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Big Data, TTIP and the Hubris of Techno-Capitalism
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For Raphael Sassower (2014), public intellectuals need to play a key role in enhancing the quality of debate in dialogic democracies. Political radicalism, he holds, denigrates this, neglecting the real possibilities for an intellectual (and socio-economic) elite to enhance democracy, and for technology, in the 'Digital Age', radically to undermine nefarious social relations by creating a 'Postcapitalist' society. In a previous essay (Chis and Cruickshank 2014) we rejected the concept of public intellectuals and held that a dialogic democracy was antithetical to the elitist privileging of certain interlocutors.

Here we address Sassower's arguments about radicalism, and the Digital Age creating Postcapitalism. What we term techno-capitalism is the Panglossian and technologically determinist outlook which holds that developments in technology can radically reshape social relations and transcend many or all of the inequities of capitalism. Techno-capitalism predates the Digital Age but in all its forms it is hubris. Radical change requires a radical dialogic democracy that means re-framing problems away from elite definitions. Many advocates of Big Data promise it will deliver radical improvements in efficiency and democracy: we can have a better functioning and more open set of institutions. Such claims are hubris though. Developments in technology, together with political-legal developments, such as the Transatlantic Trade and Investment Partnership (TTIP), work to increase the power of corporations in neoliberalism to have greater access to a supply of disciplined labour, increasingly privatised public services operating in markets or quasi-markets and commodified public data.

On Radicalism, Dialogue And TTIP

Sassower (2014) discusses five possible meanings of radicalism. The first point Sassower makes about radicalism is that one can seek to be more radical than another by ratcheting up the rhetoric and the positions endorsed, leading ultimately to extremism. The second type of radicalism is what Sassower terms philosophical radicalism, meaning academics challenging the intellectual and social status quo. The third point, which is really a complement of the second, holds that ideas do have consequences and therefore it is legitimate to speak of intellectual radicalism. The fourth point is that there are many types of activism and as we are discussing this in a journal and not forging a new political party, we need to accept the legitimacy of academic—intellectual activism, whether it is defined as radical or not. Finally, he argues that academics should be radical by taking risks and speaking up against a nefarious political consensus, for example, McCarthyism (2014, 59). So, intellectual and academic radicalism is a legitimate form of radicalism and, even if one wanted to quibble over definitions, it is still a legitimate form of activism.

On these issues we have two comments. First, we recognise the vital role of ideas in being able to bring about change. Indeed, this is the *sine qua non* for any dialogic approach to knowledge and politics. It is also why we stressed the need to recognise that people are located in ideas which have traction making the liberal free market conception

of dialogue a fallacious model both descriptively as well as prescriptively. Ideas can be as hard to change as 'structural' factors but both need to be changed. We did not set up binary opposition between mere ideas and structural moving forces of which an elite, in the name of the collective, had specialist infallible knowledge.

Second, we were critical of academics seeking to pursue career capital as Kuhnian puzzle solvers but we did not dismiss academics or universities. We did not set up a dualism between academics and the global poor. What we did was explore the elitist implications of the construct 'intellectual', the institutional politics shaping academics and students, and the control over the media by elites. Rather than dismiss the whole world as 'fallen' we argued that academics can have a very important role to play both inside and outside universities. Inside they can seek to create what we, following Mary Beard, called the 'dissatisfied student', meaning the student who sought critical thinking in place of consumerism. This fits Sassower's concept of philosophical radicalism.

Academics should also work with other groups inside the university such as support staff when they bring out grievances against management. In engaging in these activities in the university, academics will be engaging in a form of political radicalism too, for their views will be seen as a threat to the status quo and will entail risks—the greater the success with these activities, the greater the risk. We take this risk seriously and, so, we hold that such action should be collective to minimise the risk of individuals losing their livelihood. Outside universities, we spoke of academics working with others, to develop new ideas that challenged the status quo of capitalism, as they worked on deep-seated problems. Academics could use their knowledge in doing this but this is not to put them in an elite position as epistemically privileged myth-busters leading the herd.

On the four questions we pose at the end of our previous piece, Sassower replies as follows. One way to prevent public intellectuals becoming apologists would be to look at their previous work and replace inductive hope for more of the same with setting 'up the public agenda to which public intellectuals should respond in critical terms' (2014, 60). For the second question concerning the payment tempting intellectuals to become celebrity academics, Sassower holds that this is in part inevitable but there are many roles public intellectuals can play including that of outspoken 'amateur'. On the issue of whether a true dialogic democracy needs public intellectuals, Sassower holds that critical voices within liberalism are needed and that more critical news platforms like Al Jazeera are making commercial headway. Finally, on the issue of media debate being a passive consumption experience, he argues that this conception is wrong because some media campaigns do provoke consumer reactions that make corporations change.

