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Experimenting with academic subjectivity: collective writing, peer production and collective intelligence

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ABSTRACT

Following involvement in several academic collectively written articles, the authors question traditional notions of the 'lone' individualist author model as the expected standard in the humanities as opposed to large research teams in physical sciences. They use Barthes and Foucault to question the function and the concept of the author and assumed notions of subjectivity. Recent collective writing as a form of peer production and publishing is an attempt to reinvent the concepts of authorship, the author subject and author subjectivity. These bring to the fore the processes of peer review, questions of ownership (for example, of what remains in a revision, whose contribution becomes revised and by whom), and blur the boundaries around author/collective voice and are discussed in this paper. Its transversality is proving as complex as the term suggests, in terms of developing new ways of connecting, thinking, examining and working, in ways that have not been the norm at least in the field of philosophy of education. Contemporary questions of the potential social, philosophical, legal, epistemological and ethical implications for and of authorship and subjectivity have barely been touched on to date, but this article begins to broach this gap.

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Introduction

As a practical experiment in collective writing we have all been involved in several collective writing articles. Michael Peters set up an Editors' Collective of scholars who are similarly editors of journals or interested in editing in the field of education (see <http://editorscollective.org.nz/>). He instigated and has also been part of several small collective writing projects, one of which is an article entitled 'Towards a Philosophy of Academic Publishing' (Peters et al., 2016), which had some twenty-one contributors. It innovated further by using open peer reviewers whose remarks were included in the article.¹ In a companion piece some of the group also participated in a reflection on the process – 'Collective Writing: An Inquiry into Praxis' (Jandrić et al., 2017). Subsequently the Editor's

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Collective members have produced other articles, including: ‘Antipodean Theory for Educational Research’ (Stewart et al., 2017), ‘Ten theses on the shift from (Static) Text to (Moving) Image’ (Peters et al., 2018) and ‘Is Peer Review in Academic Publishing still working?’ (Jackson et al., 2018). These papers have been produced through a collective writing process by different groups of scholars in the collective who know one another quite well, some of whom belong to the editorial development group of the journal *Educational Philosophy and Theory* (EPAT) that is the flagship journal of the Philosophy of Education Society of Australasia (PESA).²

As the Editor-in Chief of *Educational Philosophy and Theory* for a Special Issue, ‘What Cones After Postmodernism?’ celebrating fifty years of EPAT – both the society and the journal were launched in the late 1960s – Michael decided to extend the collective writing experiment utilising journal’s database of over 3,000 readers, contributors and subscribers in another direction. In contrast to the carefully crafted process of collective writing used by the Editors’ Collective, he drafted a seemingly innocent but provocative invitation to contribute to this Special Issue: ‘After postmodernism in educational theory? A Collective Writing Experiment and thought Survey’ and invited two Co-editors, Marek Tesar and Liz Jackson, to share in curating the responses (Peters, Tesar, & Jackson, 2018). PESA President, Tina Besley wrote the Foreword (Besley, 2018). The process was managed by Susanne Brighouse, EPAT’s managing editor. Authors were invited to contribute a short provocative piece of some 500 words that reviewed the question of postmodernism – a contentious issue that has helped to drive the ‘culture wars’. These contributions were followed by a series of nine excerpts of approximately 1400 words that illustrate the variety of theoretical persuasions and positions. The response was overwhelming with over one hundred and seventy contributions. Some of the contributors provided unsolicited remarks about how much they enjoyed the process and the form.

These experiments highlight and bring into question some rather seemingly obvious concerns about the nature of academic writing as a genre, its historical development to date, its networked future, and its relation to the rise of the journal and academic publishing more generally. They also signify a range of social, philosophical, legal and epistemological questions first raised by Roland Barthes and Michel Foucault about the function and the concept of the author and assumed notions of subjectivity underwriting authorship. Of course, none of this may be considered interesting or exceptional in the realm of the natural or social sciences where based on working relations and the epistemology of the research team, scientific papers are regularly written and appear in publication with multiple authors, sometimes with more than twenty authors, even if the underlying issues of authorship are never problematised. It is far less common in the humanities and literary studies where scholarship and research is still driven by the traditional ‘lone’ individualist author model that derives in part at least from German and English Romanticism ideas on originality, genius, and the concept of the author.

