

RESEARCH, GOVERNANCE, AND TECHNOLOGIES OF OPENNESS

NAOMI HODGSON

INTRODUCTION

The changing governance of higher education in the European Union policy context has raised concerns over the erosion of the public role of the university. Seen in the need for universities today to compete in the marketplace with other providers of research and development, and the positioning of students as consumers, for example. Concurrently, practices of governance have been concerned to ensure transparency and openness, in the name of democracy, to ensure that the public of responsible choosers can make informed decisions and see that public funds for research provide a worthwhile investment. Recent policy changes such as the requirement for the researcher to publish in open access (particularly if in receipt of public funds, as seen in EU and many member-state policies)¹ are part of this restatement of the university's duty of public accountability. Both policymakers and advocates of open access publishing argue that it is right that the outputs, and often the

¹ European Commission, 'COMMISSION RECOMMENDATION of 17.7.2012 on access to and preservation of scientific information', (Brussels: European Commission, 2012),

http://ec.europa.eu/research/science-society/document_library/pdf_06/recommendation-access-and-preservation-scientific-information_en.pdf. See also 'Guidelines on Open Access

to Scientific Publications and Research Data in Horizon 2020', (Brussels: European Commission, 2015),

https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf.

raw material (data), of publicly funded research be accessible to that public. Open access publishing is one means of making visible and accessible - and thereby accountable - the products of research and researchers themselves. Digital technologies facilitate new measures of quality and excellence, such as measuring impact in terms of sharing and mentions of an article on social media (as captured by Altmetrics, for example).

Peters characterises this decade as ‘the “open” decade (open source, open systems, open standards, open archives, open everything) just as the 1990s were called the “electronic” decade (e-text, e-learning, e-commerce, e-governance)’.² Peters suggests that:

it is more than just a ‘decade’ that follows the electronic innovations of the 1990s; it is a change of philosophy and ethos, a set of interrelated and complex changes that transforms markets and the mode of production, ushering in a new collection of values based on openness, the ethic of participation and peer-to-peer collaboration.³

The change of philosophy and ethos to which Peters refers requires, as Enroth⁴ argues, a change of social ontology - and thus a new forms of enquiry - by which we understand socio-political configurations.

² Michael A. Peters, ‘The History and Emergent Paradigm of Open Education’, in eds Michael A. Peters and Rodrigo G. Britez, *Open Education and Education for Openness* (Rotterdam: Sense, 2008), 4.

³ Peters, ‘The History and Emergent Paradigm of Open Education’, 4.

⁴ Henrik Enroth, ‘Governance: The art of governing after governmentality’, *European Journal of Social Theory* 17, no. 1 (2014), 60–76.

Recent critiques of current policy and practice affecting academic publication and accountability have been made, understandably, on the basis of concern for democratic principles and the public role of higher education. The power of metrics, such as the journal impact factor, is seen not as an objective measure of quality but as having the potential to skew research and publication in certain directions.⁵ The rising power of metrics is seen to represent an inappropriate influence of private, economically-driven interests on public, scholarly activity. The political and economic implications of open access publication specifically have also been considered.⁶ It is often argued that open access publication can challenge the dominance of a small number of large publishing companies, whose profits are based on the free, or publicly-funded, labour of academics and the subscriptions they or their institutions pay to access that knowledge. Here, recent changes to scholarly publishing are not assessed in terms of a normative account of public and private and what ought to belong to each domain, nor are they seen in purely economic terms. Technologies of reading and writing are taken here to be constitutive of a particular mode of governance in which the notions of publicity, or visibility, and privacy are constantly renegotiated (in lieu of the modern notions of public and private), and data and outputs form a new economy, and form, of accountability.

⁵ See e.g. Paul Smeyers and Nicholas Burbules, 'How To Improve Your Impact Factor: Questioning the Quantification of Academic Quality', *Journal of Philosophy of Education* 45, no. 1 (2011), 1-17.