The first two points we think undermine Sassower's conception of public intellectuals. If people are to be paid or even seen as public intellectuals whether paid or not, then they would need to be seen to be completely free. One could not have a Sartre, Žižek or Chomsky topic approval panel. Moreover, this just pushes the problem back one stage, for now a committee, presumably paid, may be tempted to be apologists and not rock the boat. If those who speak out are 'amateurs' who speak outside their specialist field, then the question is raised as to why such a person is a public intellectual and why others with no expert background are not able to receive $100,000 to speak. For example, a protester

from Ferguson may be more enlightening than an academic speaking outside their topic but it is unlikely such a person would receive such funding. On the last two points it is the case, we argued, following Herman and Chomsky (1995), that the mainstream media will allow and indeed need a certain range of contained critical debate. Consumers may avoid certain food products following criticism and that makes it look like there is a free market of ideas, thus legitimising the pseudo-pluralist system, but virtually no one has heard about TTIP.

TTIP is undemocratic in two senses. First, it has been discussed in secret. Second, TTIP shifts power even more from individuals and governments to corporations because of the power of corporations to penalise governments if their profit is affected by democratic regulation (Martell 2014). Policy would stem from demands and those demands would not be from neoliberal citizen-consumers using transparency to seek the best service, but from corporations demanding the abandonment of regulations. Central here are Investor-State Dispute Settlements (ISDS) which can use 'arbitration tribunals' made up of corporate lawyers (Williams 2014). On this Monbiot (2013) argues:

> The rules are enforced by panels which have none of the safeguards we expect in our own courts. The hearings are held in secret. The judges are corporate lawyers, many of whom work for companies of the kind whose cases they hear. Citizens and communities affected by their decisions have no legal standing. There is no right of appeal on the merits of the case. Yet they can overthrow the sovereignty of parliaments and the rulings of supreme courts. You don't believe it? Here's what one of the judges on these tribunals says about his work: "When I wake up at night and think about arbitration, it never ceases to amaze me that sovereign states have agreed to investment arbitration at all ... Three private individuals are entrusted with the power to review, without any restriction or appeal procedure, all actions of the government, all decisions of the courts, and all laws and regulations emanating from parliament". There are no corresponding rights for citizens. We can't use these tribunals to demand better protections from corporate greed. As the Democracy Centre says, this is "a privatised justice system for global corporations".

One outcome of this was that the tobacco giant Philip Morris was able to sue the Australian Government for passing legislation that made cigarette packets plain except for graphic warnings (Monbiot 2013). Meanwhile, here in the UK there have been secret negotiations over allowing corporations increased access to what could become an increasingly privatised NHS (Williams 2014). Neoliberalism is nothing if not the triumph of the corporate individual over the real individual and the possibility for dialogic democracy. Indeed, it is not just that dialogue is often framed to fit elite definitions of problems but that elites can exercise power by keeping certain activities far away from any scrutiny and public dialogue (Lukes 2004). Media commentators talk of the power of the right wing anti-immigration party UKIP (the UK Independence Party) to influence 'mainstream political debate', with some people blaming immigrants not bankers and politicians for economic problems, but TTIP remains invisible. A radical dialogic

democracy needs radically to reframe problems with capitalist socio-economic relations and to avoid elitism in the process, including the elitism of paid public intellectuals.

On Techno-Capitalism

Whilst TTIP ensures corporations can bypass democratically elected governments and make much democratic dialogue redundant within a traditional liberal pluralist framework, techno-capitalists hold that Big Data can create a Postcapitalist world. Such a claim, we hold, is hubris.

Big Data is a term that has gained more traction in the past five years, due to the development of 'smart' devices and complex algorithms. Technologies used to collect big data are mobile devices, online purchases, interactions on digital networking sites, the scanning of barcodes and so on (Kitchin 2014, 2).