Questioning the received concept of the author: Barthes and Foucault

The questioning of the received concept of authorship in the humanities springs from a 1967 essay by Roland Barthes (*The Death of the Author* [*La mort de l’auteur*]) who famously questions the intentionalist understanding of the text. This is a full blown attack on the

then ruling liberal assumptions that the author's identity, background and intentions (their *subjectivity*) are the necessary starting point for any theory of criticism and reading. Barthes argues for the separation of the literary work from the author-creator. As he writes: 'literature is that neuter, that composite, that oblique into which every subject escapes, the trap where all identity is lost, beginning with the very identity of the body that writes.'³ As he notes the ancient narrative mode is performed by a speaker whose story-telling talents might be admired as a mediator, shaman, orator or master narrator but not as its genius-creator. In a straightforward fashion Barthes puts forward his argument:

The author is a modern figure, produced no doubt by our society insofar as, at the end of the middle ages, with English empiricism, French rationalism and the personal faith of the Reformation, it discovered the prestige of the individual, or, to put it more nobly, of the 'human person'. Hence it is logical that with regard to literature it should be positivism, resume and the result of capitalist ideology, which has accorded the greatest importance to the author's 'person'.

After a brief trawl through modern French fiction beginning with Stéphane Mallarmé through to the influence of Surrealism, Barthes settles on a formulation from structural linguistics:

the author is never anything more than the man who writes, just as / is no more than the man who says /: language knows a 'subject,' not a 'person,' and this subject, void outside of the very utterance which defines it, suffices to make language 'work,' that is, to exhaust it.

Without unpacking the rest of the essay, we can already see how literary studies might become fractured by this argument that pictured the notion of the author as an individualist ideological construction of the modern period. But this presents a particularly Eurocentric view that totally ignores oral cultures and indigenous narratives, which still exist today but remain as what Foucault would call 'subjugated knowledges'. Such knowledges have by no means disappeared from our world, but they have been steadily ignored and marginalised in much of mainstream literary studies, philosophy, education and pedagogy. Just as the authorship of the Bible is shared and often unknown, so too is the authorship of many such indigenous narratives. Does that really matter? There is usually a consistency in these shared narratives that comes from oral traditions that tell and retell them so that any changes by the story-teller or *tusitala* are likely to be corrected by others listening.

Foucault begins his 1969 essay 'What is an author?' in response to Barthes, with a reference to Beckett – 'What matter who's speaking, someone said, what matter who's speaking' – to maintain:

The Author is a certain functional principle by which, in our culture, one limits, excludes and chooses: (...) The author is therefore the ideological figure by which one marks the manner in which we fear the proliferation of meaning.

He begins by setting aside a set of theoretical issues that serve as coordinates for a study of the author:

I will set aside a sociohistorical analysis of the author as an individual and the numerous questions that deserve attention in this context: how the author was individualized in a culture such as ours; the status we have given the author, for instance, when we began our research into authenticity and attribution; the systems of valorization in which he was included; or the

moment when the stories of heroes gave way to an authors' biography; the conditions that fostered the formulation of the fundamental critical category of 'the man and his work.' For the time being, I wish to restrict myself to the singular relationship that holds between an author and a text, the manner in which a text apparently points to this figure who is outside and precedes it. (p. 115)

Without exhaustively recounting Foucault's line of argument we can at least note that he understands the ethics of contemporary writing as freed from the necessity of 'expression' and, therefore the 'confines of interiority,' being more concerned today with 'creating an opening where the writing subject endlessly disappears' (p. 116). In relation to this theme he mentions the 'kinship between writing and death.' As the inheritance of European formalism and the decade of French structuralism in particular infer, the Nietzschean trope of the death of God and Man is stated in terms of its linguistic formulation. Foucault's argument then proceeds to deal with the 'author' as a function of discourse, mentioning four features including books or texts as a form of property developed through legal codification or juridication. (This is actually a process that dates from the Statute of Anne, sometimes also known as the Copyright Act of 1710). Second, Foucault acknowledges that 'the "author function" is not universal or constant in discourse' (he mentions folk tales, stories, epics etc). Third, the 'author-function' 'results from a complex operation whose purpose is to construct an author' (p. 127). In this regard he mentions as an example the Christian method to authenticate particular texts in the canon. Fourth, as he says, the 'author function' does not 'refer ... to an actual individual insofar as it simultaneously gives rise to a variety of egos and to a series of subjective positions that individuals of any class may come to occupy' (pp. 130–131).

