Despairing over the conditions of living and working in Foxconn’s ‘factory city’ in China, a total of 14 workers leapt to their deaths from the rooftops of their plant in Longhua, Shenzhen in 2010. The company’s stopgap response was to suspend nets between the plant’s buildings so as to frustrate the efforts of the would-be suicides. Foxconn’s long term solution, rather than improving the conditions of workers, is to remove them from the equation. Having reached some kind of upper limit in the tolerance levels of the human psyche they have moved to full robotisation. Aiming towards the complete automation in the assembly of iPhones and other consumer electronics, Foxconn, like other major manufacturers, have turned in their pursuit to optimal productivity to replacing workers with machines.

Media reports on the ‘Rise of the Robots’ abound, as do warnings of job losses – projected at around 35% in the next 20 years for the UK, according to a Deloitte and Oxford University study of 2014. The effects of automation are, unsurprisingly, unequally distributed. That same report notes that ‘jobs paying less than £30,000 a year are nearly five times more likely to be replaced by automation than jobs paying over £100,000.’ Equally predictable is the opportunism of employers in using the threat of automation to suppress wage levels. In response to the current campaign being fought for by workers at McDonald’s for a minimum $15 per hour the company’s CEO, Ed Rensi, warned that this demand could only lead to greater automation. The Forbes article in which this was reported argues that what those involved in this campaign are ‘really demonstrating for is accelerating the date at which their job disappears to a machine.’

Bernard Stiegler’s Automatic Society: The Future of Work, the first volume in a projected series, is addressed to the implications of this turn to automation; concerned with the disappearance of work (or at least of ‘employment’), but also with other, and equally troubling, consequences of automation. The algorithmic technics of contemporary capitalism, the ascendency of ‘big data’ as a mechanism of control, capture and subjectivation, threaten, according to Stiegler, human capacities for dreaming and reflection, even for thought itself. The book opens with a reference to Chris Anderson’s often cited and tellingly titled essay ‘The End of Theory’. In this text, published in Wired in 2007, Anderson enthuses over the displacement of human knowledge by computational information, as represented by the operations of Google. As Stiegler elaborates:

The automated ‘knowledge’ celebrated by Anderson no longer needs to be thought. In the epoch of the algorithmic implementation of applied mathematics in computerised machines, there is no longer any need to think: thinking is concretised in the form of algorithmic automatons that control data-capture systems and hence make it obsolete. As automatons, these algorithms no longer require it in order to function – as if thinking had been proletarianised by itself.

For Stiegler, typically, the threat of automation, as it currently presents itself, is nothing less than apocalyptic. Its four horsemen - heralds of the ‘becoming computational’ of capitalism – are Google, Apple, Facebook and Amazon. These are ‘literally dis-integrating the industrial societies that emerged from the Aufklärung.’

Stiegler draws substantially, though not uncritic-
ally, from Jonathan Crary’s *24/7: Late Capitalism and the Ends of Sleep* (2013) in his critique of the technologically automated environments with which we are now functionally integrated. Continuously hooked up to these environments through portable and networked electronic devices, the subject subsists in a state of unremitting connectivity, eliminating the time of sleep, dream and daydream. Deprived of the intermittences that might afford time and space for states of reverie, the human subject is also dispossessed of its capacity for the kind of thinking necessary to individual and social transformation: ‘The dream that thinks leads to realisations ... technical inventions, artistic creations, political institutions’.

Antoinette Rouvroy and Thomas Berns’s conception of an ‘algorithmic governmentality’ performs a similarly significant role for Stiegler in articulating his critique of automation. For Berns and Rouvroy, the automation of governance enabled by big data obliterates the time and space of both politics and critique. In their 2013 essay ‘Algorithmic governmentality and prospects of emancipation’, they argue that ‘legitimate authority has been displaced and distributed into things, making it difficult to apprehend or to question since it is imposed in the name of realism and loses its political visibility. Critique is paralysed because it seems to have been overtaken and rendered obsolete.’ Algorithmic governmentality anticipates our every move, mapping out in advance an apolitical ideal of behaviour and performance – as exemplified in the ‘smart city’ – to which the subject must adapt and conform without reflection.