Sassower (2014) draws on the 'public intellectual' Jeremy Rifkin, to argue that the Digital Age (i.e. an age of Big Data) can bring about a Postcapitalist society. His Postcapitalism celebrates egalitarian consumerism whilst the increasingly inegalitarian reality of production relations remains out of sight. This approach would be very much congruent with the ideology of neoliberalism: as consumer-citizens we demand more for less, and all that is outside consumption, such as work or asylum, remains invisible. Sassower argues:

> What may become more radical than any leftist critique is, for example, the transformations of young Americans' (and probably Europeans and others as well) views and commitments to private property. It seems […] that they are more concerned with 'access' than with 'ownership' and thereby contribute to a changed consumption landscape when it comes to their residence, transportation, and entertainment (Rifkin 2014). Now this has a radical potential to transform our worldviews and the ways we interact with each other (2015, 62).

This is a techno-capitalist claim because it is predicated on the promise that the internet frees people up from obsessing about possession, allowing them a happier, more footloose lifestyle, with digital technology changing attitudes as access to the supply of information is freed up. Here more can indeed be consumed for less but not owned, by a supply of labour that sees itself as mobile, flexible and part of an ever-changing world of postmodern disposable ephemera. Rifkin goes further though, with his techno-capitalist case also holding that more could be possessed for less. He celebrates the 'zero-marginal cost revolution', claiming that the development of technologies and algorithms 'can speed up efficiency, dramatically increase productivity and lower the marginal cost of producing and distributing physical things, including energy, products and services, to near zero, just as we now do with information goods' (Rifkin 2014). Here the consumer is liberated by an increased supply of almost free goods thanks to changes in technology.

We have been here before though. In 1954 Lewis Strauss, chairman of the United States Atomic Energy Commission, promised that nuclear technology would make electricity

'too cheap to meter'. Now, the reality of the situation with energy is that vast profits are made whilst millions in the UK suffer 'fuel poverty' following privatisation (King and Fairhurst 2012). If technology were to create such a supply of almost free goods it is unlikely though there would be much demand given that most people would be working on very low wages. Indeed, part of the problem with post-recession austerity economics is that the emphasis on reduced public spending has cut services and salaries, reducing demand and growth, which further reduces wages in the private sector and further reduces demand (Hay 2013). The misdefinition of the problem as a problem of debt rather than a problem of growth actually helps the elites exacerbate the polarisation of wealth because it is used to legitimise policies that make it easier to pay people less and to hand public services over to private profiteers. The rise of ever more 'zero hours contracts' is one illustration of this problem. The promise of 'free stuff', or 'almost free stuff', is hubris and the reality is low wages whilst wealth polarises.

In addition to the Postcapitalist market providing consumer goods that were almost free, the arrival of Big Data can lead to the techno-capitalist claim that society can now be run more efficiency and fairly.

For many, like Anderson (2008), Big Data can be said to embody the triumph of positivism. This is because rather than hold that the problem is to replace metaphysical speculation with causal explanation, to arrive at useful knowledge, it is held that the attempt to explain causality is itself a speculative—metaphysical— endeavour, which can finally be overcome in the age of Big Data. The pseudo-problem of justifying an explanation based on a sample of data is overcome once one has access to data based on entire populations, which is what Big Data allows. Once such access is possible, correlations are fit for purpose for making useful predictions and the search for causality is to be seen as a useless philosophical problem. Thus for Anderson, physics is no longer an exemplar for knowledge and mastery because it has become too speculative.

So, we can say that for techno-capitalist advocates like Anderson, Big Data can create a positivist planning utopia where institutions and policy making can run far more efficiently, improving the supply of services and information to the free market. The data can speak for themselves and we can benefit by the removal of inefficient speculative attempts to explain causality. A classic example is the company 'Farecast' which uses Big Data to predict when the cheapest airline tickets will be available based solely on the inductive reference to previous correlations (Mayer-Schönberger and Cukier 2013, 3-5).

However, the mere revealing of patterns cannot account for contexts and the social organisation of society, explaining issues such as inequality sociologically, historically and politically. Behind algorithms and machines are human bias and the wealth of the elite funders of technology and institutions that aim for more control.

Morozov (2015) argues that behind the fetishism of the 'free internet' that, according to techno-capitalist hubris, enforces openness, there are corporations and states, with the former shaping putatively 'pure data' and the latter monitoring people's use through ubiquitous spying. As Morozov (2015, 60) puts it, with regard to corporations:

> There are tendencies to centralization across the board […] Google and
> Facebook have figured out that they cannot be in the business of
> organizing the world's knowledge if they do not also control the sensors
> that generate that knowledge and the gateways through which is passes.
> Which means that they have to be present at all levels – operating
> systems, data, indexing – to establish control over entire proverbial
> 'stack'. Tension may arise when more and more industries and companies
> realize that, if Goggle's aim is not only to organize all the world's
> knowledge, but also to run the underlying informational infrastructure of
> our everyday life, it will be in a good position to disrupt all of them. […]
> Feeble calls in Europe to weaken or break up [monopolies such as Google
> and Facebook] lack any alternative vision, economically, politically or
> ecologically.