⁶ See e.g. Bill Cope and Mary Kalantzis, 'Signs of epistemic disruption: Transformations in the knowledge system of an academic journal', *First Monday* 14, nos 4-6 (2009).

Enroth⁷ is critical of governmentality studies that understand new modes of governing as evolutions of the governmentality identified by Foucault.⁸ Instead, he argues, the nation-state-society triumvirate is no longer the frame of reference for the art of governing. The shift from governing to governance, he argues, takes us beyond this neat policy focus on populations to a global identification of problems for which there exists no overriding sovereignty over the identification of solutions, nor any possibility that this might ever be the case.

Enroth draws our attention to a shift from ‘an art of governing premised on producing policy for a society or population to an art of governing premised on solving problems with no necessary reference of any kind of society or population’.⁹ For the university this means, as Stefan Collini recently put it, that:

the way we use such terms as ‘universities’ and ‘higher education’ may, similarly, be best understood as the deployment of an inherited vocabulary without the underlying assumptions that for a long time made sense of it... If ‘prosperity’ is the overriding value in market democracies, then universities must be repurposed as ‘engines of growth’. The value of research has then to be understood in terms of its contribution to economic innovation, and the value of teaching in terms of preparing people for particular forms of employment... what we still call universities are coming to be

⁷ Enroth, ‘Governance’.

⁸ Michel Foucault, ‘Governmentality’, in *Michel Foucault Essential Works of Foucault 1954-1984, Vol. 3 Power*, ed. Faubion, J. D. (London: Penguin, 2002).

⁹ Enroth, ‘Governance’, 61.

reshaped as centres of applied expertise and vocational training that are subordinate to a society's 'economic strategy'.¹⁰

As such, knowledge and research in current policy and practice no longer refer to the traditional activities and products of the university, such as the writing and publication of books.

Reading or writing books seems no longer essential to what happens at the university that enters a new, ever-changing digital era. In the age of information, academic articles report results, distribute information and are an efficient tool of communication or information transformation in the academic research enterprise... Some argue that a capitalist logic motivates the mass production of academic articles: we are facing a situation where articles are not written in order to be read... [I]f books, knowledge, and practices of reading, writing, and studying are considered to be essential to the university, then the emergence of screens, information, and learning could be regarded as the end of the age of the university.¹¹

The end of the age of the university is marked by the decline, replacement, or rejection of those practices that were distinct to it: the lecture, reading and writing books, studying, for example. Now, these institutions adapt the balance of teaching, research, and external

¹⁰ Stefan Collini, 'Who Are The Spongers Now?', *London Review of Books* 38, no. 2, 21, January 2016, <http://www.lrb.co.uk/v38/n02/stefan-collini/who-are-the-spongers-now> (accessed online 21 January 2016).

¹¹ Maarten Simons, Matthias Decuypere, Joris Vlieghe, and Jan Masschelein, Eds, *Curating the European University: Exposition and Public Debate*, (Leuven: University of Leuven Press, 2011), 5-6.

engagement according to their strengths, specialisms, and available resources. To argue that the motivation is ‘capitalist logic’ is perhaps too simplistic, however, glossing over the detail of the way in which the current mode of governance operates and the mode of subjectivation it entails. The shift amounts, in Enroth’s terms, to a shift in the ontology of governing.¹² The current mode of governance marks not simply the next evolution of the governmentality identified by Foucault and those who took up his work. While these accounts were not state-centred and power was not understood as top down, there remains a tendency to analyse modes of governing as further stages of the governmentalisation of the state.¹³ Changes in the relationship of the state to the population are often referred to in terms of the ‘rolling back’ or the ‘hollowing out’ of the state. But this implies the nation-state to be a given structure, emptied of its contents. Rather, recent changes constitute a fundamental shift in its role, from provider to facilitator, and therefore so too of all the institutions formally assumed to have a public role, e.g. educational institutions such as the university.

