Postscript on the empire of control

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ABSTRACT
This paper maps Hardt and Negri’s use of Deleuze (and Guattari’s) philosophical commitment to the control society as a temporal phenomena in the context of education. Education is important because it is pushed and pulled by those vectors that Hardt and Negri see as central tensions in late capitalism: localism vs globalisation, discipline vs control, codes vs axioms, metrics vs expertise and so on. In Empire, Hardt and Negri represent Empire as a form of governance that responds to the passing from disciplinary societies to societies of control. The societies of control (and Foucault’s theorisation on biopower) are central to their concept of Empire defined “as a regime of the production of identity and difference, or really of homogenization and heterogenization” (p. 46). Empire, then, is a macropolitics that produces, or infiltrates, subjectivation as a means to affect the self within globalising and localising regimes. This paper takes up Hardt and Negri’s challenge in two areas. First concerns what appears to be the collapse of the ideal of publicness within public school systems. The second provocation concerns the digital, or presumptive, economy of online and adaptive learning systems.

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Twenty years after publication, Empire remains a fascinating text. Part history, part philosophy, part political economy, the book traverses the global landscape of power and governance in contemporary times. The central argument is that the structures of politics, or sovereignty, have changed. This “new global form of sovereignty is what we call Empire” (p. xii). Empire has been seen as a Communist Manifesto for the 21st Century in that it advocates for revolutionary theory fit for postmodern times (Mouffe, 2009). Hardt and Negri see Empire as breaking from modernist political theories and their problematisations because, they argue, the political, juridical, cultural and subjective apparatus of a society are now fully immersed within global capitalism. There is no longer an outside to capitalism, and subsequently those institutions that express how a society functions, organises, governs and hopes, have changed.

Since publication, Empire has been enthusiastically taken up in different spheres such as international relations (Barkawi & Laffey, 2002), disability studies (Goodley & Lawthom, 2013) and digital cultures (Poster, 2005). In education, Empire has informed critiques of globalisation (Rizvi, 2007), new possibilities for thinking school as community (Peim, 2013) and reconceptualising the space of the classroom (Lewis, 2008). However, there has also been criticism. For example, Dean (2003, p. 120) argues that Hardt and Negri misunderstand Foucault’s understanding of power.
Empire and control

Empire is essentially a book that ‘puts to work’ Deleuze’s notion of control in the context of global politics. At first glance this claim may seem exaggerated. After all, Hardt and Negri are at pains to point out that the book is multidisciplinary, and the work of multiple theorists and their concepts is evident; ranging from Foucault’s work on power, disciplinarity, genealogy and biopower, to Spinoza’s work on the absoluteness of democracy and Luhman’s system theory to name a few. However, the new networks and relays of power or sovereignty that Hardt and Negri name as Empire are an extension of Deleuze’s (1995) articulation of the control society that, itself, is a particular rendering of Foucault’s notion of biopower (Nail, 2016).

I have written on the control society before (Thompson, 2017; Thompson & Cook, 2012; 2014; 2017) and there is necessarily some similarity in exegetical work on the control society, modulating power and dividuation. As Shapiro (2010) has suggested, the control society has been perhaps the most resonant of Deleuze’s concepts to wider audiences because it is the most straightforward example of political economy found in his work. However, I’d argue that it also remains a study of subjectivation consistent with Deleuze’s oeuvre since Empiricism and Subjectivity, first published in French in 1953. Nail (2016, p. 248) tracked through Deleuze’s lectures from April, 1986, where he found Deleuze claiming that the control society is his systematisation of Foucault’s biopower and that Deleuze attributed both biopower and control “to William Burroughs’ essay ‘The Limits of Control,” published in 1975.”

Deleuze’s work, particularly that which he undertook with Guattari, is animated by a particular question. They wanted to ask not just how societies work, and how subjects are formed, how we come to desire the politics that we do and so on, but to ask why it is that these forces, surfaces, planes of consistency have emerged now. In Anti-Oedipus (Deleuze & Guattari, 1983), the criticism they mount of Freud is that he failed to realise how historically constituted his complexes were. The Oedipal Complex is not a transcendent form but an historical one that presents an account of how a particular society was working at a given time. Deleuze and Guattari (2005, p. 194) encourage us to ask not about the transcendent forms of social interaction, but rather to ask: “Whatever could have happened for things to come to this?”. The point for them is to understand
how it is that people come to desire the world in which they live, to become invested in activities and pursuits that are clearly not in their best interests, or what is that they give attention and energy to (Buchanan, 2020).