As Wilson (2004) remarks the author question first raised by Barthes and Foucault in the late 1960s came back to life in the 1990s (Keefer, 1995; Lamarque, 1990; Sutrop, 1994), developed in its strong form by Burke's (1992) *The Death and Return of the Author* that re-examined the anti-authorial thesis of Barthes, Foucault and Derrida. Foucault may have been premature in announcing post Barthes that 'God and man died a common death' (Foucault, 1977, p. 121). Of course, in retrospect the accuracy of the Nietzschean trope hardly matters despite the critique of the postmodern de-centering of the author given that the category of the 'author' has been opened up to historical analysis once and for all. Foucault himself also, as is well known, returns to the ethical subject in his governmental and later subjectivity studies.

The fate of the author: new media and copyright

Two themes taken up by scholars from this ongoing theoretical discussion concern very similar kinds of things: one looks to the political economy of new media; the other, in related terms, builds on contemporary legal work on copyright that came to light with Benjamin Kaplan's (1967) *An Unhurried View of Copyright* and has been followed by Larry Lessig (1999, 2001, 2008), Pamela Samuelson (2007), Mark Rose (1993) and Peter Jaszi (1994), to name a few. It seems these two significant aspects – political economy of media and legal studies of copyright – have converged with literary theory. Both these theoretical tendencies problematise the category of author and the individualist subjectivity it embodies, while also denaturalising the legal apparatus that supports it.

The first line of convergence is nicely summed up by Kuusela (2015, p. 103) in 'Writing Together':

According to many, the current economic era—whether referred to as knowledge based, postindustrial, or post-Fordist—is characterized by an increased economic interest in intangible goods and intellectual property rights, such as patents, copyrights, and brands. Such characterizations point to a shift in Western capitalism, in which immaterial production has started to replace material production—if not always in real and monetary terms, then at least in our imagination. This economic tendency, which emphasizes the role of knowledge production as an asset that needs to be privately owned, has resulted in a politico-economic regime that attempts to categorize intellectual and cultural creation as private property. However, this transition has been accompanied by another development: the rise of virtual collectives and crowds that have come to serve as important cultural actors. Certain collectively produced projects, such as wiki-based works, have been clear successes, and the use of algorithms by companies like Google and Amazon has made crowds appear as significant cultural forces. As a result, our current milieu has become increasingly reliant on the privatization of immaterial processes, like cultural production, as well as on collaborative problem-solving, crowd intelligence, and crowdsourcing. (footnotes eliminated)

With regard to the second related line of convergence, Woodmansee (1997) in a stunning essay entitled 'On the Author Effect: Recovering Collectivity,' writes:

Will the author in the modern sense prove to have been only a brief episode in the history of writing? By 'author' we mean an individual who is the sole creator of unique 'works' the originality of which warrants their protection under laws of intellectual property known as 'copyright' or 'authors' rights.'