The university governed by the ‘permanent quality tribunal’,¹⁴ no longer oriented to the highest development of the nation state but to innovation and sustainability according to resources and demands in its environment, today requires the researcher who also understands herself in these terms. It requires an entrepreneurial attitude of investing in

¹² Enroth, ‘Governance’, 61.

¹³ Enroth, ‘Governance’.

¹⁴ Maarten Simons, ‘Governmentality, Education and Quality Management: Toward a critique of the permanent quality tribunal’, *Zeitschrift für Erziehungswissenschaft* 5, no. 4 (2002), 617-633.

herself and taking speculative risks.¹⁵ Investment in the form of gaining qualifications and skills is not sufficient in itself; the particular education and skills one might be able to put to use must be identified, and the use to which it is put must be adapted according to current conditions. The researcher, expressed in this way, refers not to a figure specific to the university (of the age of the nation state) but to a particular entrepreneurial, speculative attitude that is necessary for survival in the age of the ‘facilitating’ state.¹⁶ The account given here situates recent changes in practices of reading and writing as publication in the context of the shift from governing to governance and the manner of the responsabilisation of the individual as researcher this entails. The notion of the prosumer is not recent - having been identified by Alvin Toffler in the 1980s - but the availability of personal digital technologies to individuals, and the speculative model of capitalism, based on investment for future profit or further investment, gives it particular shape today.¹⁷ Responsibilisation, networked technologies, the pursuit of work-life balance, and the ways in which the researcher must account for herself entail a shift, or a further blurring, of the distinction between home and work, public and private. In the context of the university, as elsewhere in society, the notion of the precariat has been coined to express the precarious nature of employment at all levels, for example in the use of short-term and zero hours contracts. The post-welfare state governs

¹⁵ Maarten Simons, ‘Learning as Investment: Notes on governmentality and biopolitics’, *Educational Philosophy and Theory* 38. No. 4 (2006), 523-540, 533.

¹⁶ Naomi Hodgson, “‘The only answer is innovation...’: Europe, policy, and the Big Society’, *Journal of Philosophy of Education* 46, no. 4 (2012), 523-545.

¹⁷ Filling our own cars with petrol, scanning our own shopping at the supermarket, using electronic check-in at an airport are all examples of the ways in which the consumer is put to work. We are paying to use these services, but provide part of the service for ourselves.

in terms of individual freedoms and choices and thus does not provide care, inclusion, etc. but rather facilitates the environment in which choice, and the audit of its quality, are possible.¹⁸

Accounting for the shift in the constitution of life, work, and production in the knowledge economy, then, entails considering the physical, bodily, spatial, and temporal change that the shift in patterns and terms of labour activity requires.

In light of the shifting mode of governance and the responsabilisation of (and as) researchers to account for and sustain themselves, practices of academic reading and writing are recast: to count they must be 'outputs' i.e. publications, and to have impact they must, in the first instance, be discoverable.

Seen in terms of the shift from governing to governance,¹⁹ technologies and practices of making visible our reading and writing, in ways constitutive of the economies of scholarly publication today, are seen to give shape to a particular mode of governmentality in which notions of transparency and openness are integral. The focus here is on the constitution of the particular figure of the researcher in and through particular practices and technologies of self-assessment, reading, and writing. The analysis focuses on the language and the needs according to which the researcher understands herself, and the technologies - both as digital devices and forms of work on the self - that constitute this self-understanding.

The account given here entails two interrelated notions of technology: the specific devices referred to here - the Researcher Development Framework (Vitae) and the Anywhere Article (Wiley) - and, following Foucault, the practices or technologies of the self by which they are constitutive of a mode of governance. Not only in the sense that these technologies make her

¹⁸ Wendy Larner, 'Neoliberalism: Policy, Ideology, Governmentality', *Studies in Political Economy* 63, Autumn (2000). Cf. Simons, 'Learning as Investment', 533.

