

GOOD DATA IS (AND AS) PEER PRODUCTION

By Angela Daly

INTRODUCTION

This essay is an introduction to the Good Data Project and its relationship with peer production. Here I provide some context to the Good Data Project and our recent publication, an edited collection entitled *Good Data*, published open access in early 2019 by the Amsterdam University of Applied Sciences Institute of Network Cultures. Here I link peer production to some of the Good Data Principles we derived from the *Good Data* book contributions. Through a reflection on the process of producing the book as academics situated within (neoliberal) university structures, I acknowledge some limitations as to how far the process of the book and the broader Good Data Project embody peer production values. In conducting this work, both in its procedure and in its substance, we aspire to contribute to the ‘hacking’ of the university from within by working within institutional constraints to create fledgling alternatives. We aim to do this both by opting for a non-traditional open access publishing model and also through our own substantive Good Data proposals as well as those of the authors who contributed chapters to the *Good Data* book which work towards alternative, collaborative and socially just visions of the datafied future. Yet, this aspiration to institutional hacking, genuine peer production and the realization of Good Data is very much a work-in-progress for us in various senses.

WHAT IS THE GOOD DATA PROJECT?

The Good Data Project is an interdisciplinary

exploration of ‘good data’ which I commenced in late 2017 in the Queensland University of Technology Faculty of Law, along with S Kate Devitt and Monique Mann. As we have said elsewhere (Mann, Devitt & Daly 2019), we were increasingly depressed and dispirited with the many examples of ‘bad data’ we saw around us, from the Facebook/Cambridge Analytica scandal to developments closer to home regarding the Australian government’s surveillance capacities including participation in the Five Eyes alliance as leaked by Snowden, ongoing colonial practices – including now using digital data – directed against Indigenous peoples in Australia (Moreton-Robinson 2015), and the subjugation of marginalised people in Australia through data and datafication (Mann & Daly 2018). But we were also depressed and dispirited by the prevalent alternative narrative, which focused unduly on opting out to the greatest extent possible of digital technology use – ditch your smartphone, delete your Facebook account, take to the hills. Surely there must be other option for us to use digital technologies, and imagine ethical, moral and overall ‘good’ digital futures?

To shake ourselves out of this funk, we launched the Good Data Project, thanks to a small amount of seed funding from our faculty (for a strategic ‘interdisciplinary’ collaboration, to address the silos created by traditional Faculties and Disciplines). The seed funding helped to fund three project research assistants, a workshop in late 2017 and allowed us to do an initial print-run of the *Good Data* book (more on which below). Our initial aim with the project is to open a conversation about alternative digitised futures, for a just and fair digital economy and society, and start identifying and celebrating concrete examples of Good Data practices as a way

to achieve more ethical, moral, and overall ‘better’ future scenarios. We also wanted a space for fun and playful imaginings of better worlds and possibilities for ourselves, which we found lacking from our other activist/academic work, which mostly focused on critique.

The initial Good Data workshop which took place in late 2017 at QUT involving academics, activists, public and private sector representatives, NGOs and hackers/tinkerers where we began to interrogate what we thought could be considered ‘good data’, both in theory and in practice. The workshop was preceded by a public outreach event in the form of a Brisbane Free University (BFU) session in which I participated, coordinated by Anna Carlson, one of the Good Data research assistants and the co-founder of BFU, ‘a space in which we could “reimagine education (...) challenge the divide between the academic sphere and the public forum, between the sandstone and the street corner”’ (Carlson & Walker 2018). Public outreach has been a key aspiration for this project, both in events such as the BFU one, and more recent launches for the Good Data book which have been organised outside of traditional academic settings such as Spui25 in Amsterdam,[1] the ACO Bookshop in Hong Kong’s Foo Tak Building,[2] and ThoughtWorks office in Brisbane/Meanjin.[3]

This initial workshop, and our desire for this work to engage with publics beyond typical academic audiences then led to our proposal to the Institute of Network Cultures (INC) at the Amsterdam University of Applied Sciences to assist us in publishing an edited open access book on *Good Data*. It was of the utmost importance to us that a book coming out of this project be published on an open access basis (as a form of ‘Good Data’ in and of itself), and we also appreciated and were attracted to the INC’s publishing experiment:

INC publication series include essay collections, commissioned writings on the intersection of research, art, and activism, and theoretical works with an international scope. Experiments are done

with multiple formats such as print, ePub, PDF, etc. keeping quality standards in content and design high at all times. The INC produces and distributes books in-house, which allows publishing of state-of-the-art research in a fast yet personal way. Most publications are open access and available for free for everyone interested. (INC, n.d.)