In addition to recent conceptions of 24/7 capitalism and algorithmic governmentality, Stiegler’s critique of automation also takes in longer term perspectives with which readers of his substantial oeuvre will be familiar. He conceives of the ‘proletarianisation of minds and spirits’ effected in contemporary processes of automation, for instance, as the final culmination of a process of rationalisation originally identified by Weber, and by Adorno and Horkheimer in their *Dialectic of Enlightenment*, as the calculative instrumentalisation of reason within and for capitalism. Stiegler also builds here upon his longstanding engagement with the thought of the paleo-ontologist André Leroi-Gourhan – for whom the human is defined, as such, in terms of its ‘originary technicity’ – and his earlier synthesis of this with Derridean conceptions of ‘supplement’ and ‘grammatisation’ in his *Technics and Time 1: The Fault of Epimetheus*. Grammatisation, ‘consisting in the duplication and discretisation of mental experiences’, is a process conceived by Stiegler, following Derrida, as one in which human experience and knowledge are exteriorised and retained by technological means, including, but not limited to, those of writing. Digital technology is understood, within this schema, as only the ‘most advanced stage’ of a process essential to and inextricable from hominisation, one ‘that goes back to at least the end of the Upper Paleolithic’.

These perspectives on technology and proletarianisation enable a more nuanced and in some ways more radical take on the political economy of automation than is offered by many other critics of its deleterious effects. Stiegler parts company with Crary, for example, over the issue of the relationship obtaining between capitalism and technology. For Crary, television and related technologies are ‘part of a larger strategy of power’, whereas, for Stiegler, capitalism is only ever the ‘quasi-case’ of technological development that is to be properly understood as ‘fundamentally accidental’. While acknowledging that ‘there are strategies and programmes directing and prescribing research and development’, those devices which integrate us with Crary’s 24/7 capitalism are better conceived as appropriated by capitalism – an advantageous ‘windfall’ – rather than as resulting from some pre-planned strategy. This point might be further debated, particularly given that state investment of tax revenues in technological research and development is often ultimately employed in devices supposed, for example, to be entirely ‘Designed in California’ by Apple. Whatever the intricacies of this particular debate, Stiegler’s larger and effectively argued point is that the threat of automation is not best described as a ‘rise of the robots’ but rather as the capture of technics by capitalism within its ongoing project of rationalisation.

Stiegler’s account of technics as exteriorisation, as an apparatus of human retention, also challenges
conceptions of technology as an always externally posited and invasive threat to an essentialised humanity. Franco 'Bifo' Berardi, for instance, in his recent book *And: Phenomenology of the End*, argues that the human subject is currently threatened with ‘neurological mutation’; that there is underway an epochal shift in the very nature of the human nervous system wrought by the rise of digital technologies that now makes possible ‘the insertions of neuro-linguistic memes and automatic devices in the sphere of cognition, social psyche and life forms.’

Through such insertions ‘history is replaced by the implementation of a technological model, formatted by the networked machine.’ Berardi’s lament replays a longstanding trope in which newly introduced media technologies – writing, the printing press, television, the internet, social media – are held to threaten the supposedly given nature of the human subject. What Berardi describes negatively as the invasive and technological ‘reformatting’ of cognition is, for Stiegler, necessarily fundamental, and in some sense ‘natural’, to the human. ‘[S]ince the beginning of hominisation’, he writes, ‘the practice of tools and instruments has disorganised and reorganised the brains, minds and spirits of workers … of all kinds, which are formed during these practices.’ On this basis, Stiegler is able to formulate an effectively critical response to a contemporary technics of automation rather than simply denouncing its supposedly inhuman effects.

Technics, then, is not itself the problem. What is at issue for Stiegler is rather the *proletarianisation* of the relationship between technics and the subject; the latter’s *alienation from* rather than its *invasion by* processes of automation. When retention is digitised as data, as information algorithmically processed and circulated, it is no longer available to knowledge. Technics no longer serves as *pharmakon*. It is taken out of circulation as a site of social and psychic investment to be instrumentalised, instead, as the exclusive property of computational capitalism. In escaping and outrunning human cognition, automation leads to the ‘disintegration of psychic and social individuals’.