¹⁹ Enroth, 'Governance'.

visible in certain ways, but also that they are designed specifically to facilitate the self-understanding and measures of accountability of the excellent researcher. A specific new technology of publication, the Anywhere Article developed by the publisher, Wiley, will be considered in the light of the definition of the excellent researcher found in the Researcher Development Framework developed by Vitae and the role that openness and visibility play in the ways the researcher is asked to account for herself.

We look first at the European policy context in which research is understood as essential to the development of a sustainable knowledge economy, in the form of the Innovation Union. The language of research indicates how the researcher is understood and the mode of governance that requires this particular understanding and investment of oneself. We will then look more closely at technological devices designed for the researcher today. The first, the Researcher Development Framework, is a tool designed to identify and develop the learning needs of individual researchers, which not only articulates very clearly the terms according to which the researcher understands herself but also provides the means by which to work on these particular aspects of herself. In the light of this self-understanding and the constitutive, personalisable technologies of self-assessment that provide the feedback the researcher understands herself to need, we then look more specifically at a technology of publication, the Anywhere Article developed by the publisher, Wiley. These technologies indicate not only the constitution of the researcher in the university today, but also the role of visibility - not only of ourselves to others, but of ourselves to ourselves – in the governance of ourselves as researchers as distinctive of the mode of subjectivation today.

GOVERNANCE AND THE EXCELLENT RESEARCHER

Following the establishment of the European Research Area by the Bologna Process, the European Union recast itself as an Innovation Union. As it is currently presented on the

Innovation Union pages of the European Commission website, we are in an ‘innovation emergency’: innovation is vital for the future economic and social well-being of Europe.

Innovation Union is the European Union strategy to create an innovation-friendly environment that makes it easier for great ideas to be turned into products and services that will bring our economy growth and jobs.

Europe's future is connected to its power to innovate. The Innovation Union, an action-packed initiative for an innovation-friendly Europe, is the solution.²⁰

The governance of research in this context is oriented towards the economic growth and competitiveness of an *open* area that is defined in relation to its competitors. Research, on this account, is not an activity specifically located in the university, and its quality and excellence are judged on its measurable outputs, i.e. the translation of good ideas into products and services. The introduction to the 2014 European Research Area Performance Reports reads:

Knowledge is a key driver of economic growth and job creation. If Europe is to compete on a global scale, it must maintain its commitment to research and innovation excellence. The European Council has underlined that, in order to attract talent and investment, Europe needs a unified research area, an open space for knowledge, research and innovation. The European Research Area (ERA) will enable

²⁰ Innovation Union: http://ec.europa.eu/research/innovation-union/index_en.cfm

researchers, research institutions and businesses to work and co-operate freely across borders.²¹

As a key facet of the Innovation Union, and a means by which research is rendered measurable and governable, the main requirements of the European Research Area further express how research is understood and governed. Achieving ‘More effective national research systems’ requires open national-level competition in order to derive ‘maximum value from public money invested in research’. This should be achieved by open calls, peer review, and assessment of the quality of research organisations, their teams, and their outputs in order to ‘overcome divergences in performance across the EU’.²² ‘Optimal transnational co-operation and competition’ is sought in order to jointly address grand challenges. Joint research agendas and compatible funding rules are required.²³ To facilitate an ‘open labour market for researchers’ requires ‘open, transparent and merit-based recruitment of researchers’, cross-border access to grants, and shared principles of Innovative Doctoral Training. ‘Gender equality and gender mainstreaming’ is required in order to ‘foster science excellence and relevance’.²⁴ Further, ‘Optimal circulation, access to and transfer of scientific knowledge’ is required in order: ‘To guarantee access to and uptake of knowledge by all’.