For a very topical topic like ‘Good Data’, we wanted to be able to produce a book which was open access, freely available to the general public rather than being stuck behind an academic paywall, and also would be published quickly. We also did not have enough funding to pay a traditional academic publisher to make the book open access. Thus we were delighted when the INC agreed to take on our book project as we see their publishing experiment as being a great example of ‘Good and Open Data’.

The open access book with over 370 pages comprising 20 chapters with more than 50 authors, *Good Data* was published by the INC in January 2019, and to date has been launched at events in Amsterdam and Hong Kong, with further events planned in London and Brisbane. We have also curated a series of blogposts for the INC website, with Good Data chapter authors giving summarised and more accessible versions of their contributions, as part of the public outreach strategy.

We see the production of *Good Data* as just the start of the Good Data Project. We want to continue our academic/activist inquiries on this topic, and look to implementing Good Data solutions in more pragmatic ways. In order to do this, it is timely to give an insight into where our thinking is heading since the book was published in early 2019, and provide a reflection on the content and process of creating the *Good Data* book and their relationship to ideas of peer production, and the limitations of trying to conduct work such as this within the institutional structures of contemporary universities.

GOOD DATA PRINCIPLES AND PEER PRODUCTION

This section presents some of our current thinking on the idea and practice of ‘Good Data’ subsequent to the edited book’s publication. These could be termed as interim ‘findings’ from our inquiry so far, and how they relate to ideas and practices of peer production.

For us, it is clear that the ‘goodness’ of data must relate to the entire process of creating and using data:

- When the decision is made to collect data in the first place;
- When the data is collected;
- When the data is processed/analysed;
- When the data is used; and
- When the data is re-used.

At each of these stages a decision is taken which will have ethical, moral and political impacts, and should be recognised as such. Another key issue here is the question of which actors should be involved at each stage. In many cases of ‘bad data’ we see hierarchical and domineering relationships exploiting individuals and communities which are in practice unable to stop data about them being collected and used by governments and large for-profit corporations – and often the two working together (see: Daly 2016; Thatcher, O’Sullivan & Mahmoudi 2016).

Overall, we view data’s goodness in general as an explicitly political (economy) question and one which is always related to the degree which it is created and used to increase the wellbeing of society and especially to increase the power of the most marginalized and disenfranchised.

My conception of peer production is taken from Benkler’s ‘commons-based peer production’ which he defines as:

radically decentralized, collaborative, and nonproprietary; based on sharing resources and outputs among widely distributed, loosely

connected individuals who cooperate with each other without relying on either market signals or managerial commands (Benkler 2006, p. 60).

We have formulated 15 principles of Good Data which we have derived from the substantive content of the 20 chapters in the *Good Data* book (Devitt, Mann & Daly 2019). Here we highlight a few principles which relate to Good Data as facilitating peer production, which we have previously grouped under the theme of ‘Data challenging Colonial and Neoliberal Data Practices’:

Principle #1: Data collection, analysis and use must be orchestrated and mediated by and for data subjects, rather than determined by those in power.

Principle #2 Communal data sharing can assist community participation in data related decision-making and governance.

Principle #3 Individuals and collectives should have access to their own data to promote sustainable, communal living.

These principles reflect but counter the problematic Bad Data practices which pre-existing colonialist and neoliberal hegemonies have created, involving the disempowering of individuals and communities with data about them being extracted from them. Here I explain in more detail the relationship between these principles and notions of peer production.

Principle #1: Data collection, analysis and use must be orchestrated and mediated by and for data subjects, rather than determined by those in power.

Principle #1 is derived from Lovett et al (2019) on Indigenous Data Sovereignty (IDS) and Indigenous Data Governance (IDG). IDS and IDG present ways by which Indigenous peoples and First Nations can resist Western-colonial data practices and go beyond Western data protection laws and practices

to achieve self-determination, autonomy and sovereignty in how and by whom data about them and their communities is collected, analysed and used.

A key point raised in IDS/IDG scholarship and initiatives is recognising and questioning which actors are involved in collecting data about people and communities, and the purposes for which and for whom the data is collected. First Nations and Indigenous peoples have historically had data about them, their communities and their cultures extracted from them in non-consensual ways by colonial apparatuses, data which is then used against them and their interests to disempower them as part of the historical and ongoing processes of colonisation (see Kukutai and Taylor 2016).

