The impact agenda and the production of subjectivity

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Abstract

In what is often referred to as the 'impact agenda', governments and research funding agencies across the world have recently introduced audit systems and funding mechanisms that require academics to demonstrate the societal impact of their research. Grounded in an ethnography of a UK university, and informed by Deleuze and Guattari's assemblage theory, this thesis explores the role the impact agenda plays in the production of academic subjectivities. I demonstrate how the defining function of the impact agenda is the production of the 'impactful academic' – an enterprising subject who demonstrates their value through the effective and efficient pursuit of research impact. I argue that this function of the impact agenda effectuates neoliberalism's tendency to construct persons as competitive individuals. Moreover, I show how it entails mechanisms of power which operate at the level of language and subjective interpretation and at the level of pre-personal affects. While the workings of power are never far away, I also bring to light processes of subjectification that take us beyond constructions of the impactful academic. In doing so, I draw attention to a conception of subjectivity that is conceived in terms of collective agency and creativity and which breaks with the neoliberal notion of the competitive individual. I argue this alternative way to conceive subjectivity points to the potentials for converting the impact agenda and for creating an alternative that is based on the cultivation of collective joy.

In offering this account I contribute to knowledge in two central ways. First, I offer an advancement on existing studies relating to the impact agenda. I go beyond much of the existing empirical literature which tends to lack the 'critical edge' of critical scholarship. At the same time, I go beyond much of the critical literature which tends to rest on limited empirical data. What I offer is an in-depth empirical account of the impact agenda that is attentive to the ways in which the workings of power are both reinscribed and circumvented and which presents an alternative that is grounded in an analysis of the potentials that lie latent and emergent in the present. Secondly, I contribute to debates surrounding critical policy studies' growing interest in the concept of assemblage. I illustrate the value of taking up a reading of assemblage that is anchored in the work of Deleuze and Guattari and puts to work the allied concepts of strata and abstract machine. I argue that such an approach offers a way to overcome the pitfalls of 'policy assemblage' literature which neglects questions of subjectivity and fails to grasp the wider forces at work in the arrangement of policy assemblages.

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Chapter 1 Introduction

What does it mean to be an academic? What is the role of universities in society? These questions have been pushed to the fore of public consciousness in the wake of Covid-19. The pandemic has put the spotlight on the relationship between science and society and has sparked public debate about the authority and value of academics. Moreover, it has sparked debate about the nature of human existence and the kind of world we live in. On one hand, we have the likes of Boris Johnson who put the UK's vaccine success down to 'greed' and 'capitalism' (Allegretti and Elgot, 2021). On the other, we have those who are quick to rebut such claims and emphasise the merits of 'collaboration' (Safi, 2021) and 'public research' (Whyte, 2021).

Such questions have of long been debated, not least by academics themselves. As far back as Classical Antiquity, the societal function of the university has been a question that has concerned thinkers (Chantler, 2016). In recent years the surfacing of such debates has been brought on by governments' and funding agencies' interest in assessing the wider societal impact of academic research - what's often referred to as the 'impact agenda'. Some academics have come out against the impact agenda, claiming it augments a neoliberal culture of market competition that is detrimental to academic life (e.g., Back, 2015). Others strike a more optimistic tone and view the impact agenda as an opportunity to revamp the social mission of universities (e.g., Pain, 2011).

While such diverging views about the impact agenda fill the pages of many commentaries and opinion pieces, there is limited empirical research that examines how the impact agenda is impacting the organisation of universities and the lives of academics. This omission leaves academics ill-equipped for the task of engaging (or not?) with the impact agenda. This is particularly true for 'critical' academics who are interested in rearticulating the impact agenda and creating alternatives. Indeed, critiques of the impact agenda that simply rest on self-reflections and political values only go so far in understanding the terrain we find ourselves and in identifying the appropriate tools for intervening. What is needed is theoretically and empirically informed research that undertakes the dual task of (1) understanding how the impact agenda is implicated in the (re)production of dominant power formations and (2) uncovering the potentials for converting the impact agenda and creating alternatives.

It's against this backdrop that this thesis examines how the impact agenda is implicated in the production subjectivity. More specifically, it asks the following questions:

1. What role does the impact agenda play in producing academic subjectivities, and what do these processes of subjectification reveal about formations and mechanisms of power?
2. What alternative academic subjectivities are there to those ascribed by the impact agenda, and what do these subjectivities reveal about the potentials for converting the impact agenda?

I address these questions through an ethnographic study centred around one university and the lives of academics working in the health field. In doing so I build on previous critical policy studies that have deployed ethnography to examine how policies construct subjects as objects of discourse *and* how policies are interpretated by actors (e.g., Shore, Wright, and Pero, 2011). I also take my cue from critical policies studies' recent turn to 'assemblage' - what's been coined 'policy assemblage' (Savage, 2020) - and carve out a theoretical and methodological approach that finds its footing in the work of Deleuze and Guattari's assemblage theory. My use of Deleuze's and Guattari's assemblage theory moves me beyond a preoccupation with discourse (which has long characterised critical policy studies) and brings into recognition the affective and corporeal dimensions of human existence. Moreover, it moves me beyond much of the policy assemblage literature which, to date, bears little resemblance to the foundational work of Deleuze and Guattari. As I demonstrate in this thesis, what's at stake in such advancements is the ability of critical policy scholars to connect the 'two political poles' of critical work: that is, articulating 'a negative critique of the dominant in the present' with a 'positive opening up of the present to other possible futures' (Grossberg, 2010: 94).

In the account that follows I show how the defining function of the impact agenda is the production of the 'impactful academic' – an enterprising subject who demonstrates their value through the effective and efficient pursuit of research impact. I demonstrate how the production of the impactful academic works by bringing a semiotic system (which ascribes a particular understanding of what it means to do academic research and what it means to be an academic) together with an arrangement of material bodies (which activates certain affects and incites certain conduct). I argue that this function of the impact agenda effectuates neoliberalism's tendency to construct persons as individuals while simultaneously inhibiting the potential for collective agency and creativity. Moreover, I suggest that it is indicative of how contemporary mechanisms of power operate at the level of language and subjective interpretation and at the level of pre-personal affects.

While I demonstrate how academics' subjectivities bear the traits of the impactful academic, I also draw attention to processes of subjectification that trouble and surpass this figure. In particular, I bring to light the ways in which academics' sense of self is formed through alternative knowledges to those that the impact agenda propagates. Moreover, by fostering a sensitivity to the multiple registers of subject formation, I draw attention to collective relations that dispel the notion of the individual that sits at the heart of neoliberal thinking and which the impactful academic is an inflection of. Here I draw attention to moments of joy that show how people's capacity to act is dependent on their ability to form productive relations with other bodies. It's in these affective relations where I locate the potentials for converting the impact agenda and creating alternatives. In what I refer to as the 'joy machine', I point to an alternative model of governance that is centred on the cultivation of 'collective joy' (Gilbert, 2019) and maximising the capacity for collective creativity.

In offering this account, I make an original contribution to two central bodies of literature.

Firstly, impact literature. I go beyond existing empirical studies on impact which tend to lack the 'critical edge' of critical scholarship and fall short of connecting the two political poles of critical research. At the same time, I go beyond much of the critical literature which tends to rest on limited empirical data and thus lacks an attentiveness to the ways in which the workings of power are both reinscribed and circumvented and the potentials for alternatives.

Secondly, policy assemblage literature. I demonstrate the value of an approach that is anchored in the work of Deleuze and Guattari and deploys the concept of assemblage in conjunction with the allied concepts of abstract machine and strata. As I illustrate in the following pages of this thesis, such an approach overcomes the shortcomings and pitfalls that characterise policy assemblage literature and ultimately puts critical policy scholars in a better position to (1) grasp how policy processes are involved in the reproduction of dominant formations of power and (2) open up the present to alternative futures.

Chapter overview

In Chapter 2 I introduce the central of topic of this thesis: the impact agenda. I begin by discussing what it means to speak of an impact agenda, outlining what the term commonly refers to. I then move on to discuss the key developments in UK higher education policy and university research funding that have paved the way for the UK's instantiation of the impact agenda. This is followed by

an overview of the recurrent debates surrounding impact agenda, particularly in relation to concerns about the advancement of neoliberalism and the question of whether academics should work with or against the impact agenda. This sets up a succeeding discussion regarding the shortcomings of existing literature and the original contribution of this thesis.

In Chapter 3 I introduce the conceptual resources that enable me to achieve the research aims set out in Chapter 2. In doing so I broaden the scope of literature that this thesis is in conversation with, situating it in relation to the field of critical policy studies. I begin the chapter by setting out what it means to conduct a 'critical' policy study, before moving onto position the thesis in relation to critical policy studies' recent turn to assemblage theory. While welcoming the move to expand the conceptual repertoire of critical policy studies through the concept of assemblage, I draw attention to the shortcomings and missed opportunities that hinder this emerging body of work. I thus argue there are gains to be made by returning to the work of Deleuze and Guattari and developing an approach more closely anchored to their conceptualisation of assemblage and the allied concepts of strata and abstract machine.

In Chapter 4 I discuss the study's methodology. Drawing inspiration from the notion of 'assemblage ethnography', I begin this chapter by describing how I developed a flexible and pragmatic form of ethnography that enabled me to trace and map the flows and components of the impact agenda assemblage and to examine how their articulations relate to academics' subjectivities. I then introduce the study's central research site before moving on to discuss the various methods I utilised to collect and analyse data. This is followed by a discussion on the ethics and politics of doing research.

In the following two chapters (Chapter 5 and Chapter 6) I present the study's empirical data. In Chapter 5 I trace out the impact agenda's components and the forces at work in their arrangement. In doing so, I set out the role the impact agenda plays in producing academic subjectivities, and outline what these processes of subjectification reveal about formations and mechanisms of power. In Chapter 6, by focusing on the experiences and accounts of five individual academics and one research group, I bring to the fore the ambiguities and complexities that characterise processes of subjectification. In doing so, I draw attention to alternative academic subjectivities to those ascribed by the impact agenda and consider what these alternatives reveal about the potentials for converting the impact agenda.

In Chapter 7, the conclusion, I address the study's central aims and questions, before moving on to distil the thesis' contribution to knowledge in relation to the impact agenda and critical policy studies' turn to assemblage theory.

Chapter 2 The rise of the impact agenda

What does it mean to speak of an impact agenda?

Early usages of the term 'impact agenda' (in relation to higher education and science) can be traced back to 2009 when academics and commentors (e.g. Martin, 2009; Moriarty, 2009) began to use the term to refer to two developments in the UK Government's 'dual support system' for university research: (1) the move to make 'impact summaries' and 'pathways to impact' core components of the Research Councils' competitive grant applications; and (2) the announcement that the 2014 Research Excellence Framework (REF)[1]would introduce 'societal and economic impact' as a performance measure. These developments represented a significant step change in research funding policy. As Oancea (2013a, para. 1) notes, 'research funding is no longer defined in policy circles as a long-term investment in intrinsically worthwhile activities'. Rather, 'research is expected to make a case for funding in terms of external value' (Oancea, 2013a: para. 1). This shift in expectations has effectively meant UK academic researchers are under greater pressure to justify their worth in terms of the wider societal benefits of their research.

The term impact agenda has grown in usage over the past 10 years, as it has been applied to a wider range of cognate developments within and beyond the UK. For instance, we now hear of an impact agenda being spoken about in relation to National Institute for Health Research's (NIHR) plans to assess the impact of the research is funds (Lincoln University, n.d.). Similarly, the term impact agenda is used to describe the research evaluation activities of UK research charities such as Wellcome Trust (Allen, 2013). Outside the UK, we can find the term being used in reference to developments across various countries including the US (Holbrook, 2017), Canada (Hache and Phipps, 2017) and not least Australia (Gunn and Mintrom, 2018) where a policy interest in incentivising and assessing research impact has occurred concomitantly and synergistically with the UK (Williams and Grant, 2018).