Morozov (2015, 61) notes that even if a better, more efficient, algorithm were developed by a smaller rival to Google, any such rival would fail to break Google's monopoly simply because it would lack the virtual monopoly of data that Google possesses: mass would trump innovation. Data are commodities and Google has a virtual monopoly. Further, we may argue that any attempt to use regulations to limit the power of Google or Facebook would fall foul of TTIP arrangements, when / if accepted by the EU, that allow corporations in neoliberalism to pursue rapacious greed.

In this Digital Age the monopolisation of the supply of commodified data restricts the knowledge of academics and others. The owners of technological systems and algorithms have the power to prevent other organisations and non-aligned individuals from studying their data and so a knowledge deficit emerges furthering the gap between those who own the means of generating and analysing data and those who do not (Stevenson 2014: 18): 'Twitter recently accepted applications from academics to mine its data archive, but the awards only went to a select few—and were decided by Twitter' (Bucy and Zelenkauskaite 2014, 23-4). The data do not speak for themselves but for corporations and through the mouths of selected academics. Given the amount of data available, social scientists would be very keen to gain access, but they can only do so if their use of the data fits with commercial interest. This seems like a reversal of the hermeneutic circle, for instead of academic ideas influencing agents, elite agents would construct the data world and delimit the potential interpretations of that, for social scientists.

In addition to claiming that private companies can improve our lives by using Big Data to furnish better services and information, techno-capitalists could also claim it will help the public sector deliver improved public services, with beneficial commercial spin offs too. Care.data provides one illustrative example of this. As Wilson (2014) argues:

> Care.data sounds good on paper. Commissioning of healthcare services
> will be more efficient and more accurate. Massive new datasets will drive
> both research and health improvement. Rare side-effects of drugs will be
> detected much more easily. Correlations between lifestyle and health will
> be much easier to spot. The economy will be boosted by increased
> commercial usage of the datasets. […] Care.data involves the monthly

extraction of rich data at the individual patient level from GPs' computer systems into a central database at the recently established Health and Social Care Information Centre (HSCIC). The data extracted includes directly identifying information such as a person's age, postcode and NHS number. These identifiers are then replaced with codes in a process known as pseudonymisation. Once the data is in the HSCIC's secure system, it can be linked to existing databases, such as the Hospital Episodes Statistics database. Identifying data will not exit the HSCIC except in very special circumstances such as a public health emergency.

There are two problems here. First, the problem with Google is reversed, for now corporate interests would buy public data shaped by public issue concerns and use it for private-commercial purposes. They may pay for access but the issue here is not the payment but the ability to by-pass ethical problems. As Griffith (2014) argues:

> The potential problems of secondary analysis can be demonstrated the extreme case of Philip Morris International, the makers of Marlboro cigarettes: they put in an anonymous Freedom of Information request to the University of Stirling to see the raw data from a study composed of thousands of interviews about children's attitudes to smoking. This illustrates how companies could gather data from other studies when, if they conducted such sensitive primary research themselves, they would get into trouble.

Second, people's privacy is meant to be protected. However, in 2012 the medical information of 47 million patients gathered over 13 years had been sold to the Institute and Faculty of Actuaries (Griffith 2014). Now there is concern that the anonymisation process, with 'pseudoanonymisation', is not robust enough and that private insurance firms would be able potentially to identify some people if those people already had some records with private companies (Ramesh 2014).

The march of Big Data into people's private lives is welcomed by those who adopt the identity of the 'quantified-self', ready to self-track and 'hack' their own body, believing that big data offers 'self-knowledge through numbers' which can enhance their livelihoods and body (Fotopoulou 2014; Lupton 2013). Self-tracking is used to measure, monitor and quantify one's everyday habits, activities, performance, physical location, learning and health to discover matters such as the amount of calories burnt over a day, after-lunch moods, the number of heart-beats per minute and brainwave activity in order to boost healthiness, concentration and productivity. Social relationships are also 'measured': through a mobile application, one can find the most 'efficient' way of choosing who to spend time with, based on the type of emotions presumably induced through the interaction with particular individuals online. A user concluded: 'Maybe I shouldn't hang out with Mark' (Murphy Kelly 2015).