IDS and IDG initiatives push back against (data) colonialism and demand that instead data is collected for and by the communities and individuals to whom it pertains. This is an illuminating consideration which should also be taken account of in data collection and use regarding non-Indigenous peoples as well, that hierarchical powers should not be collecting data about individuals and communities more generally without their genuine involvement, interest and need. The involvement, interest and need of individuals and their communities regarding data is likely to differ among individuals and communities and must be taken account of, and may well differ on the basis of culture, history and political economy.

In other words – good data should be peer-produced, should genuinely reflect peers' involvement, interests and needs, and should not be hierarchically extracted, held and used. However, Good Data in these circumstances may not fulfil all criteria for Benkler's commons-based peer production. Individuals and communities may not be 'loosely connected individuals', and instead may be strongly connected individuals in a pre-existing community such as members of a First Nation; and there may be 'managerial commands' that such communities adopt to guide and steer the projects,

and specifically the participation of any non-community members.

Principle #2 Communal data sharing can assist community participation in data related decision-making and governance.

Principle #2 is derived from Ho and Chuang's chapter (2019) critiquing neoliberal data protection models which emphasize (false) individual autonomy and choice through concepts such as consent and anonymisation. Instead, an alternative approach may involve communal data sharing, both of the data's value and the data's governance, by individuals whose data it is. Data cooperatives may be an example of such communal data sharing that attempt to redress the power imbalance between individuals and communities of which they are part on the one hand, and large entities which have been extracting and using their data on the other hand.

The cooperative form and the peer production, ownership and consumption it can entail may present an alternative paradigm to both the extractivist hierarchical for-profit corporate and nation state apparatus. This is notwithstanding some of the structural problems with previous versions of cooperativism such as engaging with non-members or accepting aspiring members of the cooperative, emulating capitalist extraction and scarcity tactics and participating in capitalist competition (Bauwens & Kostakis 2014).

Nevertheless, the cooperative form is increasingly emerging in the digital economy, with concrete examples including midata.coop for health data.^[4] Some interpretations of the data trust concept emerging in the UK also seem to aspire to a cooperative or mutualist model (see e.g. Lawrence 2016).

Time will tell whether these attempts at data cooperativism involve peer production in ways which overcome cooperativism's structural problems, or reproduce them. However complete and unfettered openness of data and sharing is unlikely to be

desirable from a Good Data perspective. Linking back to the first principle above, it may well be that for some data, only a particular individual or groups of individuals or community should be able to access and use that data, and only particular individuals should be part of a certain (data) community in the first place.

This may mean that such initiatives do not fulfil all requirements of Benkler's commons-based peer production. However, limiting participation in data cooperatives and access to data in the aforementioned circumstances is very different from limiting access to data because of (neoliberal, colonial) capitalist forces and should not be equated as such.

Principle #3 Individuals and collectives should have access to their own data to promote sustainable, communal living.

Related to **Principle #2** regarding communal data sharing and community participation in decision-making and governance is **Principle #3**, that individuals and collectives should have access to their own data, given this, as Kuch et al (2019) demonstrate, can also promote sustainable and communal living in the case of solar energy.

While it would seem implicit in the previous two principles that individuals and communities should be able to access their own data, it is worth making this explicit both in the cases of communal data governance and the collection of data by and for individuals and communities.

Thus, individuals and communities need access to their own data, need ways of sharing data communally and should have their needs and interests regarding data collection determining whether and by whom data about them should be gathered and used in the first place.

I view these three principles of Good Data as overlapping with, but not identical to, ideas of peer production: broadly, that data should be produced,

accessed and governed by peers. This can be contrasted with the prevailing model of data being extracted from people by large bureaucratic institutions without (much) regard for individuals' and communities' genuine participation in the process beyond possibly ticking a box or signing a form, if indeed they are aware of the data being gathered in the first place. However, Good Data initiatives along these lines may not be open to everyone – there may be criteria according to which one can or cannot become a member of a particular data community and cooperative. For example, in case of IDS/IDG initiatives, a particular individual not being Indigenous may exclude them from participating in the IDS/IDG initiative. While this may not at first glance accord well with peer production ideas, excluding some individuals from some data communities and cooperatives may in fact ensure that the production, collection, aggregation and use of data is occurring among genuine peers. This may not reproduce exactly Benkler's commons-based peer production, but should still be acknowledged as falling within a broader category 'peer production'.