It is in this context that we need to approach Deleuze’s essay on the control society. For Deleuze, the disciplinary social apparatus typified by institutions had reached its zenith early in the twentieth century. Since World War II, due to the emergence of global capitalism and immaterial labour, enabled by technological advances, disciplinary forces were becoming less satisfactory explanations of subjectivity, subjectivation and social coordination. The central argument is that “societies of control are in the process of replacing the disciplinary societies” and this is evident in the different machines at work (Deleuze, 1995, p. X). In a control society a subject “is more closely and minutely monitored, regulated and policed than ever before, where personal privacy is more or less non-existent, and where information about our whereabouts, personal details and spending habits is ceaselessly collected” (Newman, 2009, p. 105).

For Deleuze (a la Simondon) “any machine or technology is social before it is technical” (Savat, 2009, p. 3). Machines exist in thought, often in response to real or imagined problems, before they become material. This explains why Deleuze argues that there is a “correspondence between any society and some kind of machine, which isn’t to say that their machines determine different kinds of society but that they express the social forms capable of producing them and making use of them” (Deleuze, 1995, p. 180). If the machinery of the disciplinary was thermodynamic, for Deleuze the machinery of the control society is the computer and computational networks. Control societies “function with a third generation of machines, with information technology and computers, where the passive danger is noise and the active, piracy and viral contamination” (Deleuze, 1995, p. 180). These machines enable new technologies and techniques of subjectivation that “short-term and rapidly shifting, but at the same time continuous and unbounded” compared with those machines of discipline organised around “long-term, infinite, and discontinuous” institutions and their associated techniques (Deleuze, 1995, p. 181). Deleuze described this new ultra-rapid temporality as modulation, producing discrete yet non-cumulative expressions, designations or assignations of subjects. “Disciplinary man produced energy in discrete amounts, while control man undulates, moving among a continuous range of different orbits” (Deleuze, 1995, pp. 180). Under the forces of dividuation, identities are temporary assignations that are used to control short term activity (Colwell, 1996, p. 211).

If the simple machine of sovereignty clank and groan slowly and the complex machines of discipline beat and punch with monotonous regularity, then the digital machines of control hum. It is a matter of speed. The increased pace at which modulatory machines operate reduces the differentiation of each moment leading to a collapse into apparently continuous sound. When modulatory machines insinuate a disciplinary society the frequencies of the modulatory machine superpose those of the disciplinary machines and modulated humming is the only discernible output (some of the noise of the disciplinary machine is cancelled out and some feeds into the modulations) (Thompson & Cook, 2012).

There are two important observations to make. First, the concept of speed was important for Deleuze in outlining the transition from disciplinary to control societies. While speed suggests a certain spatial apparatus of capture, it is also a temporal machine effected by changes in time as both duration and intensity. This is a tactic of control, a “logistics of engagement” where the system logic is to keep people moving, and accelerate (intensify) where possible through their engagement with the technology (Thompson & Cook, 2017). Control society uses digital technology to entice dividuation on the part of subjects. Think here of the multiple registers in which a person is now aggregated and narrated; social media and scoring of ‘influence’, virtual networks of online friends, virtual credit ratings, ratings of work efficiency, predictive analytics that use search histories, demographics and so on to devise personalised marketing strategies. The point is that we are only aware of the surface of these new forms of adaptive governance that require “technologies of action at a distance… for the capture of multiplicity in an open space” (Lazzarato, 2006, p. 183).
Second, and related to the above, engagement becomes a principle form of politics in the societies of control as it measures, codes and represents capacities and dispositions in order to create new surfaces to deploy marketing forces and so on. Whereas disciplinary power can be considered as dominated by moulds (such as fairly static enclosures/institutions that individuals are cast within), power in societies of control is a modulation; “a self-deforming cast that will continuously change from one moment to the other, or like a sieve whose mesh will transmute from point to point” (Deleuze, 1995, p. 180). Savat (2009) argues that while control and discipline can be distinguished in a number of ways, they do not extinguish each other, rather control/modulation overlays or is superposed upon pre-existing networks and relays of power.