Michael states that he has been heavily influenced by both of these lines of convergence and the arguments represented by them and pursued both lines of development in a variety of papers and books over the years. He began this trajectory over twenty years ago with an edited book on Jean-Francois Lyotard (Peters, 1995) after completing a PhD thesis on Ludwig Wittgenstein. Lyotard's use and interpretation of Wittgenstein's language games as a method for analysing the social bond intrigued him, and he was also impressed with Lyotard's analysis of performativity as part of the condition he called postmodern. His 'phrase regimens' define the multiplicity of communities of meaning, with overlapping and incommensurable systems, that erode the status and ideological content of grand narratives. Lyotard also introduces political economy into the study of knowledge and the technologisation of knowledge systems which influenced Michael to focus on political knowledge economy in order to talk of 'knowledge cultures' as a critical philosophical term, as neither 'knowledge economy' nor 'knowledge society' – a standard bifurcation between economics and sociology that hindered the understanding of knowledge in terms of its effects (e.g. Peters & Besley, 2006; Peters, Britez, & Bulut, 2009). Despite his adoption of Lyotard's skepticism he thought that open education (Peters & Britez, 2009) had potential that escaped the monopoly effects of digital capitalism and the predatory nature of 'Big Tech' (Dayen, 2017). He embraced the philosophy of openness (Peters & Roberts, 2015) based on a critical understanding of 'cognitive capitalism' and 'immaterial labour' (Peters & Bulut, 2011). These works have been recently followed by *The Digital University: a dialogue and manifesto* (Peters & Jandrić, 2018a), and a series of papers on creativity, on subjectivity, on peer and co-production, and collective intelligence (e.g. Peters & Jandrić, 2018b). Often in humanities research it makes sense

to see where you have been rather than to detail future research plans. The study of Wittgenstein together with Lyotard, Derrida and Foucault – while a scandalous marriage to some analytic philosophers – enabled Michael to explore linkages. Using Nietzsche and Heidegger enabled him to take the question of the author into the realm of the virtual and social media, to inquire of knowledge cultures and collectivities that offer departures from the regime of academic authorship governed by the genre rules of journals, where authorship is submerged and constructed in a digital system.

Woodmansee (1997, p. 280) charts the emergence of the concept of the author as individualised genius from 1815 in the writings of Herder, Goethe, Coleridge and Wordsworth, as first expressed in Edward Young's *Conjectures on Original Composition* (1759):

The notion that the writer is a special participant in the production process—the only one worthy of attention—is of recent provenience. It is a by-product of the Romantic notion that significant writers break altogether with tradition to create something utterly new, unique—in a word, 'original.'

She argues that the collective and collaboration element in writing becomes more apparent as we move backwards in time into the medieval era. Since electronic communication new forms of collaboration have emerged that throw up the problem of copyright as it has shaped and formulated the modern notion of the author. Yet the law still largely remains unaffected by the critique of authorship although there is the growing movement of open access and the 'creative commons' that escapes the iron law of copyright.

Kuusela (2015) captures this moment and its effects on culture:

This tension between private property and crowds has also had clear effects on culture. Cultural production increasingly takes place within this conjuncture, which is characterized, on the one hand, by an economic regime that increasingly brings intellectual processes under the category of private property and, on the other hand, by the influence of masses and crowds. This situation has resulted in countless legal conflicts regarding intellectual property rights and has generated heated debates on piracy and copy-right violation, but these conflicts have also created new interest in notions of the intellectual commons and the public domain.

In *The Digital University: A Dialogue and Manifesto* (Peters & Jandrić, 2018a), Michael and Petar relate personal anarcho-aesthetics to the notion of *homo economicus*, and the design principle to the notion of *homo collaborans*, to defend a notion of creativity as the sum of rich semiotic systems that form the basis of distributed knowledge and learning. It is a kind of inherently collective creativity that is enabled by the new digital infrastructures and increasingly augmented by algorithmic reason. In 'Education, Creativity and the Economy of Passions: New Forms of Educational Capitalism' (Peters, 2009), Michael reviewed claims for creativity in the economy and in education distinguishing two accounts: what he called 'personal anarcho-aesthetics' and 'the design principle.' The former, he argues, emerges in the psychological literature from sources in the Romantic Movement emphasizing the notion of creative genius and the way in which creativity emerges from deep subconscious processes, involves the imagination, is anchored in the passions, cannot be directed and is beyond the rational control of the individual. This account, curiously, has a close fit to business as a form of 'brainstorming,' 'mind-mapping' or 'strategic planning,' and is closely associated with the figure of the risk-taking entrepreneur. The latter, by contrast, 'the design principle' is both relational and

social, and surfaces in related ideas of 'social capital,' 'situated learning,' and 'P2P' (peer-to-peer) accounts of commons-based peer production. It is seen to be a product of social and networked environments – rich semiotic and intelligent environments in which everything speaks.