OPEN ACCESS PEER PRODUCED PUBLISHING AS GOOD DATA

Publishing *Good Data* as an open access book was very important to us. We wanted to practise what we were preaching as it were, while cognisant of our locations within a university institution, which is significant for reasons I will come to below.

Our very low budget for the project, and also our wish for the book to be out and ready relatively quickly ruled out the more traditional academic publishers which charge for open access publishing. Also the length of time these publishers can take to review book proposals created too much risk for us that the book would not be out in the timeframe of 12-18 months after the initial workshop in late 2017.

We also wanted authors to have more freedom that they might otherwise encounter with a traditional academic press, to write pieces that may deviate from the peer-reviewed traditional academic paper.

Yet we were also cognisant of the ‘metric power’ (Beer 2016) at play in many of our neoliberalised university systems (Feldman & Sandoval 2018) by offering authors the option of having their work peer-reviewed, as this can be important for having an output ‘recognised’ by such performance metrics. In any case, even those contributors who needed to pay some attention to these metrics were compromising themselves by even contributing to our book given the non-traditional academic publisher and the undervaluing of book chapters in metric exercises such as the UK’s REF (Feldman & Sandoval 2018). In this sense, *Good Data* and how we went about creating it is a compromise between a genuinely radical academic creation and a more conventional publication subject to, and fulfilling the demands of, university metric powers.

These were some pragmatic reasons to approach the Institute of Network Cultures, but also their publishing philosophy as quoted above, and my experience of contributing a chapter to their *Society of the Query Reader* (Konig and Rasch 2014) provided positive reasons to try to publish the book with them, given the experimental, innovative and politically progressive nature of their operations. The INC is also a research centre situated within a university and possibly one which could be characterised as a very progressive ‘university press’. This is significant given the institutional recognition of scholarly material published with university presses to which we are subject as part of the exercise of metric power in our own university institutions. By publishing with the INC, we can argue that *Good Data* was published by a university press, albeit a very different creature to what is commonly associated with this term.

Open access publishing such as the INC’s operations can constitute peer production (Bauwens 2005). *Good Data* was released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International licence. Thus the book is a non-proprietary output, available to ‘widely distributed, loosely distributed individuals’ worldwide and one which also does not rely on ‘market signals’ (Benkler

2006, p. 60), reflecting various (but not all) attributes of commons-based peer production.

Aside from our strong inclinations to publish this book open access, we also consider that open access publishing is a form of Good Data too. This relates directly to some other Good Data Principles:

Principle #7 Open data enables citizen activism and empowerment.

Principle #15 Good data should be published, revisable and form useful social capital where appropriate to do so.

At the outset, we acknowledge that ‘data’ may not be the correct way to describe the contents of the *Good Data* book. In terms of the Data Information Knowledge Wisdom (DIKW) model, we hope that the book produces and contains ‘knowledge’ as well as ‘information’ and ‘data’ and we aspire to it producing and containing ‘wisdom’ in its discussions and arguments. If ‘data’ is used here in a more expansive way to cover the book’s contents then these Principles of Good Data direct us to open access publishing, given the ways in which doing so can enable citizen activism and empowerment (see Gray & Lämmerhirt 2019) and can form useful social capital (Trenham & Steer 2019).

It is too early for us to be able to tell whether by publishing *Good Data* in an open access form we have indeed enabled citizen activism and empowerment and formed useful social capital, and also reached beyond the academy with this work. But there is more possibility for this to happen compared to data (and information, knowledge, wisdom) which is con(s)t(r)ained behind paywalls. Furthermore, collective rather than individual publishing and making outputs freely available online can be a form of resistance as an ‘alternative’ to the neoliberal university model (Feldman & Sandoval 2018, citing SIGJ2 Writing Collective 2012).

PEER PRODUCTION, GOOD DATA AND THE UNIVERSITY

Here, I want to reflect upon the extent to which I view the whole process of us producing the *Good Data* book as reflecting ethical principles of both Good Data and peer production. In particular I want to reflect on the possibilities for doing this kind of activity while still being situated in the neoliberal, hierarchical and colonial institutions of universities.