Reflecting these translocal developments, impact agenda is a term that has taken on a broader usage, referring not simply to a specific policy or funding system (as in the 'REF impact agenda') but rather a general trend towards accountability measures that demand academics to address the societal value of their research. Those who have adopted this broader framing have noted the

[1] A national audit of university research which informs the distribution of 'quality-related' core research funding.

localised inflections of the impact agenda (Holbrook, 2017), drawing attention to differences on a number of fronts: the definition of the impact, methods of assessment, stage of assessment, unit of analysis and mechanisms of incentivisation.

From this brief excavation of the term impact agenda, we start to get a sense of the various ways in which the term is used and its fluid referents. My specific usage will be become clearer when I discuss my conceptual framework. For now, I want to suggest that it is useful to think of the impact agenda in terms of its abstract and concrete dimensions. In terms of its abstract dimensions, we can think of the impact agenda as a function that works to make certain outcomes more probable than others. As I will demonstrate throughout this thesis, the specificity of the impact agenda's functional qualities lies in its propensity to construct academics as enterprising subjects who demonstrate their value through the effective and efficient pursuit of research impact. It is this productive function that gives the impact agenda its particular character and a degree of consistency across different contexts (different nation states, fields, funding systems, impact assessment frameworks and so on). In terms of its concrete dimensions, we can think of all the various elements that are in enlisted and put to work in particular instantiations of the impact agenda (different technologies, practices, people, buildings, discursive repertoires and so on). A crucial point to note here is that these elements are not reducible to the impact agenda's general function. In other words, while they can be articulated with and subsumed by the logics of performance evaluation and competition, they have the potential to be ascribed with different meanings and to be put to different uses.

In conceiving in the impact agenda in this way I deviate for the common tendency in existing literature to frame the impact agenda in terms of one discrete policy programme or audit technology (the REF being a dominant object of analysis). Conceiving the impact agenda in terms of its abstract and concrete relations, as described above, necessarily entails a broader approach – one that is attentive to a wider range of elements than a specific programme/technology alone and is sensitive to translocal and transnational connections. Such an approach offers the advantage of being able to detect consistencies across different settings, while being simultaneously being attentive to local permutations. I'm not suggesting here that I have somehow been able to develop a whole and complete account of the impact agenda. As I detail in the methodology chapter, this thesis focuses particularly on the health research field and is grounded in an ethnography of one UK university; the account I offer is thus partial and situated. Nevertheless, I have sought to 'study through' the particularities of my research site in order to connect them to boarder processes and formations and to probe the impact agenda's general function.

UK research funding and the advent of the UK impact agenda

A concern with the societal return of investment from the public funding of science is not new. As Smith et al. (2020, Figure 2.1) show as far back as the 1910s the UK government has sought to play an active role in enhancing and steering the social and economic value of science. To understand the emergence of the impact agenda, however, we need to turn to the 1980s and consider the conception of the Research Assessment Framework (RAE) – the precursor to the Research Excellence Framework (REF). Knowles and Burrows (2014: 239) suggest that prior to the RAE the allocation of block research grants to universities was 'very opaque'. With the arrival of Margaret Thatcher's conservative government this all changed as the body responsible for the allocation of block grants (the University Grants Committee) was compelled to base their decisions on the measures of performance. Subsequently, the RAE was conceived in 1986 with the stated purpose to assess the research quality of universities and to allocate funding accordingly.

The arrival of the RAE formed part of a sea change of reforms across the UK public sector. Premised on the notion of enhancing efficiency and accountability, and signalling a shift towards a neoliberal mode of governance (Ball, 2015), the 1980s saw a far-reaching set of reforms that refashioned public sector organisations according to the logic of market competition. The onset of quasi-market mechanisms and performance management systems such as the RAE were central to these developments. These changes have set the course for how public sector organisations have been governed ever since, giving rise to what's often referred to as an 'audit culture' (Shore and Wright, 2015b) or a culture of 'performativity' (Ball, 2000). The continuing pervasiveness of this culture of audit and performativity is exemplified by the subsequent rounds of the RAE and its more recent reincarnations REF 2014 and REF2021, which have continued to be predicated on the logics market competition and the concomitant goals of greater efficiency and accountability.

To understand the emergence of the impact agenda we need to also consider another broad trend: the shift to a global knowledge economy. This transition has seen universities become central sites of economic production as they are assigned the role of producing knowledge which can be converted into innovative products that stimulate economic growth (Naidoo, 2003). This reorientation is captured in the metaphor of 'putting science into the harness to drive economic competitiveness' which, as Demeritt (2010: 516) shows, has been a recurrent trope in UK science policy since it first in featured in the Conservative's Realising Our Potential paper (HMSO, 1993).

Crucially, the emphasis placed on wealth creation and competing in a global knowledge economy has driven the government's interest in enhancing knowledge transfer and ensuring a return on investment. It is within this context that policy makers have sought ways to foster dialogue between universities and knowledge users. It also within this context that the policy drive to incentivise and measure impact gained its impetus. A notable development came with the publication of the Warry Report (2006) which set out a series of recommendations for increasing the economic impact of research councils. Recommendations included: (1) influencing the 'behaviour of universities, research institutes and Funding Councils in ways that will increase the economic impact of Research Council funding'; (2); engaging 'government, business and the public services in a wide-ranging dialogue to develop overarching, economically relevant research missions'; (3) using metrics to 'demonstrate more clearly the impact [Research Councils] already achieve from their investments'.

The move to make 'impact summaries' and 'pathways to impact' components of Research Council grant applications, as well as the decision to introduce 'impact' as a REF performance measure, were in direct response to the Warry Report. It's important to note here, however, that following a push back from academics who were concerned about a narrow economic framing, the definition of impact the Research Councils and REF adopted encompasses a range of impacts. For instance, REF2014 defined impact as 'an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia' (UK Research and Innovation, n.d.a).

While funders and regulatory bodies work with this broader definition, as others have argued (Holmwood, 2016a), an economic register still dominates; the different kinds of impact (social, cultural, etc) tend to be articulated with and subsumed by economic impacts. To understand the dominance of an economic register, we not only need to take into account the dominant logics of neoliberalism and a global knowledge economy, but also how these logics have coalesced with the post-2008 fiscal environment. The Government's focus on deficit reduction and achieving national prosperity has put the economic return of universities further in the spotlight. Indeed, as Blagden (2019) shows, the introduction of an impact criterion centred on economic benefits has been crucial to preserving government funding for university research.

So far I have discussed key developments in UK research funding with particular reference to the Government's dual support system. There are parallel developments beyond this central funding system, most notably in the field of health research. Bearing a strong imprint of the 'harness science

for economic growth' trope, the UK health research system and the NHS have become central features in the Government's plans to build the nation's knowledge economy. The creation of the National Institute for Health Research (NIHR) in 2006 was in part predicted on this rationale, as the twin goals of improving the 'health and wealth of the nation' indicate (Department of Health, 2006). Intimately connected with this rationale, the creation of the NIHR was also justified in terms of efficiency and accountability. Prior to the NIHR's conception, funding was locked into historical allocations to NHS trusts (Shergold and Grant, 2008). Premised on the goals of funding the 'best research' and 'acting as sound custodians of public money for public good' (Department of Health, 2006), the NIHR centralised this funding and made it available through various competitive funding streams. This reorganization of funding has meant researchers now have to address various conditions of funding and assessment criteria (such as 'patient and public involvement') when competing for funds. The NIHR also asks its funded researchers to capture the outputs, outcomes and impacts of their research via the digital platform ResearchFish. Moreover, the NIHR is currently developing its own 'value framework' to evaluate the impact of the research it funds (NIHR, 2019).

From this brief overview of the history UK research funding we can see how the advent of the impact agenda represents a significant set of changes in the way universities are funded and governed - changes that raise fundamental questions about the functions of the university and what it means to be an academic. How then how then have academics reacted to the impact agenda?

With or against the impact agenda?

The emergence of the impact agenda has stirred up a notable degree of disquiet across the academic community, as exemplified by the large number of critiques voiced in opinion pieces and perspective articles (for example see Back, 2015; Braben et al. 2009; Davies, 2014; Collini, 2009; Corbyn, 2010; Fox, 2009; Holmwood, 2011a; Ladyman, 2009; Martin, 2011). A key thread that connects many of these texts is the view that the impact agenda is symptomatic of the neoliberal restructuring of universities. The unease and friction resulting from these wider developments is well documented (Giroux, 2014; Collini, 2012; Brown and Carasso, 2013; Lorenz, 2012; Roggero, 2011). As previous studies have shown, the imposition of market logics coupled with the shift towards a performance-based approach to accountability has led many to express concerns about the displacement of traditional academic values (such as collegiality and autonomy) and the devaluing of aspects of academia that are not amenable to measurement (Henkel, 2000; Harris, 2005). Other studies have drawn attention to heightened levels of personal stress and a growing

culture of 'game-playing' resulting from the competitive and insecure environment that academics find themselves in (Gill, 2009; Lucas, 2006). For many critics, by expanding the realms of competition and comparison, the impact agenda will feed into and augment these troubling facets of academic life.

It is not simply the addition of further funding criteria and performance measures that concerns critics of impact agenda. What appears to be at the heart of much anxiety is how the impact agenda merges funding and audit processes with the government goal of promoting knowledge transfer. The impact agenda in this way adds a whole new dimension to the already vexed question of academic autonomy. This can be seen in the large number of commentaries and opinion pieces that argue the prospective and retrospective assessment of impact will stifle academic freedom as academics will feel pressured to shape their research in accordance with the utilitarian goals of the government (for example see Back, 2015; Braben, 2011). This seems to be particularly problematic for those who see the impact agenda being driven by the Government's goal of building the nation's knowledge economy. Critics such as Holmwood (2016b) and Moriaty (2011), for instance, draw attention to an emerging culture of intellectual property protection and commercial exploitation which they argue is at odds with the ethos of academia and publicly-funded research**.**

While the degree of disquiet stirred up by the impact agenda is palpable, the response from academics is far from univocal. Some academics have welcomed the move towards an evaluative framework that gives credence to applied research and takes into account the motives of academics to impact wider society (e.g., Pettigrew, 2011). Others see impact as a 'strong weapon for making an evidence-based case to governments for enhanced research support' (Donovan, 2011: 178).

There also those who hold an ambivalent position and express a 'cautious welcome', including 'critical' and 'radical' social scientists who view the impact agenda as another advancement in the neoliberalisation of universities but at the same time draw attention to the spaces that the impact agenda opens up for alternative ways of thinking and acting (Pain et al. 2011). Pain et al. (2011) for instance suggest that the emphasis placed on impact and public engagement opens up opportunities for co-productive research that works towards progressive social change and counter-hegemonic ends. Thus, rather than simply disregarding the impact agenda, they argue academics should work with the opportunities that it presents and seek to develop an impact assessment framework centred on the co-production of knowledge.

Pain et al. (2011) comments resonate with Oancea's (2013a: para 6) observation that many universities and academics are adapting the impact agenda to their own ways of working and 'reinterpreting the official agenda and articulating alternatives'. As Oancea (2013a: para 6) suggests, these 'reinterpretations – and their visibility and weight in the public domain – are essential if impact is not to become yet another measure rendered meaningless by reducing it to a target for performance'.

Pain et al.'s and Oancea's comments are an important reminder that the impact agenda is not one fixed 'thing'; it can evolve and potentially be 'translated' in different ways. Their comments also speak to wider conversations about creating alternatives to the 'neoliberal university' (Rustin, 2016). While much of the existing literature on the neoliberal restructuring of universities has tended to focus on institutional transformations and their damaging effects, there exists a small body of work that seeks to bring into focus alternative futures. Back (2016), for instance, draws attention to the aspects of academic life that matter yet are not counted within regimes of performance measurement. In a similar vein, Mountz et al. (2015) argue for a collective feminist ethics of care as a way to resist the accelerated time and elitism of the neoliberal university. Such work has a searching quality that provokes us to envisage a university beyond the confines of seemingly all-encompassing neoliberal audit culture. To take up Pain et al.'s and Oancea's link of thinking, the impact agenda offers a useful lens/resource to further elicit and ground such thinking.