The same digital infrastructural architecture and array of apps also enable citizen science, amateur science, and crowd funding opportunities, as well as the encouragement of collaborative writing in the sciences.⁴ Pettibone, Vohland, and Ziegler (2017), as part of the Citizens Create Knowledge (GEWISS)⁵ online platform and capacity-building programme, chart the ways in which citizen science have diversified taking on a range of characteristics sometimes in conflict: 'a way to collect massive data sets at relatively low cost, a way to break science out of the ivory tower and better engage the public, an approach to educate lay people in scientific methods.' They find 'evidence supporting previous findings that citizen science is a phenomenon strongest in biodiversity and environmental monitoring research, but at home in a number of scientific fields, such as history and geography.'

The Citizens Create Knowledge (GEWISS) online platform lists the building blocks for citizen science in their programme, including

- Networking and exchange for those engaged or interested in citizen science through our online platform and events.
- Analysis of current citizen science activities as well as of needs of citizens and researchers through dialogue workshops
- Participatory creation of a toolkit for practitioners to realise citizen science projects
- Development of a Citizen Science Strategy 2020 for Germany through a moderated consultation process
- Production of technical and organisational resources, such as training workshops and a short film

It doesn't take much imagination to see that citizen science provides a new collaborative way of doing science and of doing collaborative science writing.⁶ The new mandate is to involve citizens and stakeholders in future projects and in the design of research agendas developing new forms of citizen participation and the communication of science with the prospect of merging them into an overall concept.⁷ Certainly, citizen science is a new movement that flows out of the concept, philosophy and digital practice of openness (Peters & Roberts, 2015), and collective writing is another 'experiment' that recasts the ideology of the author and shifts the governance of subjectivity.

Watson and Floridi (2016) refer to 'crowdsourced science' and examine the sociotechnical epistemology of the e-research paradigm. They analyse Zooniverse as 'the world's largest citizen science web portal' (p. 1). Their empirical investigation reveals

how information and communication technologies enhance the *reliability*, *scalability*, and *connectivity* of crowdsourced e-research, giving online citizen science projects powerful epistemic advantages over more traditional modes of scientific investigation.

The change of practice that results from the sociotechnical epistemology similarly promotes collaboration in science and the humanities. The important element in citizen science is that it promotes public participation in scientific research, creating roles for

interested amateurs and developing scientific communities that blend the professional and the amateur. This development is certainly well suited to subjects that require mass observation like astronomy and environmental monitoring (Peters & Wals, 2016; Wals & Peters, 2017) but it also has significant opportunities for peer-to-peer pedagogy combined with citizen science or with collective writing – what we can call the peer production of symbolic public goods.

The League of European Research Universities (LERU) recognises the potential of citizen science and its role in the open science movement. Their paper ‘Citizen Science at Universities’ (2016) introduces the history and state-of-the-art of citizen science and identifies three significant trends:

1. Increasing coordination and collaboration between citizen science practitioners from different fields, which leads to sharing procedures and best practices, and to the creation of networks and associations.
2. Emergence of platforms that support a variety of citizen science projects, creating broader public awareness and encouraging a greater retention of volunteers.
3. Expanding the role played by citizens in the projects beyond simple tasks to include greater participation in all phases of the research process from conceptualisation to publication (p. 3, Executive Summary).

There is no doubt that citizen science has taken off and governments around the world have become aware of its significance in crowdfunding and public participation in science.⁸ James Surowiecki’s (2005) *The Wisdom of Crowds* provides the argument for the significance of the wise crowd in situations where information aggregation among groups enhance the cognition, coordination and cooperation that optimises disorganised decision making groups. The same processes have been used to understand crowd organisation in large-scale networked protests. Bennett, Segerberg, and Walker (2014, p. 253) show how ‘technological stitching platforms play an important role in enabling large-scale crowds to achieve macro-level organization involving many different networks’ and they ‘identified a basic package of peer-production processes that are integral for achieving the coherent organization that network stitching implies. All three categories – production, curation, and dynamic integration – are important.’ Of course, not all crowds are wise, as we have seen in various investment bubbles, mob mentality (as in Tulsa Race riots 192 and lynchings during the US Civil Rights era), responses to viral health panics, moral panics, populism and even the crowds who follow politicians in ethnic cleansing (e.g. during the Bosnian War, the Holocaust and so on).

