent housing, to name just the most obvious. The Labour Party was always a flawed, spluttering vehicle for this grand project, but with its hollowing-out by New Labour and the decline and withdrawal of trades unions as a force in public life, and now the occupation of the resultant vacuum by a resurgent old hard left, Labour doesn't seem too interested in talking (or rather shouting) to anyone but itself, let alone facilitating the much broader 'Big Conversation' we really need. Any notion of collaboration across classes becomes, in our 'stuck' British public culture where class prejudice always trumps political principle and the tabloid press are on hand to coarsen and simplify, a dialogue of the deaf or a shouting match.

Green Robots?

This is where Greens come in, and did so in continental Europe when environmental politics emerged in the 1980s out of the 'new social movements' of citizens’ action and participative democracy, and facilitated the profound shifts in attitude and practice which modernised and re-popularised their famed welfare states. In the process, Green Parties became key players in the
social as well as environmental politics of their societies. Grass roots, 'bottom up' democracy is the other, often neglected, green USP, alongside the biggest single issue of our time climate change. Greens are not burdened with the debilitating ideologies of capitalism or Labourism, with their outdated 'work ethic' and industrial fetishism. They are uniquely equipped to contemplate a future without manual work, but with plenty to do in support and care for each other; and for that matter, to warn and steer clear of the dangers of over-reliance on robots, and the clear risk that without profound social change they will simply reinforce established patterns and relations of power and wealth. Perhaps it really is time to embrace the opportunities of technological advance, and quell the inner Luddite we all of us hear when we come across the latest rosy view of the economic future.

A friend of mine works in the offshore energy industry, and tells me that the East of England is already a world-leader in wind energy (with dwindling help from the current government). But you'd never guess it from the state of the coastal towns where the new sustainable energy companies operate from. The advanced technological work is done by small, 'lean and mean' teams of mostly outsiders, multinational and mobile to the point of transience, on short-term postings that will take them all over the world in the course of their careers. In the meantime they live in large detached houses in small villages, inland towns or our 'fine city' of Norwich, and commute to work by train, flash car or even helicopter. The indigenous populations of Great Yarmouth and Lowestoft see very little benefit from them or their industry, and subsist on benefits or low wages in some of the most multiply deprived conditions in the country. What work there is for them is precarious, casual and seasonal, at the bottom end of tourism and food processing.

There is a huge and obvious mismatch here, which requires concerted political action to overcome, a question Greens are uniquely placed to address and answer: how can we bring people and jobs together in these 'newer times', so that everyone can make a satisfactory living and lead fulfilling lives? Finding meaningful, practicable answers to that question requires a 'new politics' far beyond anything so far offered by present generations of politicians, even those attached to the Corbyn 'surge'. As the anarchist-communist visionary Victor Serge said in 1929, when surveying the ashes of a different but related type of revolution in Soviet Russia, “We have committed great errors, comrades. We wanted to be revolutionaries, we were only rebels. We must become termites, boring obstinately, patiently, all our lives: in the end, the dyke will crumble.” (Men in Prison, p. 250)