However, we need to be cautious about cautiously welcoming the impact agenda. Holmwood (2011b: 14) for instance warns against the idea of engaging with the impact agenda, arguing that is 'naïve' to think it can be 'tweaked to serve public social science'. To make his argument, Holmwood draws attention to how the shift to Mode 2 knowledge production hasn't generated the kind of 'public agora' that Notowtny et al. (2013) envisaged but rather has given rise to 'privately-negotiated user-researcher relationships and the replacement of disciplinary hierarchies by those of government strategic priorities operating though funding agencies' (Holmwood, 2011b: 14).

Back (2015: para 3) who initially thought this argument was 'overly pessimistic', now concurs with Holmwood, noting how the vast majority of REF2O14 sociology impact submissions were 'tinkering with minor reforms'. He goes onto to flag the risks of colluding with the impact agenda:

> They might also console themselves with the idea that this is just a language game: we need to play and not take it too seriously. I would suggest that these patterns

> amount to more than that. The 'impact agenda' is coming to constitute our self-understanding, guide our decisions around job appointments, and I would go further to suggest it limits the public ambition of our discourse. Remember that next time someone says: "I think that might make a really good impact case study." (Back, 2015: para 11)

Back's comments resonate with others who have posited the insidious ways in which the impact agenda will reshape the organisation of universities and how academics of all disciplines conduct themselves. Power (2018: S30), for instance, speaking in reference to UK Universities more generally, suggests the 'impact agenda is being hard-wired into organizational routines and processes' and is 'changing ways of talking and ways of acting'.

Such positing about the behavioural changing effects of the impact agenda builds on a wealth of Foucauldian-inflected literature which examines how audit and performance management technologies encourage academics to act and think in ways that accord with logics of neoliberalism and the global knowledge economy (Ball 2001, 2003, 2015; Shore, 2008, 2010; Shore and Wright, 1999, 2015a). These studies have been key to illuminating how the shift towards a neoliberal mode of governance is centred on the production of 'enterprising subjects' who 'calculate about themselves, 'add value' to themselves, improve their productivity' (Ball, 2000: 18). Moreover, they have been key to illuminating how such technologies of governance 'work on and through our capacities as moral agents and professionals' and how 'the values that most academics subscribe to […] have thus become instrumental in eliciting compliance and governing conduct' (Shore, 2008: 291).

The insights from previous studies on a neoliberal audit culture, along with the critiques posed by the likes of Holmwood, Back and Power serve as a cautionary note for those looking to work with and rework the impact agenda. Indeed, they underscore the need to not lose sight of the broader forces that bear down and shape the impacts agenda's forms and meanings. A key question that arises here is whether local 'reinterpretations' (Oancea, 2013a) represent emergent alternatives or just new forms of the dominant. Similarly, we might also ask if attempts to develop an understanding of impact based on the 'co-production of knowledge' (Pain et al., 2011) are simply enrolled into regimes of audit and performance management, thereby containing and nullifying any radical or counter-hegemonic potential. Moreover, these cautionary insights underscore the need to remain attentive to the subtle and indirect ways in which the impact agenda elicits compliance and

shapes the conduct of academics. By raising this point, I'm not suggesting that the impact agenda is a totalising force that we have no hope in challenging and transforming. Rather I'm suggesting that any attempt to rearticulate the impact agenda needs to critically reflect on the multiple power relations that we are subject to and how techniques of governance work by tapping into our own values and desires.

Where does this all leave us? It's clear from the various ways in which academics have reacted to the impact agenda that it is a topic characterised by ambiguities, tensions and conflicts. As MacDonald (2018) suggests, the impact agenda presents a puzzling dilemma for academics: do we 'resist, welcome, co-opt, or ignore'? There is no simple either/or answer to this question. Moreover, our own values and personal experiences take us only so far in answering it. What's needed is in-depth empirical research which examines how the impact agenda is reshaping the organisation of universities and the lives and subjectivities of academics. Through carrying out such empirical work we can develop a more sophisticated understanding of the terrain we find ourselves in and, in doing so, identify the appropriate tools for intervening. This is not to suggest the absence of a normative position but rather that the vision put forward is grounded in the concepts that emerge from analysis. As I now move onto demonstrate, existing literature stops short of offering this empirically grounded account of the impact agenda.

The shortcomings of existing literature

Above we see how scholars from a range of disciplines and fields have published numerous commentaries and essays that posit the effects of the impact agenda and debate the merits of working 'with and/or against'. While these texts often offer illuminating and powerful accounts, they rest on the authors' own self-reflections, theoretical crutches and/or political inclinations rather than in-depth empirical research. A problematic consequence of this is that critics are quick to reduce to the impact agenda to advancement of the neoliberalisation of the university, thereby overlooking the diversity of forces and potentials that provide the conditions for the impact agenda's emergence and formation. From a cursory consideration of the various values and traditions of research that the impact agenda brings together and gives voice to (e.g., quality of life and participatory research) we start to unravel a complex web of relations that exceed the logics of market competition. A closely related problem is the danger of over-reading the disciplinary and controlling effects of the impact agenda. In other words, by not grounding their critiques in empirical research that examines how the impact agenda unfolds 'on the ground', critics are at risk of ignoring

the ways in which academics subvert and escape the flows of power channelled through the impact agenda.

The pitfalls of relying on our self-reflections and/or theoretical and political inclinations don't just hinder accounts that posit the effects of the impact agenda but also those that seek to rearticulate the impact agenda. The issue here being that the proposed alternatives are detached from the lived realities of academics and contextual conditions of our present moment. For instance, in Pain et al.'s (2011) attempt to put forward an understanding of impact centred on co-production of knowledge, we don't get a sense of how academics enact co-production in their everyday lives and the potentials for rethinking impact agenda that lie latent in these enactments. Moreover, we don't get a sense of how such potentials exist in relation to dominant formations of power. Thus, the complex interplay between the opening up and closing down of potential alternatives is left unexamined. Likewise, the question of whether the proposed ways of rethinking the impact agenda represent alternative futures or are merely diversifications of the dominant is left unreckoned with. Such shortcomings reveal a lack of critical attentiveness to the ways in which public engagement and co-production open up new measures of performance and thus augment rather than loosen the grip of a neoliberal audit culture.

While the various opinion pieces and perspective articles account for much of the existing literature on the impact agenda, there is a growing body of empirical work, much of which finds its footing in the fields of higher education studies and policy studies more widely. Broadly speaking, this body of work is constituted by two distinct but sometimes overlapping strands. The first strand bears the traits of 'orthodox' policy studies and works within the technocratic and instrumental confines of policy formulation and implementation, exemplified by the vast number of studies that focus on assessing the frameworks and methods used to assess impact (e.g., Grant et al 2010; Penfield et al. 2013; Greenhalgh et al. 2016; Milat et al., 2015; Hinrichs-Krapels and Grant, 2016). Such studies have a tendency to take the politics out of the impact agenda. The wider social forces that have given rise to the impact agenda are rarely questioned. So called implementation 'barriers' (such as competing conceptions of impact) are treated as technical matters to be resolved rather than political questions about competing values and power-struggles.

The second strand bears the traits of 'interpretive policy analysis' and largely consists of qualitative studies that examine the differing understandings of the impact agenda (e.g., Chubb and Reed, 2017; Oancea, 2013b; Leathwood and Read, 2012; O'Connell, 2018; Smith et al., 2020). A notable

text here is Smith et al.'s (2020) recent book The Impact Agenda, whose blurb states '[t]his book is the first to provide a critical review of the research impact agenda'. Studies such as these are a welcome addition to literature on the impact agenda; they offer an advancement on studies that remain firmly lodged in the technocratic world of policy making, and they also go beyond more polemical and/or theoretical writing found in the numerous opinion pieces and perspective articles. More specifically, the value of these studies lies in their empirical sensitivity to the varied and mixed perceptions of the impact agenda. While a welcome addition, this emerging body of work could go further in critically examining how such sense-making relates to the reproduction and circumvention of dominant formations of power. Here it's worth reflecting on Clarke et al.'s (2015: 18 - 19) concerns about the various 'turns' in policy studies (e.g., the 'argumentative turn', the 'interpretive turn', the 'discursive turn') that have pivoted around the idea of 'policy as meaning':

> For us, the turn to treating 'policy as meaning' was of vital importance, and was, without doubt, one of the foundations for much of the work of critical policy analysis that followed. Yet, by itself, a concern with meaning is not enough. Several of the 'turns' noted earlier have expanded the possibilities of policy studies but without always pursuing what we would see as the critical edge of critical policy studies. In many of the studies to have emerged around language, meaning/discourse, meanings are 'made safe': they circulate, rather politely, in arguments and deliberative processes, or they are securely installed within the confines of institutions. Such meanings rarely appear troublesome, turbulent or disruptive – either in the specific field of policy or in the mode of analysis. [..] For us, meanings are more interesting than this: they are a focal point because they point to the constructed, conjunctural and contested character of policy. Meanings are usually in motion – they only rarely become crystallised and solidified. When they do, such moments are the result of intense effort to normalise and naturalise a particular cluster of meanings, for example, meanings about the naturalness of forms of inequality, about the desirability of progress or about inevitability of market rule. (Clarke et al., 2015: 19)

Reflecting the shortcomings that Clarke et al. (2015) draw attention to, the meaning-centred work on the impact agenda could go further in pursuing the 'critical edge' of critical policy studies. In particular, there is a need for further studies that pay greater attention to (1) the ways in which the impact agenda is implicated in the production of subjectivities that fit the imperatives and logics of the dominant social order and (2) whether such techniques of governing work. Such a focus would help to illuminate how differing interpretations of the impact agenda are bound up with a 'struggle

over subjectivity' (Ball, 2015a). Moreover, there is a need for further studies that undertake the critical work of reimagining the impact agenda and creating alternatives. While previous studies bring into focus different ways to think about impact, the 'alternatives' put forward appear more like attempts to tinker around the edges rather than doing the impact agenda 'otherwise'. For instance, Smith et al.'s (2020: Chapter 10) 'alternative, evidence-informed approach to research impact' remains wedded to a culture of performance measurement and academic competition.

While a lack of criticality is apparent across empirical studies on the impact agenda, it would be wrong to suggest that there are no studies that seek to bring politics to the fore and offer alternatives to the dominant. The work of Watermeyer (2019), Evans (2016) and Jerome (2020) is notable in this regard. In their differing ways, these studies examine how the impact agenda is enacted, shedding light on how the logics of neoliberalism are both reinscribed and subverted in the practices of academics. Furthermore, through bringing into focus understandings of the public intellect, ethics of care and activism these studies point to ways in which questions of impact and accountability can be dislodged from the grip a neoliberal audit culture.

While important and valuable contributions, these 'critical' studies are nevertheless impeded by a number of drawbacks (drawbacks, I should add, that also characterise empirical literature on the impact agenda more widely). In particular, similar to other studies that focus on 'policy interpretation' or 'policy appropriation' (Nielson, 2015: 44), they tend to restrict their analytic scope to actors who make sense of and experience the impact agenda as a pregiven object. One of the effects of this is that interactions and relations that seemingly fall outside of the process of making sense of and experiencing the impact agenda are side-lined. Tied to this, processes and relations that operate at the level of affects are ignored. These drawbacks are compounded by the methods used. Reliant on surveys and interviews or autobiographical case studies, the multitude of ways in which the impact agenda is effectuated remain on the periphery of their analytical scope. Likewise, the various interactions and relations within and beyond academia that exceed the impact agenda are given limited attention.

The upshot of these drawbacks is that there is a lack sensitivity to the various ways in which the impact agenda is imbricated in mechanisms and formations of power. This is particularly apparent in relation to mechanisms of power that are more diffused and dispersed and which operate at the level of affects. At the same time, there is a lack of sensitivity to the complex web of relations that shape what academics do and think and which point to subjectivities that deviate from the kinds of

subject positions that the impact agenda ascribes. The key implication here being is that the potentials for converting the impact agenda that such alternative subjectivities reveal are missed.