To achieve this requires researchers who understand research, and themselves, in these terms. Various guidelines and principles are offered by the European Commission to facilitate the

²¹ 2014 European Research Area Performance Report:

http://ec.europa.eu/research/era/eraprogress_en.htm

²² http://ec.europa.eu/research/era/more-effective-national-research-systems_en.htm

²³ http://ec.europa.eu/research/era/optimal-transnational-co-operation-and-competition_en.htm

²⁴ http://ec.europa.eu/research/era/gender-equality-and-gender-mainstreaming_en.htm

training and development of mobile, adaptable, employable, innovative researchers.²⁵ Such qualities are constituted in and made visible by devices for performance measurement and management at the individual, institutional, regional, national and international levels.

THE RESEARCHER DEVELOPMENT FRAMEWORK

An example of such a device, developed in the UK but being trialled elsewhere, is the Researcher Development Framework. In order to illustrate how the excellent researcher is defined, not only in terms of her skills and attributes, but also in terms of the practices of self-assessment required to maintain and develop them, we describe the Framework (RDF) here, before focusing more specifically on those aspects related to publication.

Developed by the organisation Vitae in the UK, which supports institutions and individual researchers to ensure they can accurately diagnose their training needs and maintain their self-development,²⁶ the device is not only a graphic illustration and definition of the facets of the excellent researcher, but also it is supported by online self-assessment tools and support materials to help the researcher in these areas. The organisation, Vitae, also holds physical training and networking events and conferences. The visual representation of the framework gives a brief but very clear indication of the terms in which the researcher is asked to understand herself.

[insert Fig. 1 here]

²⁵ http://ec.europa.eu/research/era/open-labour-market-for-researchers_en.htm

²⁶ See also: Naomi Hodgson, 'Materials that shape researchers', in eds Paul Smeyers and Marc Depaepe, *Educational research: Material culture and the representation of educational research* (Dordrecht: Springer, 2013).

‘Four domains encompass what researchers need to be effective in their approach to research, when working with others and in contributing to the wider society and environment.

Domain A: Knowledge and intellectual abilities

Domain B: Personal effectiveness

Domain C: Research governance and organisation

Domain D: Engagement, influence and impact

‘The RDF is a tool for planning, promoting and supporting the personal, professional and career development of researchers. It articulates the knowledge, behaviours and attitudes of researchers and encourages them to aspire to excellence through achieving higher levels of development.’²⁷

In addition to the standard academic requirements concerning subject knowledge, analytic skills, and an enquiring mind (Domain A: Knowledge and Intellectual Abilities), and governance and administrative knowledge and skills, such as copyright, research ethics, and managing research funds (Domain C: Research Governance and Organisation), other aspects ordinarily associated with academic work such as publication are classified under Domain D: Engagement, influence, and impact, and aspects not distinctive to academic work are classified as essential to the excellent researcher, see Domain B: Personal Effectiveness. The way in which the device functions also facilitates a further requirement of the researcher, not only to permanently seek feedback and undertake continuing professional development in

²⁷ Vitae Researcher Development Framework: <https://www.vitae.ac.uk/vitae-publications/rdf-related/introducing-the-vitae-researcher-development-framework-rdf-to-employers-2011.pdf>

response as in the case of the ‘learner’, but also to visualise this and make visible this attention to oneself.

Component parts of academic reading and writing are divided in their categorisation by the RDF. Aspects relating to content and style are listed within Domain A: Knowledge and Intellectual Abilities. Publication itself, the resulting output, is situated within Domain D: Engagement, Influence, and Impact. Publication alone does not make an excellent researcher, even if excellence is achieved within Domain A. Engagement, influence, and impact require adding value to publication through the demonstration of, for example: public engagement, global citizenship, and communication methods and media.