Hardt and Negri take Deleuze’s control society and apply it to political philosophy. Less overtly interested in subjectivity, Empire is a book about an emerging global order of governance that they call sovereignty. There is something very Deleuzian about taking the words of Deleuze and giving him a new monstrous child, an immaculate progeny. While it has always seemed to me that the it is modulated individual that is the most interesting, and relatively underutilised, concept of Deleuze’s essay, Hardt and Negri have taken modulation and control to construct a systematic account of revolutionary politics for postmodernity. Their main thesis is that global power has “taken a new form, composed of a series of national and supranational organisms united under a single logic of rule” (p. xii). Put simply, Empire represents a ‘smoothing’ of commonly perceived lines and striations of authority, of the modernist project of nations, of the emergence of liberal forms of government such as parliamentary democracies.

Empire establishes no territorial center of power and does not rely on fixed boundaries or barriers. It is a centered and deterrioralizing apparatus of rule that progressively incorporates the entire global realm within its open, expanding frontiers. Empire manages hybrid identities, flexible hierarchies, and plural exchanges through modulating networks of command (pp. xii–xiii).

They take seriously Deleuze’s (1995, p. 181) comment that capitalism has changed and that “businesses have souls, which is surely the most terrifying news in the world”. For Hardt and Negri, this is a result of a new global flows of capital that operates within “a smooth world—or really, a world defined by new and complex regimes of differentiation and homogenization, deterrioralization and reterritorialization” (p. xiii). An effect of this smooth space is a “new paradigm” of governance, or more appropriately sovereignty, characterised “as a dynamic and flexible systemic structure that is articulated horizontally” (p. 13). Empire is a “concept” that is “characterized fundamentally by a lack of boundaries: Empire’s rule has no limits ... No territorial boundaries limit its reign” (p. xiv). If the surfer is, for Deleuze, an example of the new sports of the control society, Hardt and Negri ponder authority and power (sovereignty) as a form of surfing in smooth space, where the global regime has “no temporal boundaries and in this sense outside of history or at the end of history” that extends “down to the depths of the social world” (p. xv). Importantly for Hardt and Negri, Empire is “the paradigmatic form of biopower” (p. xv).

The example that they see that best represents Empire is the United Nations, an exemplar of a ‘smooth’ organisation “bathed in blood” that is paradoxically “always dedicated to peace—a perpetual and universal peace outside of history” (p. xv). The UN represents the pivot from systems of governance predicated on the sovereignty of the nation-state to that of the global order. The UN acts as “a real historical lever that pushed forward the transition toward a properly global system” (p. 5).

Publicness, prosumption and sovereignty in educational assemblages

In education, the most obvious example is the rise of global forms of “networked governance” (Ball, 2009; Lingard & Sellar, 2013). International and intranational organisations such as the OECD, UNESCO and the World Bank are key players in a global education policy network that depends upon metrics, standards and negotiated ambitions such as the Sustainable
Development Goal 4: Quality Education. A corollary to this is the ways that nations and jurisdictions now outsource their policymaking to private actors such that much statework is done through extrastatecraft of infrastructure and the resultant patchwork of organisations, relationships and responsibilities. Ball (2009, p. 89) argues that in education policy corporate entities now “act as advisers, evaluators, service deliverers, philanthropists, researchers, reviewers, brokers, ‘partners’, committee members and as consultants and auditors” as an effective privatisation of the state (Ball, 2009, p. 89). Recent work by Junemann and Olmeido (2020) traces the ways that non-state providers are now deeply implicated in the formation, provision, monitoring, and evaluation of public sector education policy and service through the creation of new networks that spread across the globe. A specific manifestation of this networked governance is occurring in school provision. Publicness, always elusive as a pure ideal, is collapsing as more and more hybrid models of governance and provision emerge. Systems that have invested in new, networked forms regarding the provision of education, whether it be at the VET, secondary school or primary school level, have created new forms of sovereignty that depend upon “an infrastructure of rapid production and dissemination of data” emerging from “advocacy organizations and networks, research outfits, policy entrepreneurs, bloggers, and other internet-based thought-shapers” (Lubienski, 2019, p. 70). It is this data infrastructure of prosumption, whereby individuals both consume and produce education data, that is emerging as a significant new form of sovereignty at work.