My contribution

This thesis is guided by two overarching aims: (1) understand how the impact agenda is implicated in the (re)production of dominant power formations and (2) uncover the potentials for converting the impact agenda and creating alternatives.

I address these aims through an ethnographic study that focuses on the question of subjectivity. The key questions I seek to answer are as follows:

- What role does the impact agenda play in producing academic subjectivities, and what do these processes of subjectification reveal about formations and mechanisms of power?
- What alternative academic subjectivities are there to those ascribed by the impact agenda, and what do these subjectivities reveal about the potentials for converting the impact agenda?

By pursuing these lines of inquiry, this thesis goes beyond the wealth perspective articles and opinion pieces that posit the effects of the impact agenda and debate the merits of working 'with and/or against'. What I offer is an in-depth empirical account that is attentive to the ways in which the workings of power are both reinscribed and circumvented. Moreover, I avert the pitfall of presenting alternatives that are not grounded in analyses of the lives of academics and the present as we know it.

These lines of inquiry also push the thesis beyond the large body of empirical texts that bears the traits of 'orthodox policy studies' as well as those that work in the tradition of interpretative policy analysis and lack the 'critical edge' of critical scholarship. The thesis also offers an advancement on the small number of empirical studies that bring the politics of the impact agenda to the fore. As will become clearer the next couple of chapters where I outline my theoretical framework and methodology, through my use of assemblage theory coupled with an ethnographic approach, I offer a more nuanced account of (1) the multiple ways in which the impact agenda works to control and discipline academics, (2) the capacities of academics to subvert and escape the disciplining and controlling effects of the impact agenda, and (3) the potentials for converting the impact agenda.

Before moving onto to these chapters, I want to first pre-empt a couple of charges.

In my attempt to go beyond opinion pieces and perspective articles, I'm not suggesting I have somehow been able to simply bracket off my own political values. Indeed, the sympathies I share with many of the sentiments expressed by critics have been a motivating factor in undertaking this research. However, I take seriously Grossberg's (2010: 98) comments that 'it is necessary to push against the sometimes overwhelming force of such political concerns and to remain committed to telling the best story possible'. That is to say, I have approached this study with the understanding that 'intellectual work comes first' (Grossberg, 2010: 98). Thus, this thesis is less of a statement of my political values than it is an attempt to perform the central task of critical scholarship: 'analysing particular formations and mechanisms of power and to subject them to the challenge of contingency and possibility' (Grossberg, 2010: 98).

Moreover, my attempt to go beyond opinion pieces and perspective articles and to be open to the potentials of the impact agenda should not be read as a retreat from critique. Remaining attentive to the spaces that open up for diverse ways of thinking and acting does not necessarily entail the side-lining of power relations, nor does it mean simply substituting a critical/pessimistic account with celebratory/optimistic one. Rather, it signals an attempt to undertake the 'difficult and risky work of allowing oneself to be surprised' (Grossberg, 2010: 98). It's my contention that such openness is key to the imaginative and strategic work of constructing alternative futures. Indeed, our ability to open up the present to other possibilities rests not only our understanding of the forces of power we are subject to but also our attentiveness to the complexities that trouble dominant tendencies (and our well-rehearsed narratives of them) as it's here we can find traces of alternatives.

Chapter 3 Critical policy studies and assemblage theory

A 'critical' policy study?

'Critical policy studies', in certain respects, is an awkward name. Scholars whose work is labelled 'conventional' or 'orthodox' policy studies (the wider strands of policy studies that critical policy studies distinguishes itself from) no doubt espouse the merits of 'critical thinking'. Moreover, many scholars whose work is often labelled critical policy studies more readily identify with subdisciplines such as policy sociology (Ball, 2015c) or anthropology of policy (Shore, Wright, and Pero, 2011). Despite such definitional and disciplinary complexities, I find critical policy studies to be a useful term – one that best represents the primary academic field that this thesis contributes to.

My identification with critical policy studies in part reflects my previous academic studies. As an undergraduate I was based within the Sociology Department at the University of Birmingham, though the particular course I undertook was rooted in the Centre for Contemporary Cultural Studies (CCCS). And as a master's student I studied at the Department of Sociology at Goldsmiths University of London - a department known for its interdisciplinary work. The interdisciplinary orientation I developed through these previous courses has stuck with me, and it's an orientation that resonates with the 'interdisciplinary zone' (Peck, 2011: 774) of critical policy studies.

Through my previous academic studies I also cultivated an approach to thinking critically that is characteristic of the political-intellectual work of cultural studies, and it's here we find further resonances between my academic background and the central tenets of critical policy studies. Much like Clarke (2019: Introduction, Thinking critically but not alone, para 1), I want to hold onto a notion of critical that is distinct from mainstream conceptions that frame 'critical thinking' as an 'approach to thinking systematically about any issue'. Key to this is to 'redeem the word for political purposes'. As Clarke (2019: Introduction, Thinking critically but not alone, para 1) suggests, this involves recognising 'that thinking critically might be socially and politically motivated, driven by a desire to challenge formations of power and knowledge'.

Clarke's proposition points to the 'critical attitude of mind' (Jessop and Sum, 2016: 105) that critical policy scholars share. As Fischer et al. (2015) show, while critical policy studies encompass various theoretical traditions and different approaches to critique, a common thread is the rejection of the positivist and technocratic tendencies of conventional policy studies. For critical policy scholars, policy processes (and our analyses of them) are never neutral nor simply technical. Rather they are

entwined with values, interests and norms, and are implicated in relations of domination and subordination. A central task then for critical policy scholars is to analyse how policy processes are involved in the (re)production of dominant formations of power, and to use the knowledge gained in order to challenge existing power relations and to open up possibilities for alternative futures.

My approach to thinking critically will become clearer as I move onto outline my theoretical approaches and concepts in more detail. Before doing this I want to offer some further preliminary remarks on the kind of critical work undertaken in this thesis. Taking my cue from Grossberg (2010: 94), I attempt to connect the 'two political poles' of critical work; that is, I aim to articulate 'a negative critique of the dominant in the present' with a 'positive opening up of the present to other possible futures'. Underpinning this approach to thinking critically is the recognition that politics is contextual. As Grossberg (2010: 94) notes, 'if politics is, in part, the art of the possible, then one has to understand what is happening in order to figure out how to go about changing it'. This contextual understanding of politics shares similarities with the immanent mode of critique that Jessop and Sum (2016) put forward in their approach to critical policy research. For them, proposals for sub-or counter-hegemonic alternatives 'do not derive from some continuing commitment to an as yet unrealized Enlightenment project or from other external, transcendental criteria' (Jessop and Sum, 2016: 105). Rather, 'they are grounded in specific, conjunctural analyses that rest on explicit and contestable entry-points and standpoints' (2016: 105).

Pursuing such contextually sensitive analysis is key to overcoming one of the traps that critical scholars often fall into: taking their own 'political assumptions (however commonsensical they may be) as if they were the conclusion of some analysis' (Grossberg, 2010: 54). As was saw in the previous chapter, many critics of the impact agenda run the risk of falling into this trap, leaving them susceptible to two dangers: (1) falling back on to well-rehearsed narratives that overlook the specificities, contradictions and ambiguities of the present; (2) formulating alternatives that are detached from the possibilities that lie latent and emergent in the present. In this thesis, I avert these dangers by offering an ethnographic account of the impact agenda. In doing so, I resist the urge to allow my political values to supersede the intellectual task of analysing the present, and I seek to put forward alternatives that are grounded in my analysis.

To further delineate my approach to conducting a critical policy study I want to close this section by drawing on Clarke's (2019) notion of 'thinking with and against'. Invoking Stuart Hall's 'capacity to dig out the 'good sense' of positions and analyses' that Clarke himself 'had learned to deconstruct

and dismiss', Clarke suggests that that a 'willingness to think with, as well as against' is central to the process of thinking critically (Clarke, 2019: Introduction, Voices in my head, para 3). Clarke expands on this by referencing Scott's (2017) idea of 'clarification' which is described as a way of approaching thinking that 'does not presume the possibility of resolution; on the contrary, there is no presumption of closure, only successive provisional resting points along the way where we gather our thoughts for further dialogic probing' (Clarke, 2019: Introduction, Thinking critically: with and against, para 2). For Clarke, clarification thus implies a continual engagement with the 'other' (whether a person or text) and a willingness to avoid 'closure'. Such openness, however, doesn't render scholars incapable of staking out a position or making judgments about competing knowledges. Rather it means treating any intervention as 'provisional'.

'Thinking with and against' aptly describes my engagement with the impact agenda. While I carry out the critical work of deconstruction, I also work *with* the impact agenda, going beyond binary oppositions and seeking to open up new possibilities. Furthermore, in no way do I attempt to provide the definitive account of what the impact agenda is and what it should be. The claims I make in this thesis are made with a healthy degree of epistemological modesty and with a recognition of the need for further 'clarification'. In this way I invite others to judge the plausibility, relevance and political consequences of my claims and to work with and against their offerings.

Thinking with and against also captures my approach to using theory. Clarke (2019) offers a useful vignette of what it means to think with and against theory:

> One doesn't have to be a Foucauldian to think with Foucault … Indeed, I am not sure how one thinks without Foucault after Foucault, any more than I can imagine how to think without Marx after Marx. Both reorganised intellectual and political horizons in decisive ways, but so too do many other individuals and movements, such that the challenge of thinking critically is to work, creatively, carefully, collaboratively, with the tensions, possibilities and gaps that surround us. (Clarke, 2019: Introduction, Thinking critically: with and against, para 1)

As I discuss below, my primary theoretical resources are drawn from the work of Deleuze and Guattari, particularly in relation to their concept of assemblage. However, I don't profess to be a 'Deleuzian' or a 'Guattarian', or a 'Deleuzoguattarian'. Nor do I seek to enter into debates with social and cultural theorists who identify with these monikers. This reflects a 'strategic' (Grossberg, 2010:

27) approach to using theory. I have selected my theoretical resources on basis of their ability to (1) grasp the ways in which the impact agenda is implicated in the (re)production of dominant power formations and (2) open up possibilities for converting the impact agenda and bringing into being alternatives. This strategic approach to using theory, however, does not preclude an attempt to contribute to ensuing theoretical debates in the field of critical policy studies. Indeed, I hope that the approach I carve out helps to advance the theoretical tools that critical policy scholars have at their disposal.

Policy assemblage

The turn to assemblage theory

Over the past decade the concept of assemblage has become increasingly popular amongst critical policy scholars. This is exemplified by a swathe of texts - including books (e.g., Clarke et al., 2015), edited volumes (e.g. Higgens and Larner, 2017), special journal issues (e.g. Viczko and Augusto Riveros, 2015) and individual articles (e.g. Savage, 2020) - that explore the opportunities that assemblage theory presents for expanding the conceptual repertoire of critical policy studies. Across this growing body of literature – what has been dubbed 'policy assemblage' (Savage, 2020) – we can find various understandings and applications of assemblage. However, what loosely ties these texts together is an interest in using assemblage to conceptualise policies as complex and ever-shifting social formations that are made up of heterogeneous elements.