TECHNOLOGIES OF PUBLICATION

THE ANYWHERE ARTICLE

The account of research and of the researcher given above provides a context for the analysis of the Anywhere Article. While the development of the technology can be seen as a response to market conditions and consumer needs, this is not the focus here; instead it is the particular visual presentation or construction of that market and that consumer that is of interest,²⁸ i.e. what the researcher is understood, and understands herself, to need. In particular, the

²⁸ Cf. Bruno Latour, ‘Visualisation and Cognition: Drawing Things Together’, in ed. H. Kuklick, *Knowledge and Society Studies in the Sociology of Culture Past and Present* 6 (1986), 1-40, 14. Reprinting and revision in eds Michael Lynch and Steve Woolgar, *Representation in Scientific Activity*, MIT Press: Cambridge Mass, 1990, 19-68, <http://www.bruno-latour.fr/article?page=7>; last accessed 14/08/2014.

description of the Anywhere Article here further illustrates the relation of the researcher to the activities of reading and publication, in light of the researcher self-understanding and the role of visibility given in the account so far.

The Anywhere Article is a new ‘enhanced’ technology for reading journal articles, developed by the publisher Wiley, which combines features of the PDF (portability, white page border) with those of html. The way in which the text of the article is presented and can be used by the reader, and the additional features of this technology, are described here before relating its features to the constitution of the researcher.

[ins. Fig. 2 here]

The page is headed by an advert for another of the publisher’s services, which can be clicked on to take you to a separate website. To the left of the page space, we can click on the PDF version of the article, and access further information about it: the DOI number, submission and acceptance dates, and copyright information. We can also directly access the reference list.

To the right of the page space we can see a list of the different sections, enabling the reader to click and go directly to that point in the article. Inside the page space, to the right of the text we see the front cover of the journal, information about the issue, and an arrow, that if clicked (and if we are appropriately logged on to a network that gives us access e.g. our institutional library) will take us to the next article in the issue. At the bottom right of the screen there is an ‘Enhanced Article Feedback’ tab, enabling users to comment directly on their experience of the Enhanced Article, or Anywhere Article. At the top of the page space beneath the titles and authors, we can link to citation data on the article, either hosted by Wiley Online Library (‘Citing Literature’) or by Altmetrics.com (by clicking on the ‘Am score’ icon).

We then see the text of the article itself. Each reference in the article is clickable: when clicked the relevant full reference in the list to the left is highlighted. Where available, links to those articles are provided.

[ins. Fig. 3 here]

Discussing what the article can ‘do’ in this way refers to its ‘functionality’, one of its selling points, ‘what can it do *for me?*’. Among the other benefits listed by Wiley are readability, mobility, and choice. These terms can be found in a promotional article launching the new product on the Wiley website.²⁹ The terms are indicative of the discourse within which such technologies and users of such technologies are situated. They are aspects of the way in which, according to the normative language of policy, we should understand ourselves as researchers.

The reader of the Anywhere Article is already positioned as researcher, not by the fact that the content of the article is academic, but by where she is directed to and what she is assumed to want to know, and what she understands herself as needing to know. She can access the data she needs to assess the value of the article (How many citations?), other sites through which she can connect with other researchers (Mendeley), and she can (often directly) access the papers referred to in the article. Reading takes a particular shape - of assessing value not only in terms of the article’s academic content but also with reference to the value given to it by others and of assessing content in terms of specific aspects rather than as a whole - and thus gives shape to the researcher as reader’s self-understanding in relation to these functions. It enables direct comparison with her own metrics as part of the process of reading.

²⁹ Wiley Anywhere Article promotional video:

<http://olabout.wiley.com/WileyCDA/Section/id-819787.html>

In turn, writing, for the researcher today, takes the form not only of the reporting and publication of analysis, data, results, and conclusions, for publication, but also of publication as measurable indicator of individual and institutional performance, and also of self-reflection and presentation, for example, on blogs, twitter, institutional research profiles, personal websites. That is, the process of writing itself - *that* I write or *how* I write - only has value as a tangible output, as a written product, the journal article, the monograph, etc. These outputs, and their promotion online, constitute the 'profile' of the researcher, enabling her 'visibility' and 'discoverability'.