As I have noted, the picture painted of the implications of an ‘automatic society’ subsumed to the rationalising and algorithmic logic of capitalism is apocalyptic. Stiegler is, though, equally concerned to grasp the possibilities of automation dialectically so as to envisage some exit from his catastrophic forecast. Whereas Berns and Rouvroy, for example, tend to present their ‘algorithmic governmentality’ as a done deal, in which critique has already been rendered impossible, Stiegler both insists on its possibility and demonstrates its necessity in *Automatic Society*. We are, he argues, placed at a critical juncture and his avowed purpose, rather than to paralyse thought through despair, is to ‘anticipate, describe, alert, but also to propose’. ‘The question this period poses’, he notes, ‘is how to make an exit from its own toxicity’. Stiegler’s exit strategy is through automation itself. Automation as *pharmakon* might be turned to curative rather than poisonous ends. It is through a return to Marx’s critique of the alienation of wage labour that Stiegler pursues this possibility here.

Stiegler is not alone in observing that automation will likely render much current employment redundant, but he is more original – while acknowledging here his debt to André Gorz – in arguing that we must not confuse employment with work in re-
sponding to this. Employment, as wage labour, necessarily implies proletarianisation and alienation, whereas for Marx, ‘work can be fulfilling only if it ceases to be wage labour and becomes free.’ The defence of employment on the part of the left and labour unions is then castigated as a regressive position that, while seeking to secure the ‘right to work’, only shores up capitalism through its calls for the maintenance of wage labour. Contrariwise, automation has the potential to finally release the subject from the alienation of wage labour so as to engage in unalienated work, properly understood as the pursuit, practice and enjoyment of knowledge. What currently stands in the way of the realisation of fulfilling work, aside from an outmoded defense of employment, Stiegler notes, is the capture of the ‘free time’ released from employment in consumption, as forms of entertainment and distraction equally devoid of knowledge or its real fulfilment.

Stiegler’s critique of automation is inarguably dialectical and, in its mobilisation of the pharmakon, impeccably Derridean. Yet it leaves unanswered – for the moment at least, pending a second volume – the question of the means through which the transition from employment to work might be effected. This would surely require not only the powers of individual thought, knowledge, reflection and critique that Stiegler himself affirms and demonstrates in *Automatic Society*, but also their collective practice and mobilisation. What is also passed over in Stiegler’s longer term perspectives is the issue of how such collective practices, such as already exist, are to respond to the more immediate and contemporary effects of automation, if not through the direct contestation of the conditions and terms of employment and unemployment.

Douglas Spencer

Unlikely hegemons


*Kill All Normies* sets out to provide an anatomy of the internet spaces in which contemporary ‘culture wars’ are being fought out, and an account of how the alt-right rose to prominence and power. It examines the aesthetics of transgression, the symbiosis of sadism and sentimentalism, and the effects of alienation in modern life which have been reproduced and amplified by the internet. The text opens with the hope and optimism surrounding the ‘horizontal’, ‘networked’, ‘leaderless’ realm opened up by the internet, heralded by the 2011 Egyptian revolution (the so-called ‘Twitter revolution’) and the Occupy movement, before moving on to puncture the resultant hubris and complacency. If we let a thousand flowers bloom, some of them are bound to go rotten. It was a pervasive myth at the start of the decade that the methods of communication and organisation opened up by the internet were to the intrinsic advantage of the left. Subsequent events have shown otherwise.

On Nagle’s account, Tumblr-liberalism, a form of politics focusing on identities and their recognition, mainly existed on social media before recently breaking out into what she calls ‘campus wars’. For some time now, a more general version of identity politics has informed the prevailing world view of professional strata and the liberal press; Tumblr-liberalism is not coextensive with this but rather a radicalised offshoot that grew online. But the internet is a diverse place and, less noticed until relatively recently, on the message boards of 4chan and Men’s Rights Activism (MRA) groups, the alt-right was beginning to emerge. Both the alt-right and Tumblr-liberalism are, Nagle argues, insular movements, possessing their own subcultural norms, their ‘own vocabulary and style’, raising barriers of entry in an effort to exclude the eponymous ‘normies’. Both groups saw themselves as *transgressing* a mainstream orthodoxy, of rebelling against the status quo by violating social norms. But the kind of transgres-