All these technologies and applications are marketed with the promise of empowering the user by revealing patterns to them through algorithms, in order to boost their confidence and knowledge of themselves. With quantification comes anxiety however: the attempt to

rationalise and manage behaviours and mindsets to fit an unrealistic, one-dimensional standard leads to an enforced conformity, a concealing of emotions and the preoccupation to always make the 'right' choices. Meaningful relationships become reduced to one dimension: a quantification of clicks. For instance, the users of the aforementioned application started 'liking' and 'favouriting' all their social interactions online as a way of meeting perceived expectations and quantifying 'closeness' (Murphy Kelly 2015).

In addition to arguing that the putative liberation of the self is actually the entrapment of the self through constant monitoring, we can note that the monitoring is not simply neutral positivist fact gathering. Rather, the whole point is to construct a disciplined, indeed, self-disciplined, labour force that seeks to be more efficient by being healthier and happier. One is tempted to speak of happiness capital being pursued by a disciplined supply of Brave New World labour. Furthermore, the monitoring can be used to manipulate emotions and behaviours for commercial purposes. Facebook's experiment to control emotions for market research and advertising is a clear example of this (Booth 2014). So, although the user is the producer of data, they are not its owners, as communication platforms and infrastructures are provided by corporations that subsequently can commodify the data by using it for marketing purposes.

In addition to corporations wanting access to public and private data there is the techno-capitalist argument that public institutions will perform more efficiently and fairly for the tax-payer-citizen (and business) if they are made transparent, thus enabling citizens to make informed consumption choices in quasi-markets. This brings us to the issue of Open Data which is defined as 'Big Data + politics' (Keen et. al. 2013). Here we can note three problems.

First, transparency can generate neither trust nor efficiency in public services. As many, such as the philosopher O'Neill (2002) have argued, transparency seeks to enhance trust by exposing all aspects of 'professional performance' but, even if audit culture did somehow manage to measure professionalism, it could not enhance trust, because trust is based on an empathetic understanding and not on the attempt to 'see' everything, which presumes a total lack of trust. Box ticking audit culture though is replacing trust in professions. In turn this undermines professional efficiency, but not bureaucratic efficiency, because cultures of box ticking replace professional cultures, undermining care in hospitals for instance. The Liverpool Care Pathway for terminally ill patients illustrated this, because it encountered scandal with care being replaced by bean counting (George 2014). Audit cultures shape more than they measure and such shaping does not inspire trust in any form.

Second, Morozov (2013) talks of 'solutionism' meaning the naïve belief that Open Data can solve a myriad of social and political problems, leading to a more efficient and fair society. One interesting counter example to such solutionism is discussed by Donovan (2012). He discusses the Bhoomi e-government project in Karnataka, India, which digitised land records. This was meant to assist the democratisation of information, but it 'empowered the empowered' because small and medium farmers had no formal records of land ownership, and thus large land owners were able to exploit the system to gain more land.

Third, democratic reformers have often been co-opted by a system which does little to nothing to challenge elites. As Bates puts it, Open Data has been 'domesticated' and adapted for the political and economic aims of institutions, a strategy to 'win over the protesting popular movements as a whole so they come to consent to the dictates of existing political institutions' (Paterson, cited by Bates 2013, 122). The language used by the advocates has been absorbed by the government (through the use of terms such as 'transparency' and 'openness'), and some of the advocates have been institutionally integrated through their selection to join government advisory panels such as the Public Sector Transparency Board and Local Public Data Panel (Bates 2013, 130). After their integration, an advocate stated that 'they are trying to open up data and at the same time sweat the assets' (Bates 2013, 131). Decision-making over the Trading Fund data plans to sell public data were taken from the hands of the aforementioned advisory panels and given to the Department for Business, Innovation and Skills and HM treasury, reducing the influence of open data advocates on this issue (Bates 2013, 132-133). Although already partly absorbed within state institutions, the data advocates were further undermined when in 2012, individuals with 'connections to the global economic elite' (Bates 2013, 133) were appointed in Cabinet Office's Open Data advisory groups.

The Digital Age of Big Data is one that re-inscribes neoliberal corporate capitalism. Techno-capitalists promised capitalism with better consumerism—or 'Postcapitalism'—but as with the claim for free electricity, this was hubris, and the reality is increased corporate exploitation. Academics need to challenge this rather than being co-opted by corporations like Google and people need to reject their governments' decisions to capitulate to capital with TTIP.

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