Much of the original work on peer production springs directly from the publications of Yochai Benkler (2006) who argues that peer production constitutes a new form of production. He argues ‘organizational innovation that has emerged from Internet-mediated social practice’

combines three core characteristics: (a) decentralization of conception and execution of problems and solutions, (b) harnessing diverse motivations, and (c) separation of governance and management from property and contract. (Benkler, 2016, p. 1)

Working with colleagues, Benkler investigates peer production in relation to contributions made to Wikipedia. They begin;

Wikipedia, the collaboratively edited encyclopedia, is one of the Internet's most valuable global public goods. With 37 million freely usable articles in 285 languages and 500 million unique visitors per month worldwide, its revealed informational value seems to be enormous to society. (Hergueux, Algan, Benkler, & Morell, 2015, p. 2)

They demonstrate 'the quantity of field contributions that our subjects make to Wikipedia is strongly related to their taste for reciprocal exchange, their social image concerns and their altruistic preferences' (Hergueux et al., 2015, p. 21). While this may well be the case, Wikipedia continues to be soundly criticised in terms of factual reliability of content, and specifically for systematic gender and racial editorial bias, American and corporate bias and being an open encyclopedia, it lists some of these (https://en.wikipedia.org/wiki/Criticism_of_Wikipedia). Many were shocked when it emerged in October that 2018 Physics Nobel laureate, Donna Strickland, the first female physics winner in 55 years had been 'not deemed significant enough to merit her own page' by a site moderator who stated, 'This submission's references do not show that the subject qualifies for a Wikipedia article,' only in March 2018! This highlighted the ongoing marginalisation of women in science and the gender bias at Wikipedia. 'The episode also cast light on Wikipedia's own gender bias: just 16% of the site's volunteer editors are female and only 17% of entries dedicated to notable people are for women.' (<https://www.theguardian.com/science/2018/oct/03/donna-strickland-nobel-physics-prize-wikipedia-denied>). In a personal experience, Michael has been subject to a hostile environment and in fact had his Wikipedia page taken down and objective of his career history and publications altered several times by a NZ Wikipedia editor who is a technical specialist at Victoria University of Wellington, and someone had previously completed his PhD at Waikato University. Surely a case of conflict of interest and maybe even some unknown vendetta? This is despite the information at the time being on his employer, the University of Waikato's website and verifiable from many independent sources. The NZ editors of Wikipedia cast aspersions on the construction of the site and even removed all verified publications. As of August 2018, the objections to the entry are that 'a major contributor appears to have a close connection with its subject; this article contains wording that promotes the subject in a subjective manner without imparting real information; the article relies too much on references to primary sources' (https://en.wikipedia.org/wiki/Michael_Adrian_Peters).

Biographies of living persons must adhere to strict rules, neutral point of view, verifiability and no original research yet this 'editing' over several years seems to go well beyond this. (see: https://en.wikipedia.org/wiki/Wikipedia:Biographies_of_living_persons).

These studies 'extend the existing empirical literature on public goods provision beyond its current focus on explaining individual contributions' to gauge pro-sociality and the foundations of cooperation in public goods environments that speak to concepts of collective intelligence, involving changes in subjectivity in relation to authorship and scientific practice.

Guattari experimenting with the collective subject

Further diverse conceptions of authorship and science lead to questions about the collective author subject. For example, literary and legal literatures on the author, bring to bear more centrally notions of the collective author subject and forms of subjectivity that spring

from creative appropriations of available networks in the peer production of symbolic public goods. These new forms are new experiments in pedagogy, in learning exchanges, and in intersubjectivity – the self-conscious academic and creative writing, scientific or activist communities – with elements sometimes all happening together in, for example, existing environmental and ecology groups (Wals & Peters, 2017). Calling into question the very nature of the relationship between the subjectivity of the author and its exteriority (Guattari, 2000), calls us to question the wider ecological interconnectedness of authors not only with co-authors, but also with all human and non-human life, and with the wider world and planet Earth itself. Guattari urges a move against a contemporary stasis, for an ‘ecosophical revival’ (p. 23), that is, through his idea of three ethico-political ecological registers: ‘the environment, social relations and human subjectivity’ (p. 18). This calls into question not only the idea of the individual or collective author subject, but ties authors in to every aspect of individual and collective living in contemporary society. Rather than conceptualising the individual author as the subject, an ecosophical perspective calls for a consideration of subjectivity, or ‘components of subjectification’ (p. 23) as the critical aspect of working on or through oneself, in as much as one is a collective singularity; constructed and in a permanent way re-constructed in the collectivity of a multi-valent collective liberation project.