At the outset I acknowledge that the production of *Good Data* was hierarchical – my co-editors and I formed and still form the core of the Good Data Project and made decisions regarding which contributions were accepted and rejected, performing a gatekeeping function. We also benefitted from internal funding from our university faculty to run the project, and employ three research assistants to help us do so. Yet this interaction with institutional structure and hierarchy is not an unusual form of organisation in peer production projects (Shaw & Hill 2014). In creating and curating *Good Data* we evidently did ‘not exist wholly in opposition to [the] formal [site]’ of the university as an institution (Carlson and Walker 2018). We were within higher education institutions (two out of three editors still are, including myself) and utilised some available university resources in order to run the project and produce the book.

Yet I still consider the process of curating and disseminating the *Good Data* book as something which does not align entirely with the neoliberal logic of these university structures and performance metrics: instead it is a compromise with these structures and metrics. We – and more so the INC’s whole publication experiment – have attempted to ‘hack’ the university (Winn and Lockwood 2013) – at least somewhat – from within. We have utilised resources and support and our own time paid for by the institutions to produce an ‘output’ which will be recognised – again, to some extent – by these institutional structures and performance evaluation processes, but which in its more collaborative and open form defies some of these logics – again, at

least to some extent. With *Good Data* we have attempted to ‘create useful services and effect positive technological interventions in the research, teaching and learning environment of the university’ (Winn and Lockwood 2013, p. 228) – services and interventions we hope are also useful for those in other universities and also in the world beyond the university as well.

Regarding our role in the production of *Good Data* as editors, I do view it as one of hierarchy as mentioned above. While ‘pure’ commons-based peer production may necessitate a ‘radically decentralized’ model facilitating cooperation ‘without relying on either market signals or managerial commands’ (Benkler 2006, p. 60), forms of ‘legitimate authority’ and control have emerged in online peer production initiatives (O’Neil 2014). I do not know whether participants view us as legitimate authorities or not, or whether they view the whole *Good Data* production process as one which would even fall into the definition of peer production. I just note that forms of hierarchy, authority and control are found in peer production initiatives, and if the process of creating the *Good Data* book can be viewed as peer production, then it was definitely one that could be characterised as ‘pure’ commons-based peer production.

We do hope that our project is a step towards a Good Data/peer produced future. We have attempted to strive for a ‘good enough’ data project in order to bring about ‘better’ or ‘good enough’ (Gutierrez 2019) scenarios for conversations on data through the substance of the discussions in *Good Data* and by incorporating some aspects of peer production into the production and dissemination of this material. We acknowledge these limitations which are associated, I believe, with trying to conduct this work from within a university institutional context which make it difficult (but not impossible) to bring about a ‘best’ scenario.

CONCLUSION

In beginning to come to a clearer and more precise

definition of what ‘Good Data’ is, reflecting on existing ideas, current and movements such as peer production in order to determine what overlaps and what does not has been a useful exercise. We acknowledge the work of others on which we build our ideas, such as ‘data justice’ (Dencik, Hintz & Cable 2016) and ‘data activism’ (Milan & van der Velden 2016; Kazansky et al 2019), but we should not forget peer production and the ways in which some of the Good Data Principles interact with this phenomenon as described above.

In the process of producing the *Good Data* book we also attempted to engage with principles of peer production, most notably by publishing the book with the INC and releasing it as an open access publication. I note the limitations of our approach, especially the hierarchy we implemented and the university institutional structures in which we resided, which entailed that the project was not pure commons-based peer production. But it was these limitations which also provided the conditions of possibility for the project as manifested.

As long as we reside in (Western, academic) institutions, we are beholden to comply with (some of) these institutions’ demands regarding ‘outputs’ and performance metrics. Yet we can try to forge new paths in at least partial resistance to the demands by constructing alternatives, both through the substance of our research and how we disseminate it – in other words, by hacking the university. Collective rather than individual scholarship and making this scholarship freely available are alternatives to the neoliberal paradigm which may involve peer production and may also constitute ‘Good Data’. The substance of *Good Data* through the authors’ contributions and our i.e. the editors’ continuing research theorises on and provides practical examples of better (morally, ethically, politically) forms and futures for data and digitisation incorporating alternatives to the current neoliberal ‘bad data’ present.

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ENDNOTES

[1] <http://www.spui25.nl/en>

[2] <https://www.aco.hk/aco-eng>

[3] <https://www.thoughtworks.com/locations/brisbane>

[4] See: <https://midata.coop/index.html>