The collapse of publicness

The example above suggests a phenomenon that Hardt and Negri presciently describe, the collapse of publicness. One of the key challenges for education systems is the issue of the publicness of (what had hitherto been considered) public institutions. In Empire, Hardt and Negri argue that publicness, as it is commonly understood, is essentially a carryover of a particular Enlightenment conceit between “the ‘inside’ of subjectivity and the “outside” of the public sphere” (p. 183). Within that liberal tradition, which we should see as central to how we are taught to understand government in many Western countries, the “the modern individual, at home in its private spaces, regards the public as its outside” where that outside “is the place proper to politics, where the action of the individual is exposed in the presence of others and there seeks recognition” (p. 188). Within this image of thought, public spaces and public institutions become bastions of liberal democracy, places where the free and open exchange of ideas can flourish, and sites where the demos may organise. The problem, as they see it, is that in the postmodern world, or the world of Empire “public spaces, which constitute the place of liberal politics, tend to disappear” (p. 188). For Hardt and Negri, public spaces and public institutions are “increasingly becoming privatized” and shifting away from “the modern focus on the common square and the public encounter to the closed spaces of malls, freeways, and gated communities” (p. 188). This is an aspect of what Deleuze (1995, p. 178) referred to as the “breakdown of all sites of confinement” such as schools. It is the interiority of these sites that are breaking down. “Educational reforms, industrial reforms, hospital, army, prison reforms; but everyone knows these institutions are in more or less terminal decline. It’s simply a matter of nursing them through their death throes and keeping people busy until the new forces knocking at the door take over” (Deleuze, 1995, p. 178).

Hardt and Negri make the point that in the “passage from modern to postmodern and from imperialism to Empire there is progressively less distinction between inside and outside” (p. 197). This can certainly be seen in the case of public education where the lines between public and private are being blurred in the ways that schooling provision is being organised. This is the networked, sovereign form sees the “inter-linking of business, philanthropy, quangos and non-
governmental agencies and public and private sector entrepreneurs and there is a recurrence of particular companies and people, related to particular kinds of policies” (Ball, 2007, p. 124).

It is not an exaggeration to say that there is an overt operation in many Western countries to reform public education systems through how schooling is provided. The choice of pro-voucher and pro-charter advocate Betsy de Vos as the United States Secretary of Education in 2017 is an example of the coordination, and power, of the reform lobby that advocates for new forms of public school. The charter school in the US, the Free school in Sweden, the academy in England are examples that operate within larger public systems while exhibiting many characteristics of privatised entities. We no longer have public education institutions, we have hybrid entities that straddle the world between public and private. Perhaps we always have, after all if pedagogy is the drawing out of the self (a process of making the private child a public citizen) then the school has long been an institution tasked with making public what was once private. One thinks here of Foucault emphasis on visibility – the public must be seen and to enable that there has to exist a whole “apparatus of uninterrupted examination” (Foucault, 1991, p. 186). Always a hybrid institution, the importance is in the journeying from private to public. Yet what are perhaps seeing is an inversion of that process. Schools are increasingly expected to act as private organisations, compete with each other, are constructed through multiple databases and registers, remain connected through public/private hybridised data infrastructures even as they proclaim to be public institutions. Importantly, to borrow from Hardt and Negri’s analysis of the UN, it is the concept of public education that is changing to become, paradoxically, more private. And this is an unsettling thought, if hybridity constitutes the most likely settlement (or rapprochement) under control, then differences in kind become the only debates available in the contemporary milieu. There can only ever be a very small society, yet a large, smooth globe, for hybrid organisations.

**The commodification of attention**

The second provocation regarding control and education concerns the student or teacher as prosumer and the ways that institutions of learning that commodify attention. If we were to think about what the future holds for pedagogy, perhaps the most striking possibility is that of the digitalisation replacing pedagogy itself. In 2000 the internet and information technology were just emerging as significant influences, in For Hardt and Negri, “new information infrastructure” represent the new production processes of immaterial labour (p. 299). The network is “the site of both production and circulation” (p. 299) and can be thought of as “the combination of a democratic mechanism and an oligopolistic mechanism, which operate along different models of network systems” (pp. 299–300). Already, however, they saw that the ‘horizontal’ democratic potentials of this network were being overwritten by a massive centralization of control through the (de facto or de jure) unification of the major elements of the information and communication power structure” (p. 300).

However, as Poster (2005, p. 103) has written, Hardt and Negri fail to appreciate how the networked, digital information infrastructure would intertwine humans and machines “to such an extent that properly speaking one cannot locate a position that resembles that of a subject nor that of an object”. For Poster (2005, p. 113), network societies “are an evolving, unavoidable and central aspect of globalization” that contain countless dangers and opportunities for the agglomeration of power at the same time as offering serious points of resistance. While Empire represents the information network as the model of the control society, it is perhaps the notions of prosumption and the commodification of attention that best represent digital technologies today.