This interest in assemblage in part reflects an attempt to develop a set of conceptual and methodological tools that are more attentive to heterogeneity and contingency. This follows concerns about a tendency in critical policy studies to fall prey to the perils of reductiveness. As Clarke et al., (2015) state:

> Too often, in critical policy studies, there is an emphasis on what Raymond Williams (1977) termed the epochal', reducing the complexity of a historical moment to the 'rolling out' of a dominant tendency in which 'the usual suspects' play the leading tole, be they 'globalisation, neoliberalism, modernity (or post-modernity), post-Fordism, or the needs/interest of capital. Such forces seem to re-emerge endlessly and to repeat the same scripts with the same conclusion'. (Clarke et al., 2015: 52)

Perhaps the most prominent 'usual suspect' that Clarke et al., (2015) note is neoliberalism. We saw in the previous chapter how this term has provided the dominant frame for scholars to make sense of the imposition of market logics in higher education, and critical scholars more widely have applied the term to similar developments across a range of sectors and settings (Cahill, et al., 2018; Springer et al., 2016). In such texts we can find various and sometimes overlapping conceptualisations of neoliberalism, including a Marxist political economy orientated approach (e.g., Harvey, 2007), a Foucauldian / governmentality approach (e.g. Dean, 2010) and a 'regulationist' approach (e.g. Peck and Tickell, 2002). Newman and Clarke (2009: 18) suggest that despite their differences these approaches have a tendency to provide an overly integrated or coherent account of neoliberalism, resulting in neoliberalism seeming 'omnipresent' (it is a universal or global phenomenon) and 'omnipotent' (it is the cause of a wide variety of social, political and economic changes). Moreover, they suggest these approaches can sometimes suffer from a lack of empirical sensitivity to ways in which 'grand designs' – 'whether a class project or governmentality' – are 'translated' into policies and practices and are subverted in the process (Newman and Clarke, 2009:18).

It's in light of such critiques levelled at prevailing conceptualisations of neoliberalism, that critical policy scholars have turned to the concept of assemblage. For the likes of Clarke and others, assemblage offers a way to recognise how the 'present is formed by more heterogenous currents, forces, tendencies and possibilities that can be accounted for by a singular motive force' (Newman and Clarke, 2009:18). Moreover, it's a concept that 'points to the danger of deciding, too early, that we know what something means' (Clarke et al., 2015: 52), impelling researchers to be attentive to the different ways in which policies are reconstituted in particular contexts and their unpredictable effects.

Critical policy scholars' interest in using the concept of assemblage to account for heterogeneity and contingency also reflects the changing dynamics of policymaking. The rise of information technology, coupled with the constant drive for more 'efficient' and 'effective' policies, has accelerated the movement of policies between political jurisdictions (both at the national and sub-national level) (Peck, 2011). This enhanced mobility of policy (which is evident in the global rise of research impact assessment) has driven an interest in conceptualising policy making as a translocal and transnational process which interconnects multiple actors and institutions. Here scholars have turned to assemblage (along with allied concepts such as mobility and mutation) to develop an approach that is attentive to the translocal and transnational flow of policies and the hybrid and diverse mutations of policy ideas and practices that emerge within specific contexts (see Mcann and Ward, 2012). Such

an approach offers an advancement on concepts associated with orthodox policy studies, such as 'policy transfer' and 'policy implementation', which tend to present polices as internally coherent and fully formed 'things' and thereby ignore the ways in which policies are continually revised and reformulated as they travel across different settings and are reinterpreted by various actors.

There is another central driving force behind the rise of policy assemblage literature: a desire to move beyond a preoccupation with discourse. One of the defining characteristics of critical policy studies has been a concern with meaning, as captured by the following quote from the Interpretative Policy Analysis network (the network associated with the journal Critical Policy Studies):

> Interpretive approaches to research and analysis—methodologies and methods concerned with situated meaning(s), historical context(s), and the importance of human subjectivity—constitute the basic cornerstone of a critical approach to policy analysis which challenges the positivism and scientism that still characterize much policy analytic research' (Interpretative Policy Analysis network. n.d., para, 1)

This concern with meaning is indicative of how critical policy studies found is orients in the 'cultural turn' that took sway across the social sciences and humanities in the late 20th century. The various theoretical frameworks and dispositions that the cultural turn cultivated and elevated – not least poststructuralism and an interest in discourse – offered critical policy scholars tools to critique and move beyond the instrumentalism, technicism and positivism of orthodox policy studies. These tools remain central to critical policy studies, particularly amongst policy sociologists and anthropologists of policy who are interested in examining how policies work to construct subjects as objects of power (Ball, 2015c; Shore, Wright, and Pero, 2011). Yet concerns have been raised that a preoccupation with discourse comes at the expense of exploring material realities beyond their discursive construction. Buoyed by the recent rise of 'new materialisms' across the social sciences and humanities more broadly (what is often referred to as the 'material turn') some critical policy scholars are therefore seeking to deploy concepts that recognise 'the co-constitutive power of matter' (Webb and Gulson, 2015: 169). By offering a way to conceptualise policy as an entanglement of heterogeneous elements that cross-cut various orders (discursive, material, affective, subjective and so on), assemblage has emerged as one of the central concepts to gain traction amongst scholars interested in taking a material turn.

Conceptualising policy assemblage - shortcomings and missed opportunities

Above we see how the rise of policy assemblage literature signifies an interest in expanding the conceptual repertoire of critical policy studies. Reflecting the different impulses driving this interest, critical policy scholars have conceptualised and applied assemblage in varying ways. Some draw on Deleuze and Guattari and work at intersections of the concepts of governmentality and assemblage (e.g., Webb, 2009), while others read assemblage through the lens of DeLanda's 'reconstructed theory of assemblage' (Savage and Lewis, 2018). Some adopt an Actor Network Theory (ANT) approach advanced by Latour and others (e.g., Koyama, J.,2015), while others take their inspiration from anthropological studies of 'global assemblages' (e.g., Prince, 2014). Further still, some scholars work across and synthesize these different applications of assemblage of theory (Savage, 2020).

While the policy assemblage literature is marked by such diversity, in some respects it is rather homogeneous. What is quite striking is how far removed much of this literature is from the foundational work of Deleuze and Guattari (1983; 1987). While it is customary to mention that the concept is rooted in the work of Deleuze and Guattari – and as noted above there are some who work more closely with Deleuze and Guattari – the readings of assemblage that critical policy scholars tend to take up are filtered through the work of others who have modified and in certain respects deviated from Deleuze and Guattari's early conceptualisations.

The two readings have been most influential are ANT (Latour, 2007; Law, 2009) and DeLanda (2016). The influence of ANT is particularly apparent in a special issue of Discourse: Studies in the Cultural Politics of Education (Viczko and Riveros, 2015) where six out of the eight contributing articles explicitly draw on ANT to examine how the concept of assemblage can be used to study policy processes in educational contexts. The influence of DeLanda is exemplified by Savage's (2020) synthesis of policy assemblage literature, which identifies DeLanda's deployment of 'relations of exteriority' as one of the 'central theoretical foundations' to a policy assemblage approach.

It's perhaps not surprising that ANT and DeLanda dominate the policy assemblage literature, given the influence they have had across the social sciences more widely (Buchanan, 2015). We should also recognise the analytical gains that they these readings offer for critical policy scholars. In particular, both offer devices to overcome the pitfalls of reductionism. ANT, for instance, with is focus on 'mundane and everyday practices' and its resistance to 'overlaying the empirical with already formed theories', demands an empirical sensitivity to the features of life that trouble 'big concepts' such as neoliberalism (Gorur et al., 2019: 5). Similarly, by placing the analytical emphasis

on ‘the relationship between heterogeneous elements that do not have a logically necessary coherence’, DeLanda’s notion of ‘relations of exteriority’ enables ‘a focus on how diverse practices, rationalities, policies and so forth are assembled without assuming that these are unified in an integrated neoliberal whole’ (Higgens and Larner, 2017: 7). Furthermore, both ANT and Delanda’s work offers a relational mode of thinking that heightens our sensitivity to the complex webs of human and non-human relations that policies constitute and are constituted by. Work influenced by ANT has been particularly illuminating in this regard, drawing attention to the co-constitutive role that material objects play in enabling policy processes and outcomes (Viczko and Riveros, 2015).

While we should not simply right off ANT and DeLanda, these readings carry a number of shortcomings and missed opportunities, which in a large part can be accounted for by their dislodgment from Deleuze and Guattari. To be clear, I’m not suggesting that these readings are invalid nor that scholars can’t modify and adapt the work of Deleuze and Guattari. Of course, Deleuze and Guattari themselves, in their advocacy of ‘free variation’ (Jensen and Rodje, 2012: 2), are not opposed to the dislocation and translation of concepts. And I myself, adapt the work of Deleuze and Guattari to meet the needs of this study, and lean on the work of others who have interpreted and applied their thinking. The question I am concerned with is what it lost and what is gained in such translations and whether we end up with diminished or enhanced concepts. To put it another way, it’s a question of whether or not these readings put us in a better position to carry out the two political poles of critical work I discuss above. It’s with this question in mind that I want to draw attention to three limitations / oversights that hinder dominant conceptualisations of policy assemblage and which reflect their debt to ANT and DeLanda.

The first is a neglect of the broader social forces that produce the conditions for the emergence and formation of policy assemblages. What critical policy scholars appear to have mostly gleaned from ANT and DeLanda is both an antipathy towards using concepts such as neoliberalism as priori explanations and an emphasis on providing empirically grounded and locally situated descriptions of socio-material assemblages. While these moves can be seen to serve a necessary corrective to the well-rehearsed narratives of the ‘usual suspects’ and the pitfalls of reductiveness, they can lead critical policy scholars to dismiss the wider forces at play in assemblage processes. Likewise, they can displace the act of conceptual abstraction to such an extent that we abandon the necessary tools to map and explain patterns and tendencies that exist across different sites and settings. Put simply, we are left less-equipped to perform the critical task of analysing mechanisms and formations of power.

Some critical policy scholars have used assemblage in conjunction with Hall's notion of articulation (Slack, 1996) to avert this neglect of questions of power and politics. There are valuable analytical purchases to be made with this combination, as exemplified by Clarke et al.'s (2015) work. Yet such manoeuvres overlook the fact that Deleuze and Guattari's notion of assemblage offers concepts that enable us to account for the forces that guide the configurations of assemblages. The key concepts here are abstract machine (or 'diagram') and strata. Except for a couple of notable publications (Thompson et al. 2021; McGimpsey, 2017), these concepts are near absent in the policy assemblage literature, reflecting the relatively limited attention DeLanda gives them and their omission in dominant take ups of ANT. This is an oversight worth rectifying. As I will demonstrate in the following section, the abstract machine and it's co-functioning with assemblage offers an approach that accounts for heterogeneity and contingency without losing sight of broader social forces and dominant tendencies.

The second is the oversight of desire. Desire is at the heart of Deleuze and Guattari's concept of assemblage. As they put it: 'Assemblages are passional, they are compositions of desire' (1987:, 399). Yet the importance of desire seems to be lost on most critical policy scholars interested in assemblage, as suggested by the scant of attention given to it in the policy assemblage literature. This in part can be explained by the influence of DeLanda's reading of assemblage which effectively 'eliminates' desire (Buchanan, 2008: 92). Moreover, DeLanda's reading obscures an understanding affect that intersects with Deleuze and Guattari's conception of desire: affect understood as a pre-subjective bodily experience. As Muller and Shurr (2015) show, desire and its connections with affect are also blindspots in ANT, which again further helps to explain their omission in the policy assemblage literature. The problem with these oversights is that they further diminish the political dimensions of assemblages. As will become clearer in the following section where I discuss these concepts in more detail, what is at stake here is grasping (1) how dominant social formations proceed and take shape by capturing and ordering the flows of desire and affect that move between and through us and (2) the potential for alternative futures that lie latent in these flows of energy.

The third is the neglect of subjectivity. While the turn to assemblage has helped critical policy scholars move beyond a preoccupation with discourse, there is a risk that in the attempt to make matter matter we neglect the ways in which patterns of rule are made and sustained through the production of certain kinds of subjectivities. Moreover, there is a risk we neglect the potentials for alternative futures that can be glimpsed in the creative and unruly processes of subjectivation. While the side-lining of subjectivity is apparent across much of the policy assemblage literature,

particularly studies influenced by ANT, there are strands which bring questions of subjectivity to the fore. Of particular note here are those who use assemblage in conjunction with a governmentality approach (Webb, 2009). Yet this work tends to overlook the unique theorisations of subjectivity that Deleuze and Guattari offer and in doing so continues to be hampered by pitfalls that Foucauldian-inspired accounts are prone to[2]. These pitfalls are twofold: (1) forgetting to 'acknowledge that subjectivity precedes and exceeds the mechanisms of managerial obligations and workplace resistance' (Goffey and Pettinger, 2014: 388); (2) performatively reproducing dominant models of subjectivity (Skeggs, 2014). As will become clearer in the following section, Deleuze and Guattari's work averts these pitfalls by offering an approach to subjectivity that is attentive to the multiple and dispersed ways in which policies work (or not) to discipline and control subjects *and* processes of subject formation bring into focus new and alternative ways of thinking and acting.