Collective authorial projects not only allow academic subjectivities to shift away from pre-determined, scientific measures of subjectivity, they demand it. Equally, they are not the social or in any way a solution to all worldly problems. Recognising phenomenology as limited by its aim for transparency, ethical re-framings of subjectivity allow for the knowable and the unknowable, that is the conscious, and the unconscious, ‘conceptual ... and affective or perceptive’ (Guattari, 2000, p. 25), as entirely complementary. Such reframings invoke the principle of transversality (Guattari, 2015), whereby the collective must work on many different ways of working together, not top down, but constantly renegotiating ways in which it may not necessarily play out as an even, level plane. Renegotiating thus embeds such work in the complexities of the relational, knowledge and orientational divergences implicated in peer productions.

Peer production

Burdened perhaps by their complexity, the power of collective assemblages to develop and exceed their known potential speaks to the power of peer production. Working towards a common theme, individual contributions driven by the collaborative desire to innovate beyond each individual’s ordinary capacity, inhere in and arise from the collective give and take, working towards and working through, the issues arising in such collaborations. Guattari (2000), in his writings on analysts, calls for innovative approaches, to avoid becoming ‘trapped in a cycle of deathly repetition’ (p. 26). Transposed to the examination of academic subjectivities, collective peer productions of thought allow a re-elevation of progressive, creative, new, ethico-aesthetic paradigms, elevating both the potential of the individual and the collective. Relatedly, viewed through a Kristeva (1980) lens, the power in peer production provokes the further consideration of the intertextuality between the writings of each author and the elements they represent (histories, stratifications, interpretations and ideological positions) in time and place. The multiple voices enacted in the production of each aspect of the collective are thus never constructed on the basis of the

author's own thoughts alone. This intertextuality, first between peers, but also between each author and her or his positionings and multiple voices, thus challenges anew the ferocity of copyright and individualistic claims to knowledge, truth, genius and particular utterances.

Peer production, then, in terms of an academic authorial collaboration, such as in the Editors Collective, and in terms of rewriting the script for the ethico-political workings of academia in the contemporary world, calls also for a reconsideration of globalisation. Fears for the very existence of academia, in the face of the likes of Trump, the rise of the Alt-Right and Right-wing populism (Peters, 2018) coincide with the need for encounters with both the minutiae of academic subjectivities, and their worldly implications, in the convergence of diversity amongst student bodies, historical and contemporary events, and desires for world peace and ecological sustainability, as alluded to also above.

The philosophy of collective intelligence

A philosophy of collective intelligence offers a way of conceptualising the performance of the collective, as called for in the previous sections. A key thinker on knowledge processes, and on their collective cyberculture presence, Pierre Lévy presents the notion of collective intelligence and openness in a global collective, as 'the capacity of human communities to cooperate intellectually in creation, innovation and invention' (Peters, 2015). Emanating from Guattari's advice to him as a student, Lévy's idea of collective intelligence favours the exploratory nature of collective authorship, of pushing boundaries, and questioning, developing a 'disregard for academic consensual intellectual conservatism'. It represents thus, from its inception, the inventive, collaborative, co-operations invoked in the collective writing experiments of the Editors Collective, and the wider ecologies of future collective innovations and enterprises. It is 'neither the opposite of collective stupidity nor the opposite of individual intelligence. It is the opposite of artificial intelligence.' As such, Lévy outlines in an interview with Peters, '[i]t is a way to grow a renewed human/cultural cognitive system by exploiting our increasing computing power and our ubiquitous memory' (p. 261). The focus on computing power points to the most advanced stage of acquisition of writing (in comparison to speech and language, for example, which are innate), as a representation of knowledge and ideas. It represents anew not just authorship, but writing itself, beyond a semiotic representation of meaning through symbols and signs, and rather as a form of programming, where the writing sets corresponding processes in motion. Some of these processes are knowable, as in computer programming languages, and planned or learned, and some less so, for example the wide ranging implications and algorithms set in motion by a Facebook 'like', or online advertisements. At the same time, drawing in our 'ubiquitous memory' recognises that which converges in the individual and collective assemblages of already-there, omnipresent histories, pasts, realities, voices. It makes space in these confluences, not only for such knowledge valued in Western philosophical and academic constructs, but also for wider thought, knowledge and affective sense, arising in diverse ways of being, for example in Eastern or indigenous philosophies.