Deleuze wrote in the Postscript that capitalism is now “directed toward metaproduction… What it seeks to sell is services, and what it seeks to buy, activities” (Deleuze, 1995, p. 181).
Advances in computational capacity, software design and the creation of networked infrastructure have created fertile conditions for the use of adaptive learning solutions that represent this commodification of activity. The promise of these systems is ‘more efficient’ personalised learning that responds to each unique learner in real time maintaining their engagement with learning. Learning personalisation is the modification of educational resources and learning environments… with the goal that learners remain invested and continue to seek the highest level of knowledge possible for them in each specific field of knowledge… The promise is of improved, if not complete, learner investment, as the learning content, environment and tasks are continually updated and responsive to the profiles/patterns of the learner. (Thompson & Cook, 2017, p. 745)

This ‘logistics of engagement’ describes how “educational resources and learning environments are continually modified with the goal that learners remain invested” as the “learning content, environment and tasks are continually updated and responsive to the profiles/patterns of the learner” (Thompson & Cook, 2017, p. 745). Data dashboards, Intelligent Tutoring Systems (ITS), adaptive testing, behaviour monitoring software are just some of the examples of digital technologies used in schools already. These systems function via the collection, retention, analysis and reporting of data in various time scales that create new surfaces for control/biopower. They position the user, often the student, as a prosumer who is required to produce the data that is used to make the system more efficient and feedback into learning activities. These are productive surfaces that manipulate the investment of time and attention to elicit greater and greater investments, and more and more efficient feedback loops. Teachers, students, schools are becoming constructed within multiple databases, in multiple places, within multiple temporal registers that require the engagement, or the attention, of those creating the data that will be actioned by the digital tools. Keeping students cycling through online activities is one example of a new tactic of control emerging in universities, schools and other institutions of learning.

There is an important contemporary point. Post-COVID19, where many schools and universities in systems that had the necessary infrastructure delivered schooling and university courses online, we saw how education systems could be digitised in rapid time. This is the model of pedagogy that has emerged as the response to crises – isolate, network and keep the student moving through engaging (or motivational) tasks. It is likely that much was learnt as a result of the pandemic.

The nature of technological development, its vested interest in producing mass markets for mass consumption necessarily involved large corporations in the design, administration and analysis of these technological systems. Corporations access public school data, including that produced by students, and use this to improve their products which they sell back to those systems. At the very least this blurs the line between public and private entities as governments enlist private entities to build data infrastructures to facilitate system interoperability to partly allow a more consistent surface for commodification (Sellar, 2017). If the point of children and young people is to become the means for sustaining networked infrastructures, we may have missed the point of pedagogy.

Conclusion

One way to think about control societies is that they exert influence through the harnessing of attention, such that a user becomes a prosumer involved both in the production and consumption of data. In Empire, Hardt and Negri construct a political economy of globalisation as a control society. The book remains a rich series of provocations for thinking about social institutions, governance and subjectivation. In this short essay I have tried to think through their provocation of the collapse of inside/outside, public/private with regard to education provision and the effects of digital technologies. While Empire helps us think about the hybridisation of the public,
it may be less useful to think about the attention economy, the ways that time is captured and worked on through the creation of digital rhythms and multiplicities that fold or open up in education spaces. Deleuze (1995, p. 182) concluded his Postscript by saying “Many young people have a strange craving to be motivated” the political work for these motivated people captured through technologies of control is “to discover whose ends these serve”. The concern is that the education revolution is well under way, yet we remain far from understanding who is benefiting from societies of control.

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**References**

Ball, S. J. (2007). *Education plc: Understanding private sector participation in public sector education*. Routledge.

Ball, S. J. (2009). Privatising education, privatising education policy, privatising educational research: Network governance and the ‘competition state’. *Journal of Education Policy, 24*(1), 83–99. [https://doi.org/10.1080/02680930802419474](https://doi.org/10.1080/02680930802419474)

Barkawi, T., & Laffey, M. (2002). Retrieving the imperial: Empire and international relations. *Millennium: Journal of International Studies, 31*(1), 109–127. [https://doi.org/10.1177/03058298020310010601](https://doi.org/10.1177/03058298020310010601)

Buchanan, I. (2020). *Assemblage theory and method: An introduction and guide*. Bloomsbury Publishing.