Returning to Deleuze and Guattari

In seeking to address the missed opportunities and shortcomings that characterise policy assemblage literature, I carve out an approach that finds its footing in the work Deleuze and Guattari. In this way, I follow recent calls made by others in the social sciences and humanities to 'return to the work of Deleuze and Guattari' (Buchanan, 2021: 4). It's worth reiterating at this point that the approach I put to work in this thesis is an application of Deleuze and Guattari's thinking, one that is tailored to the needs and aims of this study. Thus my engagement with Deleuze and Guattari is a good few steps removed from the philosophical and theoretical discussions in and surrounding their work. Moreover, my use of their concepts is selective, with assemblage and the allied concepts of strata and abstract machine being the central tools I utilise. It's important to note here how these concepts, like Deleuze and Guattari's vast corpus of concepts in general, have various facets and threads, carry various meanings and functions, and are sometimes clouded in rather idiosyncratic prose. No doubt such terminological characteristics are a contributing factor to the diverging ways in which assemblage has been interpreted. To help navigate this conceptual labyrinth I have turned to the work of others, in particular Buchanan (2008; 2015; 2021), who have made important inroads in

[2] Central here are Deleuze and Guattari's conceptualisations of desire and affect, which I describe on pages 37 and 38. To be clear, in asserting that these distinct conceptualisations help us to move beyond the pitfalls that hamper Foucauldian-inspired accounts, it's not my intention to downplay nor misrecognise the connections between Deleuze and Guattari and Foucault. Indeed, as the following section will show, the approach that I develop in this thesis is one that recognises how Foucault's work inspires Deleuze and Guattari's assemblage theory. See Morar (2016) for a discussion on the connections and differences between these scholars.

interpreting Deleuze and Guattari texts and have, in my view, discerned the useful tenets of their assemblage theory.

Before moving onto outline the concepts of assemblage, strata and abstract machine, it's necessary to first offer some opening remarks on Deleuze and Guattari's general philosophy. Gaining a full appreciation of their thinking would require a survey of their solo and co-authored texts, which is beyond the scope of thesis. What follows is a selective and streamlined overview, based primarily on A Thousand Plateaus (Deleuze and Guattari, 1987) and oriented towards the particularities of the approach deployed in this thesis.

Deleuze and Guattari's philosophy – some introductory remarks

Deleuze and Guattari's ontology consists of two planes: the plane of organisation and the plane of consistency (or what is sometimes referred to as the 'body without organs' or 'plane of immanence'). While these planes are opposing, they are entwined and inseparable; neither transcends nor escapes the other, and neither can be understood except in relation to the other. We can understand this as a philosophy of immanence whereby phenomena are not understood on the grounds of a transcendent organising principle/entity but rather through the entangled and co-constitutive relations of the plane of consistency and the plane of organisation. As I move onto distinguish the two planes, it's important to bear this immanent relation in mind and to view the polarised distinctions that I draw as abstractions that serve analytical purposes rather than descriptions of actual reality. There are never 'pure' instantiations of the plane of consistency nor the plane of organisation. Rather, life's forms are composed of processes that oscillate between the poles of these two planes.

Beginning with the plane of consistency, Deleuze and Guattari (1987: 43) define this plane as 'the unformed, unorganized, nonstratified, or destratified body and all its flows: subatomic and submolecular particles, pure intensities, prevital and prephysical free singularities'. Put rather simplistically, we can think of this plane as the flows of matter and energy that constitute the basis of the world and that have the potential to be organised in infinite ways. To use other terminology commonly associated with Deleuze, this plane can be understood as the realm of 'virtual potentiality' which is 'always more than this actual world, and not limited by its already present forms' (Colebrook, 2001: 96).

A key term to note here is 'intensities'. We can think of intensities as those experiences in life that exceed the systems of representation that give order to what we perceive and feel. An associated key term to introduce here is 'affect'. For Deleuze and Guattari (1987: xvi), affect is a 'prepersonal intensity corresponding to the passage from one experiential state of the body to another and implying an augmentation or diminution in that body's capacity to act'. There are various threads and aspects to this conceptualisation of affect, and to account for these would require a detour into Deleuze and Guattari's engagement with several other thinkers. For our purposes here I will focus on briefly drawing out the key implications that are relevant to thesis.

First, affect can be distinguished from emotion. Affects are those experiences that are registered at the level of the physical body and that escape our subjective interpretations and linguistic representations. Emotion on the other hand is 'what we experience once we have identified an affective shift and represented it to ourselves as something which can be named and which can be understood as happening to us internally as individuals' (Gilbert, 2013: 145). Secondly, affect is relational. We experience affects through encounters with other bodies[3], whereby our capacity to act is either augmented or diminished depending on the combination of bodies we enter into a relation with. Following Spinoza, Deleuze and Guattari use the term 'joy' to refer to those affects that entail an enhancement in our capacity to act, while those that entail a diminishment are termed 'sad'. This understanding of affect brings us close to an ethical position which can be discerned from A Thousands Plateaus and is captured in the statement 'We know nothing about a body until we know what it can do' (Deleuze and Guattari, 1987: 257). For Deleuze and Guattari, ethical action is not grounded in transcendent laws, rather it's a question of making connections with new bodies so as to experiment with the affects that are produced and thereby map out those encounters that produce joy.

Deleuze and Guattari's conceptualisation of affect overlaps and converges with their conceptualisation of desire, and such connections bring into play further conceptual facets and technicalities. Again, I will focus on extracting the key points that are relevant to the approach I develop here. Firstly, it's helpful to think of desire in terms of the connections we as humans unceasingly make with other bodies. The generation of these connections is the work of desire. To link this with the concept of affect, desire is what moves humans into affective states with other bodies. Desire in sense can be thought as 'a kind of affective intentionality' and as an 'energy of

[3] Body should be understood in the broadest sense of any whole composed of parts – a human, a book, a drink, an organisation etc

connectivity' (Grossberg, 2014: 7). Secondly, these connections of desire constitute a prior field of relations in which society is built on. In other words, social wholes (communities, cultures, institutions etc.) are an aggregation of the singular connections that we make with other bodies. What's important to note here is that flows of desire need to be regulated and disciplined in order for social wholes to endure. This organisation of desire works through 'coding' – a process in which 'social representations capture desire and assign it determinate aims and goals' (Holland, 2011: 60). Thirdly, in its intensive state on the plane of consistency (or the 'body without organs'), desire exceeds and escapes such social representations and is thus unfettered by the prescriptions of pre-defined aims and teleological end points. In this 'free' state, flows of desire can move in different directions and make boundless connections, opening us up to new affective encounters and new ways of thinking and acting.

So far we have seen how the plane of consistency is the realm of unformed matter and intensities, and is thus set in opposition to a realm of reality where social determinations take hold. It's this latter realm which Deleuze and Guattari refer to as the plane of organisation. Let's now turn to this plane.

The plane of organization effectively refers to the dominant powers at work in society. The plane shifts our attention to established systems of representation that construct certain ways of thinking and certain subjectivities. Likewise, it shifts our attention to social forms and relations that tend towards stasis, unity and hierarchical organisation. In this way, we can think of the plane of organisation as the processes of capturing and ordering the flows of matter and energy on the plane of consistency. We can also think of it as the actual world as it is consciously perceived - the point in which our subjective interpretations (and the systems of representation that we rely on) apprehend what we see and feel.

To return specifically to the question of affect, the plane of organisation points to the threshold that is crossed when affects are subjectively understood in terms of pre-figured categories of emotion. Moreover, it points to how power operates through the organisation of affects (how affects are assigned meanings that are compatible with the social order, and how affects are activated to incite particular kinds of conduct). Similarly, the plane of organisation points to how the 'coding' of desire gives rise to social institutions and socially constructed needs and interests. What is at stake here is how under such socially determinate conditions the potentials that lie latent in desire's 'energy of

connectivity' are inhibited as our perceptions and actions fixate on aims and objects prescribed by social order.

Having now delineated both the plane of consistency and plane of organisation, I want to address some of the risks that come with presenting these two planes in such a dichotomous way. First, there is the risk of obscuring the plane's entangled relations. It bears reiterating that the two planes overlap and fold onto each other and that social formations are composed of processes that move in directions of both planes. To put it another way, what defines social life is the continual oscillation between the two planes: the plane of organisation continually works to organise the plane of consistency, while the plane of consistency simultaneously works to free itself from the grip of the plane of organisation. Working with this ontology thus necessitates a recognition of how all social forms can exhibit dynamics of being both centralised and dispersed, stable and unstable, hierarchical and horizontal, homogeneous and heterogeneous. In certain respects, then, the dynamics we depict as social scientists is a matter of perspective and what we wish to bring to the fore. This is not to suggest, however, that empirical reality is composed of undifferentiated social forms, as clearly some social forms tend more towards stasis, homogeneity and hierarchical organisation than others.

Secondly, there is the risk of equating the plane of consistency as 'good' and the plane of organisation as 'bad'. It's true that Deleuze and Guattari advocate moves to escape the suffocating and stifling grip of the plane organisation, and it's the plane of consistency where they locate the potentials for doing so. However, they also caution against hastily breaking away from the plane of organisation's social determinations and formations, as doing so risks plunging into a dysfunctional and unproductive of state of chaos. The trick, as they suggest, is to keep enough of the plane of organisation within our grasp in order to make life liveable. It's from this position which we can experiment with the potentials of the plane of consistency and carefully plot our movements of escape. Such precautionary manoeuvring transcends the binary of plane of consistency = good and plane of organisation = bad. As Buchanan (2021: 52) notes, '[n]either state of being is desirable for itself; both are a kind of death. Life occurs in the middle'.

Thirdly, there is the risk of reinstating a narrow conception of subjectivity. Drawing a distinction between (1) a realm of intensive affects and desire (the plane of consistency) and (2) a realm of linguistic representation and subjective interpretation (the plane of organisation) offers a useful strategy for analysing how social formations are produced and sustained, and the potentials for alternative ways of thinking and acting. However, drawing this distinction too sharply can result in

equating subjectivity with the conscious 'I', which runs counter to the very understanding of subjectivity that Deleuze and Guattari's work points to. While it's often remarked that Deleuze and Guattari's philosophy is 'anti-subjectivity', they don't reject the concept of subjectivity per se. What they undeniably reject is the Cartesian understanding of subjectivity that rests on the unitary, autonomous and thinking subject. Their ontology offers a radical alternative to this narrow conception. Here I want to suggest that it's instructive to consider how we as people are formed through the immanent relations of the plane of organisation and plane of consistency. With this framing, the subject becomes a decentred and relational figure whose existence is not premised on the conscious mind, nor the simply the effects of discourses, but rather the productive interplay of elements and processes that traverse the multiple dimensions of human existence. Subjectivity[4] in this way becomes an on-going, dynamic and multi-layered process that operates across a complex web of relations that surpass dualistic categorisations of the subject (mind vs body, individual vs social, and conscious vs unconscious). Taking up such a reading is not to render irrelevant the distinctions that demarcate the different registers of human life. Rather it means adopting a broader understanding of subjectivity, one that recognises how our conscious minds are inseparable from our embodied, unconscious and social existence.

Three key concepts: strata, assemblage and abstract machine

Having got a sense of Deleuze and Guattari's philosophy, I want to further delineate the key concepts that I utilise. The three central concepts of interest here are strata, assemblage and abstract machine. Along with the 'plane of consistency' discussed above, these concepts are like the working parts of Deleuze and Guattari's assemblage theory. They overlap and converge, but they also perform different functions. I will start with strata, as this helps to set up my use of assemblage.