Conclusion

The experiment with academic subjectivity through collective writing, peer production and collective intelligence is under constant reinvention. In some ways it can therefore

be seen as in a kind of infancy. With the recent work and experiments with collective writing and publishing as an attempt to reinvent the concepts of authorship, the author subject and author subjectivity, that were traditionally served and often perpetuated by the 'lone' individualist author model with all its accompanying ideals, this experimental work is itself continually contested. Such concepts as processes of peer review, and associated questions of ownership (for example, of what remains in a revision, whose contribution becomes revised and by whom), blur some of the boundaries around author/collective voice discussed in this paper. Its transversality is proving as complex as the term suggests, in terms of developing new ways of connecting, thinking, examining and working, in ways that have not been the norm at least in the field of philosophy of education. New opportunities arise through the blurring, as authors, editors and publishers innovate their own practices, through wider forms of 'writing' in the sense of both an exilic self subjectivity – shifting to and recognising the potential of capacities beyond those of the individual academic author, editor, publisher – and a recognition of the multiple convergences and implications, of which the individual and the collective may or may not be aware or in control.

Some of the seemingly obvious questions raised in the introduction have been responded to here, while others have arisen and will play out in the ongoing experiments of the Editors' Collective and other collective writing projects. In what ways might the points that have been raised about the nature and purpose of academic writing, its history, its networked potential, its contribution to or place in the rise or proliferation of the journal and academia in general, develop this field of academia? And what might be the important openings through which we collectively intervene in the contemporary lack of serious action taken towards pressing worldly problems arising in and beyond neoliberal globalisation (Peters, 2018), mass refugee crises and culturally-based detentions and extremisms resulting in terror attacks and mass shootings? Undoubtedly questions of the potential social, philosophical, legal, epistemological and ethical implications for and of authorship and subjectivity have barely been touched on to date, at least in their contemporary manifestations. Much of this work remains to be done.

Notes

1. <http://www.tandfonline.com/doi/full/10.1080/00131857.2016.1240987>; for the Editors' Collective see <http://editorscollective.org.nz/>.
2. For the journal see <http://www.tandfonline.com/toc/rept20/current> and for the Society, see <https://pesa.org.au/>.
3. All references are to the English translation that appears in the journal *Aspen* 5 & 6, Three Essays, <http://www.ubu.com/aspen/aspen5and6/threeEssays.html#barthes>.
4. See <http://citizenscience.org/> and <https://www.citizensciencealliance.org/>.
5. http://www.buergerschaffenwissen.de/sites/default/files/assets/dokumente/gewiss_flyer_dez14_en.pdf. See also <https://www.goethe.de/en/kul/wis/20441694.html>.
6. For a list of citizen science projects that demonstrate the form and variety see https://en.wikipedia.org/wiki/List_of_citizen_science_projects. For a NZ example see 'Citizen Science Meets Environmental Restoration: measuring success through monitoring,' <http://www.landcare.org.nz/Regional-Focus/Manawatu-Whanganui-Office/Citizen-Science-Meets-Environmental-Restoration>. See also <https://www.curiousminds.nz/stories/extreme-citizen-science-in-new-zealand/>.

7. https://www.open-science-conference.eu/wp-content/uploads/2015/04/04_Aletta_Bonn_-_Citizens_create_knowledge_knowledge_creates_citizens.pdf.
8. See e.g. <https://www.citizenscience.gov/>.

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