Colwell, C. (1996). Discipline and control: Butler and Deleuze on individuality and dividuality. *Philosophy Today, 40*(1), 42–70.

Deleuze, G. (1995). Postscript on control societies. In G. Deleuze (Ed.), *Negotiations* (pp. 177–182). Columbia University Press.

Deleuze, G. (2004). *Logic of sense*. Bloomsbury Publishing.

Deleuze, G., & Guattari, F. (1983). *Anti-Oedipus: Capitalism and Schizophrenia*. University of Minnesota Press.

Deleuze, G., & Guattari, F. (2005). *1000 Plateaus: Capitalism and Schizophrenia*. Trans. Brian Massumi. University of Minnesota Press.

Foucault, M. (1991). *Discipline and punish: The birth of the prison*. Penguin Books.

Goodley, D., & Lawthom, R. (2013). Hardt and Negri and the geo-political imagination: Empire, multitude and critical disability studies. *Critical Sociology, 39*(3), 369–384. [https://doi.org/10.1177/0896920511431500](https://doi.org/10.1177/0896920511431500)

Junemann, C., & Olmeido, A. (2020). Mobilising neoliberal discourse and fostering new subjectivities: The ecletic role of philanthropy in contemporary global education governance. In A. Hogan, & G. Thompson (Eds.), *Privatisation and commercialisation in public education: How the public nature of schooling is changing*. Routledge.

Lazzarato, M. (2006). The concepts of life and living in the societies of control. In M. Fuglsang, & B. Sorensen, *Deleuze and the social* (pp. 171–190). Edinburgh University Press.

Lingard, B., & Sellar, S. (2013). Globalization, edu-business and network governance: The policy sociology of Stephen J. Ball and rethinking education policy analysis. *London Review of Education, 11*(3), 265–280.

Lubienski, C. (2019). Advocacy networks and market models for education. In *Researching the global education industry* (pp. 69–86). Palgrave Macmillan.

Mouffe, C. (2009). The Importance of Engaging the State. In J. Pugh (Ed.), *What is radical politics today?* (pp. 230–237). Palgrave Macmillan.
Nail, T. (2016). Biopower and control. In N. Morar, T. Nail, & D. Smith (Eds.), Between Deleuze and Foucault (pp. 247–263). Edinburgh University Press.

Newman, S. (2009). Politics in the Age of Control. In M. Poster, & D. Savat (Eds.), Deleuze and new technology (pp. 104–122). Edinburgh University Press.

Peim, N. (2013). Education, schooling, Derrida’s Marx and democracy: Some fundamental questions. Studies in Philosophy and Education, 32(2), 171–187. https://doi.org/10.1177/1532708607303606

Poster, M. (2005). Hardt and Negri’s information empire: A critical response. Cultural Politics, 1(1), 101–118. https://doi.org/10.1007/s11217-012-9300-0

Rizvi, F. (2007). Postcolonialism and globalization in education. Cultural Studies ↔ Critical Methodologies, 7(3), 256–263. https://doi.org/10.1177/1532708607303606

Savat, D. (2009). Deleuze’s objectile: From discipline to modulation. In M. Poster, & D. Savat (Eds.). Deleuze and New Technology (pp. 45–62). Edinburgh University Press.

Sellar, S. (2017). Making network markets in education: the development of data infrastructure in Australian schooling. Globalisation, Societies and Education, 15(3), 341–351. https://doi.org/10.1080/14767724.2017.1330137

Shapiro, S. (2010). The ‘bitter necessity’ of debt: Neoliberal finance and the society of control. Retrieved February, 8, 2020.

Thompson, G. (2017). Computer adaptive testing, big data and algorithmic approaches to education. British Journal of Sociology of Education, 38(6), 827–840. https://doi.org/10.1080/01425692.2016.1158640

Thompson, G., & Cook, I. (2012). Spinning in the NAPLAN ether: ‘Postscript on the control societies’ and the seduction of education in Australia. Deleuze Studies, 6(4), 564–584. https://doi.org/10.3366/dls.2012.0083

Thompson, G., & Cook, I. (2014). Manipulating the data: Teaching and NAPLAN in the control society. Discourse: Studies in the Cultural Politics of Education, 35(1), 129–142.

Thompson, G., & Cook, I. (2017). The logic of data-sense: Thinking through learning personalisation. Discourse: Studies in the Cultural Politics of Education, 38(5), 740–754.