ACCOUNTABILITY AND VISIBILITY

The article displayed here is from the *Journal of Philosophy of Education*, which in the language of open access is a 'hybrid' journal. It is a traditional, closed access journal that offers the option of open access publishing (for an Author Processing Charge). This is an example of the way in which (traditional) publishers are adapting to the demands of - and distinguishing themselves within - the market, to the needs of the researcher, that is, someone who understands herself as *in need* of these functions, these metrics, these links, these networks. To use these, to be included in these, is to be made visible by them, and to account for oneself in these terms.

The text of the article itself is only one facet to which the researcher can attend and that meets her needs. The mobile, competitive, innovative researcher - as a distinctive figure - is thus further constituted by such technologies and visual presentations of research and researcher. The self-understanding of oneself as in need of such functionality is inscribed by the technologies of sharing, compatibility, and comparison, of oneself with oneself and others. The device serves the needs of the researcher as both reader and writer, activities that, unless made visible and accountable as publication at the very least, have no value.

The technological devices discussed here enable the researcher to meet the demands of visibility and accountability that constitute the excellent researcher. The discourse of the excellent researcher, the practices of performance measurement and management, and the self-understanding these inscribe are not only produced by a technology such as the Anywhere Article, but also are enabled by its use. That is, it is not a device that supports or supplements one's research and networking, such as ResearchGate or LinkedIn or EverNote, but that is constitutive of a practice inherent to the work of research, that is, reading. The qualities of mobility, choice, adaptability, collaboration, and competition are inherent to and facilitated by the device. Rather than seeing the Anywhere Article as a device supplementary to a particular mode of governance, the political aspect of the device - it's being both responsive to the researcher's need for this data and to produce such data about herself and constitutive of it - can be seen to be deliberately designed in to it.³⁰ The researcher knowingly and intentionally accounts for herself in these ways and seeks innovative ways to do so, in part because, they extend beyond her professional role to encompass her social skills and mental wellbeing and her management of work-life balance. The achievement of competent selfhood³¹ requires not only the permanent feedback loop of the lifelong learner, but making visible to ourselves and others each aspect of our competence. We require that our competence is reflected back to us by the screen.

CONCLUSION: GOVERNANCE AND OPENNESS

³⁰ Noortje Marres, 'Why political ontology must be experimentalized: On eco-show homes as devices of participation', *Social Studies of Science* 43, no. 3 (2013), 417-443.

³¹ Nikolas Rose, *Inventing Ourselves: Psychology, Power, and Personhood*, (Cambridge: Cambridge University Press, 1998).

As the example of the Researcher Development Framework shows, the aspects of oneself that the excellent researcher will take care of and invest in are not only those typically associated with academic work, but also the physical, psychological, and social. These aspects of ourselves not only require monitoring and investment for the benefit of our academic work but also constitute a holistic, environmental image of the researcher; she must develop expertise and innovate in each of these areas, keeping them in equilibrium as an ecological self.³²

The demands of visibility and discoverability are constitutive of a synoptic mode of governance (Simons and Masschelein, 2008).^{33 34} This synoptic mode refers not only to governmental monitoring in the form of data gathering - seen in the measures of performance measurement and management at the European level - but also to the individual's self-monitoring and making visible - as seen in the self-assessment facilitated by the RDF and the measures of quality and excellence that the Anywhere Article makes visible. It is ordered

³² Maarten Simons and Naomi Hodgson, 'Learned Voices of European Citizens: from governmental to political subjectivation', *Teoría de la Educación* 24, no. 1 (2012), 19-40.

³³ Maarten Simons and Jan Masschelein, 'From schools to learning environments: The dark side of being exceptional', *Journal of Philosophy of Education* 42, nos 3-4 (2008), 687-704.