Strata

Deleuze and Guattari (1987: 269) note the plane of organisation 'effectively covers what we have called stratification' . In this way, we can think of stratification as the process of capturing and ordering the plane of consistency's flows of matter and energy, and we can think of strata as the formations that are generated and congealed through these processes.

Deleuze and Guattari speak of three main classes of strata: the geological, the organic and the alloplastic (or techno-semiological). While, as social scientists, it's necessary to look across these

[4] Subjectivity here is broadly defined as our sense of who we are and what we might become

strata and understand their interrelations, it's the techno-sociological stratum where our interests primarily lie, as this stratum is concerned with the formation of socialised life. This stratum is broken down into multiple substrata, with three being particular important, serving as the 'principal strata binding human beings' (1987: 134): the organism, signifiance, and subjectification. In short, subjectification refers to the process whereby a human's sense of self is produced through the semiotic systems available to them. Signifiance refers to the production of semiotic systems that are based on signifying chains (where a sign always refers to another signs. Organism refers to a human body that is organised in a centralised and hierarchised fashion, with its organs being limited to carrying out certain functions prescribed by social order.

Deleuze and Guattari's interest in the three 'principal strata' of the techno-sociological stratum resonates with the work of Foucault. Of particular note are the intersections between signifiance and subjectification. For Deleuze and Guattari, the connections and passages between signifiance and subjectification are a central way in which power operates in capitalist society (Deleuze and Guattari, 1987: 167 - 191). What we see here is a shared interest between Deleuze and Guattari and Foucault in understanding the role that language plays in imposing social norms and constituting certain kinds of subjects. Moreover, we see a shared interest in understanding the conditions that determine what is thinkable and sayable and which delimit the possible range of subject formations. For Foucault, these conditions of existence are defined in terms of 'discursive formations' (Foucault, 1972: 31). If we follow Deleuze and Guattari, they are defined in terms of 'regimes of signs' (Deleuze and Guattari, 1987: 111). A further connection between these scholars is their processual understanding of subjectivity. This is particularly evident in *Foucault* (Deleuze, 1988) where Deleuze draws out and develops a notion of subjectification that emphasises how 'subjectivity becomes an ongoing negotiation of things perceived, both consciously and unconsciously, within and outside the body' (Conley, 2011: 193). The key point to underscore is that this reading of subjectification entails a recognition of how the negotiation or rather the 'folding in' of outside forces constitutes an inner space (within a subject) where the subject can loosen the grip of subjection and engage in the self-fashioning of their own subjectivity. In this way, in the work of Deleuze and Guattari and Foucault we can discern an understanding of subjectification that accounts for the dual process of being subjected to power and the active self-construction of subjectivity.

While organism, signifiance, and subjectification are the 'great strata' of the techno-semiological stratum, 'there is no limit to the final number of strata so long as one is able to satisfy two essential requirements: (1) demonstrate the unity and logic of composition and (2) define the limits of the

composition, that is, where it begins and where it ends' (Buchanan, 2021: 39). In this way the concept of strata can be applied to all kinds of social formations that exhibit tendencies towards unity and can be distinguished from other strata.

Now, the central point of interest is not so much strata themselves than it is the production of strata. As Buchanan (2021: 27) notes, "strata' refers to a concept that enables us to see and think about a certain type of process, the production of nature, not the thing itself'. To begin to think about the process of producing strata (stratification) it's instructive to consider the 'relations of dependency' (Buchanan, 2021: 26) between strata. In other words, how existing strata serve as the substratum and provide the conditions of possibility for other strata. We can apply this to the ways in which techno-semiological strata are built on geological and the organic strata, and also how new techno-semiological strata emerge from the crossing and combining of existing techno-semiological strata. What's key to bear in mind here is that while strata intermingle and affect each other, they never cease 'to be essentially different from each other' (Buchanan, 2021: 30). Thus substrata are never simply substrata for another stratum; they are unique strata themselves with their own complex organisation.

To further grasp stratification it's necessary to consider how it involves the 'double articulation' of content and expression. Here again we see links between the work of Deleuze and Guattari and Foucault. As Caluya (2010) shows, in their conception of the double articulation of content and expression, Deleuze and Guattari build on the distinction between a non-discursive formation and a discursive formation that is present in Foucault's work. Before moving onto outline how Deleuze and Guattari describe the double articulation process, it is worth briefly clarifying the conceptualisation of expression and content that I take up here. In short, we can think of content as being equivalent to the non-discursive. Thus, what we are concerned with here is how the material world structures social relations (for instance, how the architecture of a building shapes people's movement and can generate certain corporeal affects). Expression on the other hand can be understood as being equivalent to the discursive. Thus, what we are concerned with are semiotic systems or 'regime of signs' that give meaning to the world and determine the pathways in which humans are able to think and understand themselves[5].

[5] Deleuze and Guattari offer a more expansive understanding expression that includes 'asemiological' and 'asignifying' regimes of signs (Deleuze and Guattari, 1987: 67-68) and which complicates the distinction between expression/the discursive and content/non-discursive I draw here. For the purpose of this thesis, however, I adopt a narrower understanding of expression that is centred on significance and subjectification and which is congruent with this expression/discursive and content/non-discursive distinction.

Deleuze and Guattari describe the double articulation of content and expression in terms of a passage from 'substance of content' to 'form of content' and from 'form of expression' to 'substance of expression'. To help put this in tangible terms, let's follow Deleuze and Guattari and turn to a concrete actualisation of Foucault's disciplinary power: the prison and penal law. We find a substance of content in the particular set of bodies that make up a prison, not least prisoners but also other humans (e.g., guards) and the physical material of buildings (e.g., concrete). We find a form of content in the particular ways in which this materiality is arranged and imposes certain kinds of conduct, i.e., how the prison is a system of visibility that compels prisoners to self-discipline their own behaviour. We find a form of expression in the ways in which penal law and its statements on delinquency provide the means for evaluating and classifying criminal acts. We find a substance of expression in delinquency 'in so far as it is the object of statements' (Deleuze, 1988: 47); that is, a new discursive object. It is worth clarifying here that 'delinquency refers not to a particular person or set of bodies, but rather to an abstract category that can perform incorporeal transformations on a variety of different corporeal bodies (Bryant, 2014: 132). Thus, delinquency constitutes a system of signs that 'acts on' contents and brings about a change in their social being.

There are number of key points to draw out from the summary of the double articulation thus far. First, content and expression are distinct entities with their own dynamics and historical processes. To stick with the disciplinary power example, we can think of how the prison emerged independently from the penal law, and how alternative semiotic systems are at play within a prison such as slang and initiation rituals (Harris, 2016: 442). Secondly, while distinct and irreducible to one another, content and expression interact and are mutually interdependent; they exist in a state of 'reciprocal presupoposition' as Deleuze and Guattari put it. Here we can think of how penal law and its statements on delinquency provide the categories that prisons use to sort prisoners, and how prison 'continues to reproduce delinquency, make it an 'object' (Deleuze, 1988: 29). Thirdly, while Deleuze and Guattari speak of a first articulation (of content) and second articulation (of expression) it's important not to view this as a simple linear succession from content to expression. Content and expression are in a constant process of interactivity, continually intermingling with each other.

Assemblage

In the English version of A Thousand Plateaus assemblage is the translation for the French word agencement – a word that has no exact English equivalent. As others have noted (e.g., Wise, 2013) agencement's meaning in French is very similar to 'layout' or 'arrangement'. It's worth flagging this

because it reminds us that when Deleuze and Guattari speak of assemblages they are not talking about a random collection of objects that have by happenstance entered into relations with each other. Rather they are talking about a set of elements that have been pieced together with a particular plan in mind.

It's also worth flagging how assemblage can carry the dual sense of being a noun and verb. As McGimpsey (2018: 228) notes, 'assemblage implies both the existence of a 'thing' and a functioning through which the sense of 'thing' persists'. We can push this a bit further and be more precise about the function of the assemblage: 'the real work of the assemblage is to bring together a form of content and a form of expression' (Buchanan, 2021: 34). The function of the assemblage in this sense corresponds to the two dimensions of stratification discussed above. What assemblage thus names is the state of interactivity between content and expression or rather between 'a machinic assemblage of bodies' and a 'collective assemblage of enunciation'. The concept of assemblage in this way offers a lens to examine the interactions and liaisons between content and expression that are productive of new strata. To take up this reading of assemblage then is to recognise that the power of the concept lies not in its ability to name or describe a thing but rather in its ability to explain the production of a thing – a point, as Buchanan (2017) demonstrates, which seems to be lost on many policy scholars who have adopted the 'plain language' approach to assemblage.

In recognising the role that assemblages play in the production of strata, it's important to not view this a straightforward, one-way process. As Holland (2013: 62) reminds us, 'assemblages are situated between the strata and the plane of consistency'. This means 'they are vectors both of stratification, in relation to the plane of consistency on which they draw matter and energy to form or consolidate the strata, and of destratification, in relation to the strata they are able to transform by drawing on assembling different matter-energy flows from the plane of consistency' (Holland, 2013: 62). Thus assemblages are a dynamic and ongoing process that move in both directions - towards the strata and towards the plane of consistency.

At this point it's useful to note the distinction Deleuze and Guattari (1987) make between tracing and mapping. Tracing can be equated with vectors of stratification that reproduce the present as we know it, while mapping can be equated with vectors of destratification that open up the present to new and different futures. This distinction doesn't just pertain to the oscillating movements of the assemblages that we examine, but also the kinds of analytical and communicational strategies we deploy and the kinds of realities we seek to bring forth. When we trace we seek to show what exists

and how strata are reproduced. When we map we seek to draw vectors of destratification and create alternatives. Again, we should be careful and not view the distinction between tracing and mapping in simplistic binary terms. Deleuze and Guattari (1987: 13) are quick to remind us that a map and a tracing intersect and feed off each. Thus, our mappings are inseparable from our tracings.

Abstract machine

To begin to understand the concept of an abstract machine, it's helpful to first distinguish why it's a machine and why it's abstract. It's a machine in the sense that it does something. Machines, for Deleuze and Guattari, 'harness forces and are always purposeful, they must be able to do something, must be doing something. Machines are the site of activation of a certain relation' (Buchanan, 1997: 83). [6] It's abstract in the sense that it's particular machinic function needs to be understood at a level which is abstract from its concrete actualisations. To speak of an abstract machine is to name a general function that can be actualised in various concrete settings, through various concrete assemblages. Thus, to define the function of an abstract machine is to say less about the homogeneity of its concrete forms than it is to specify a productive force that can manifest itself in varying forms, across a multitude of settings. Gilbert's (2013) account of neoliberalism as an abstract machine offers a useful example of how this all applies to social phenomena. For Gilbert (2013:21) what defines neoliberalism is the 'tendency to potentiate individuals qua individuals while simultaneously inhibiting the emergence of all forms of potent collectivity'. As he goes onto suggest, this machinic function can be seen in a wide range of concrete manifestations, from 'self-photographing Yale graduates' to 'austerity age foodies' (Gilbert, 2013: 21).

How then does an abstract machine relate to the strata and assemblage? An abstract machine constitutes 'the unity of composition of the stratum' (Buchanan, 2021: 44). Thus we can think of the abstract machine as the unifying force that places content and expression in relation with each other. And it's the role of assemblages to 'effectuate' abstract machines; they are like the concrete agents that help to actualise its general function.

It is important at this point to recognise how the abstract machine is an 'amphibious concept' (Buchanan, 2021: 44). The account of an abstract machine thus far has only dealt with one state of the abstract machine - that which defines a stratum's unity of composition. Simultaneously at work is the state which 'develops in its own right on the destratified plane of consistency' (Deleuze and

[6] Assemblages are, of course, also a machine in this sense.

Guattari, 1987: 63). Abstract machines are thus ambivalent; 'they can push the assemblage towards a closed-up transcendent formation or open it out onto an unlimited field of immanence' (Buchanan, 2021: 46). This of course closely corresponds to the point above about assemblages being both vectors of stratification and destratification and how a map and tracing are inseparable. It is because of such ambivalence that discerning an abstract machine necessitates the task of delineating a set of potentials that have more or less chance of being actualised. To put it another way, it requires the simultaneous task of (1) tracing out the machinic processes by which specific configurations of actual reality are produced and sustained and (2) mapping the virtual potentials that tend to remain unactualized and which point to alternative trajectories.