³⁴ The synoptic mode of governance is distinct from the panoptic society discussed by Foucault (e.g. Foucault, 1973) drawing on Bentham's notion of the panopticon, in which the few (potentially) observe the many. The synoptic mode combines features of the panoptic, in which the few observe the many, unseen, with features of the spectator society, in which the many see the few (Simons and Masschelein, 2008) but in the synoptic mode, the individual submits to the gaze willingly; feedback is actively sought.

around discourses and practices of accountability and transparency and made possible through the ubiquity and sophistication of personal and personalisable technologies by means of which individuals choose to make visible, and seek feedback on, numerous aspects of themselves. The investment in and of oneself as a researcher is not only a matter of differently labelling an identity or a psychological self-understanding, but also entails a particular physical investment, facilitated by such mobile, personalisable technologies. This investment is seen not only in terms of the technologies we use, where we use them, and the length of time we spend working on them, but also the aspects of ourselves that we are working on in doing so.

The researcher is increasingly responsible for her own sustainability: she is required to procure the funds to pay for her salary and resources, maintain excellent levels of student satisfaction and external engagement, and calculate how best to invest her resources for the future. Particularly in a time of precarity, this can mean an anxiety over the future consequences of saying ‘no’ to an invitation, of not doing things that successful peers are doing. The means of publication one chooses, or is required to choose, already enters the researcher into an economy of visibility, in which it is not possible to value that which cannot be found, by virtue of the degree of discoverability it provides. Promoting outputs via a personal online profile, sharing with followers, and using strategic keywords and tags can maximise this. What is discoverable is *that* I have published, not *what* I have written.

As a researcher, understanding oneself and what one does in terms of mobility, flexibility, productivity, and so on - and understanding one’s use of technological devices that facilitate an accounting for oneself in these terms - entails an insertion of oneself in to the economy: by working according to the definition of the excellent researcher she inserts herself in to a speculative, entrepreneurial knowledge economy: by working in the mobile, flexible, adaptable, visible way that this requires and that such technologies make possible.

Research is rendered as a specific, governable set of calculable activities, distinct from scholarship or study (though this is not to say that these activities do not and cannot take place). Inclusion, in a knowledge economy, entails investment of one's self in that entrepreneurial regime; one invests in those aspects of oneself one speculates will be valuable, and which are necessary for survival. The possibility of community, of concern, for a common world, is diminished by pre-defined research priorities and societal challenges, closing down other ways of understanding the role and value of the university in the age of information. Publication-as-output (rather than as, say, text or reading material; product rather than content) enters the researcher in to the economy of speculation, visibility, and data generation. It requires speculative investment in a future state rather than concerned attention to the present.

As stated in the introduction, in recent debates, openness (e.g. open access, open data) has been seen as a corrective to the privatizing of academic and the power of a few large publishers, and to the individualizing understanding of the researcher today. As Gert Biesta notes in his account of the political economy of academic publishing, however, 'not every pluralization, not every "opening up", automatically leads to the realization of democratic freedom and equality'.³⁵ To be clear, this article is not an argument against openness, but rather an analysis of the ways in which practices of openness as a governmental concern are constitutive of the mode of subjectivation of the researcher, rather than inherently resistant to it.

³⁵ Gert Biesta, 'Knowledge/democracy: notes on the political economy of academic publishing', *International Journal of Leadership in Education: Theory and Practice* 15, no. 4, (2012), 407-419, 417.

The gradual focusing in from the macro level of European policy to the micro level of the devices used by and constitutive of the individual researcher reveals a fluency - a shared language - between the policy rationality and the devices and practices identified as constitutive of the current mode of subjectivation. Questioning the opposition often posed between closed and open access in which openness is associated with a resistance to dominant publishing models, and the notion of openness in governance more broadly, associated with transparent democracy, is intended as an interruption of this fluency, a way of making it stutter.³⁶ The picture of the self-understanding of the researcher is perhaps an unsettling one, one that we don't feel at home with.³⁷ Or, perhaps we do feel at home with it, and that is what is unsettling about it.

³⁶ Nikolas Rose, *Powers of Freedom: Reframing Political Thought*, (Cambridge: Cambridge University Press, 1999), 20.

³⁷ Naomi Hodgson, 'The Researcher and the Studier: On Stress, Tiredness, and Homelessness in the University', *Journal of Philosophy of Education*, in press.