Applying Deleuze and Guattari

Following Grossberg (2010: 38) I want to suggest that the work of Deleuze and Guattari offers critical scholars two general analytical strategies. One 'involves the analysis of the particular machines by which a concrete actual reality is produced and sustained, often in ways that make it appear to be inevitable' (Grossberg, 2010: 38). This strategy is thus concerned with the work of assemblages and abstract machines in the production of strata. The other is a 'kind of deconstructive strategy that dismantles the plane of organization, the specific configuration of an actualization of the virtual, to get back to the virtual so to speak' (Grossberg, 2010: 38). This strategy is thus concerned with vectors of destratification and the potentials of a plane of consistency.

As Grossberg notes (2010: 38) the latter strategy is perhaps the most common appropriation of Deleuze and Guattari. What I attempt to do in this thesis, however, is to deploy both strategies, as I see them both as being vital to connecting the two political poles of critical work. To put this in more specific terms, the overarching aims that underpin this thesis are as follows:

- Trace the machinic processes by which the impact agenda is produced and configured (and interpret what these processes reveal about the (re)production of dominant forms of power)
- Map vectors of destratification that open the impact agenda up to differentiation and transformation (and consider what these reveal about the potentials for converting the impact agenda and creating alternatives).

I address these aims by focusing particularly on the question of subjectivity. In doing so, contra to much of the existing literature on assemblage which 'can feel unpeopled' (Goffey and Pettinger

2014: 389), I take up a reading of assemblage that has the production of subjectivity as its central foci. This particular focus reflects my aim to address the limited number of empirical studies that examine the impact agenda through the lens of subjectivity. It is also in recognition of how Deleuze and Guattari themselves situate subjectivity as a key site in which (1) relations of dominance and subordination are produced and sustained and (2) new qualities and modes of existence can be explored and created. Moreover, it is in recognition of how their theory of assemblage and related concepts offer a rich set of tools to examine such issues.

As we saw in the section above, particularly in relation to stratification and the three 'great strata', the production of subjectivity is central to how Deleuze and Guattari conceive the operation of power in society. Of particular note here is how the concepts of 'signifiance' and 'subjectification' bring into focus the ways in which assemblages 'act through signifiers and act upon souls and subjects' (1987: 200). I take up this line of analysis and examine how the impact agenda constitutes a system of signs that determines the pathways in which academics are able to think and understand themselves. In doing so I adopt an approach that seeks to bring to light the dual process of being subjected to power and the active self-construction of subjectivity. Thus, while my concern is with the role the impact agenda plays in constructing certain kinds of subjectivities, I'm also interested in the creative capacities of academics to (1) interpret and negotiate the subject positions that impact agenda makes available and (2) form their subjectivities in relation to different knowledges and alternative points of subjectification.

The conceptualisation of subjectivity I have sketched out thus far overlaps and resonates with the approaches found in the Foucauldian inflected strands of critical policy studies, particularly those that are interested in the ways which subjects interpret and 'translate' the discourses that hail them (e.g., Ball, 2015; Shore, Wright, and Pero, 2011). Indeed, in many ways I take my cue from and build on these studies. However, I want to suggest that the work of Deleuze and Guattari presents further conceptual tools that help to augment the prevailing approaches that feature in these studies. What's at stake here is the ability to tune into the multifarious elements and processes involved in the production of subjectivity, including those that precede and exceed the linguistic and cognitive registers of life. Crucially, there are analytical gains to be made both in terms of how we conceptualise dominant power formations and the potentials to create alternatives.

A key insight of Deleuze and Guattari's work is how capitalism functions through the dual processes of (1) freeing up flows of desire from the social order and (2) disciplining and ordering those same

flows of desire. The analytical value of attending to these dual processes doesn't simply lie in grasping how capitalism functions by activating and channelling flows of matter-energy but also how capitalism's production of subjectivity works by traversing the multiple dimensions of human existence and oscillating between movements of destratification and stratification. In taking up this line of analysis, I consider how elements of the impact agenda assemblage act on affects (bypassing linguistic representation and consciousness) so as to elicit certain kinds of conduct and to provide conditions for new subjective becomings. At the same time, I consider how this works in conjunction with systems of language that ascribe certain roles and identities and delimit the possibilities of subject formation.

When it comes to the question of disrupting dominant forces of power and creating alternatives, I want to suggest that a recognition of the unconscious and corporeal dimensions of human existence offers two central analytical possibilities. The first is averting a problem that can hinder Foucauldian inflected accounts of policy interpretation or translation: 'assigning 'policy' a too dominant role in people's lives and [..] and restricting the analytical scope to the explicit policy negotiations of intentional (and maximizing) human beings' (Nielson, 2015: 44). Attending to flows of affect brings into focus the complex and dynamic web of relations that shape what people do and think – including relations that surpass the imperatives of a policy. What this crucially offers is a heightened attentiveness to subject formations that counter and deviate from those ascribed by policies. The second is formulating a notion of subjectivity that breaks free from the neoliberal idea of the individual. One of the most illuminating aspects of Deleuze and Guattari's work, if we are to follow the likes of Gilbert (2013), is how the notion of joyful affects compels us to consider how 'the only thing that increases the capacity of bodies is in fact their ability to form productive relations with other bodies' (Gilbert, 2013a: 147). What's at stake here is the ability to advance a notion of subjectivity that is centred on collective agency and creativity rather than the autonomous and self-interested individual. In this thesis I seek to make use of both of these analytical possibilities. I'm attentive to academics' everyday interactions, including those that seemingly fall outside of direct and intentional interpretations and enactments of the impact agenda. In doing so I bring into focus the complex web of relations from which academics subjectivities emerge, and point to subject formations that complicate and diverge from the kinds of subject positions that the impact agenda assigns. Moreover, I consider what these processes of subjectification reveal about the possibilities of formulating a conception of subjectivity that takes us beyond the neoliberal notion of the individual.

At this point it's necessary to note one further concept that I draw on to probe and illuminate these dynamics of subjectivity: the refrain. Deleuze and Guattari introduce the refrain in A Thousand Plateaus (Deleuze and Guattari, 1987: 310-350). We can turn to Grosz (2008) for a useful definition. She describes it as a 'kind of rhythmic regularity that brings a minimum of liveable order to a situation in which chaos beckons' (Grosz, 2008:52). 'Rhythmic regularity' of course is not simply the domain of music. Deleuze and Guattari compel us to think how all manner of behaviours (gestures, walking, utterances, etc.) take on rhythmic qualities and give a sense of consistency to the various elements of people's lives. 'Liveable order' effectively equates to 'territory', not in a geographical sense (though it can include this) but rather an existential sense. Territory 'is the composition of one's own world' (Buchanan, 2021: 98). It is thus that which wards of the dangers of chaos and makes life liveable. The key point to grasp here is how refrains can 'maintain the balance between the emancipating lines of flight and the risk to go astray' (Michon, 2021, From Refrain to Musical Rhythm and Melody, para 5). In other words, refrains can work to constitute and sustain a territory that protects people from the dangers of destratification while also enabling them to remain open to difference and the transformational potentials of destratification

So here we can see how the concept of the refrain offers useful tools to understand the production of subjectivity in relation to the oscillating movements of the plane of consistency and the plane of organisation. Tied to this, one of the key analytical advantages of the concept is how it heightens our attentiveness to the various elements and processes (including both semiotic and material) that animate subjectivity. An instructive study to note in this regard is Goffey's and Pettinger's (2014) exploration of subjectivity among 'green workers'. Through examining the refrains that constitute the worlds of environment consultants they bring to light passions and connections with the material environment that can't simply be reduced to the tenets of exchange value or the abstracted understandings of market action. As they conclude, the concept of refrain 'allowed us to introduce some complexity into our consideration of the subjectivity of people who are perhaps a little too quickly read as individual –and individualistic – market actors, or workers with 'eco' identities' (Goffey's and Pettinger's, 2014: 407). Drawing inspiration from Goffey and Pettinger (2014), I deploy the concept of refrain to remain open to academic subjectivities that trouble the notion of the individual.

Final remarks

As a way to conclude this chapter, let's return to the central aims and questions stated in the previous chapter and briefly elaborate on them using terms that fit the conceptual resources outlined above.

The central aims of this thesis are twofold: (1) understand how the impact agenda is implicated in the (re)production of dominant power formations and (2) uncover the potentials for converting the impact agenda and creating alternatives. The first aim concerns the tracing of assemblages and abstract machines that face and are enveloped in the strata, while the second aim concerns the mapping of vectors of destratification and the potentials of a plane of consistency.

The central research questions are as follows:

- What role does the impact agenda play in producing academic subjectivities, and what do these processes of subjectification reveal about formations and mechanisms of power? In pursuing these questions, I explore how the general function of the impact agenda is to produce certain kinds of subjectivities. I examine how this function is effectuated by concrete assemblages that have a content side (or machinic assemblage of bodies) and an expressive side (or a collective assemblage of enunciation). In doing so, I take up a reading that sees the impact agenda's content as an assemblage of material bodies that operates at the level of corporeal relations and affects, while its expression is seen as constituting a semiotic system that operates at the level of linguistic representation and subjective interpretation.

- What alternative academic subjectivities are there to those ascribed by the impact agenda, and what do these subjectivities reveal about the potentials for converting the impact agenda? In pursuing these questions, I seek to bring to light the active self-construction of subjectivity and to probe how academics resist the discourses that hail them and form subjectivities in relation to different knowledges. I push this line of analysis further by probing the corporeal and affective processes and relations that animate academics' subjectivities. In doing so I seek to bring into focus the various elements and processes at play in the production of subjectivity and which exceed and precede the stratifying forces of the impact agenda. By harnessing such an attentiveness to the multiple registers of

subjectivity, I aim to map constructions of subjectivity that point to the potentials for converting the impact agenda and creating alternatives.

Chapter 4 Methodology

An assemblage ethnography

My methodology can be best described as an 'assemblage ethnography'. Assemblage ethnography is a term that has recently been coined to designate a methodology that 'seeks to investigate together economic, structural, spatial, temporal, representational, discursive, relational, subjective and affective orders as these play out at macro, meso, and micro scales' (Youdell and McGimpsey, 2015: 122). Thus it's a methodology that follows Deleuze and Guattari in recognizing how the material, enunciative and subjective are 'lines of force' in productive interaction. Moreover, it's a methodology that compels the researcher to reach across government and policy networks, institutional and professional forms and the everyday practices of people.

The recent coinage of assemblage ethnography is reflective of how the meaning of the term 'ethnography' has loosened and diversified. Unmoored from traditional anthropological conceptions, ethnography can now refer to a range of approaches that deploy different qualitative research methods and that which seek to cultivate an ethnographic sensibility -- 'that is, a critical and questioning disposition that treats the familiar as strange' (Shore and Wright, 2011: 21). As a particular approach itself, assemblage ethnography is also best understood as a 'kind of pragmatism' (McGimpsey and Youdell, 2015: 122); the methods and approaches that are utilised are those that best fit a study's particular aims and context. Furthermore, it's a methodology that needs to be flexible; it needs to move with the movements of the assemblage being analysed.

This all permits and demands a healthy degree of creativity and eclecticism. In designing and developing my approach to doing assemblage ethnography, I took influences from three main sources.

First, I drew inspiration from previous policy studies, particularly those emanating from the field of anthropology of policy, that have utilised ethnography to examine processes of subjectification (Shore, Wright, and Pero, 2011). In doing so, I follow others who have combined textual analysis with a focus on everyday life and have attempted to bridge the divide between approaches that emphasise how policies construct subjects as objects of discourse and approaches that emphasise how policies are interpretated and translated by actors.

Another aspect of these ethnographically grounded studies which I have found instructive is their conceptualisation of the field of research. The approach they call for is one where 'the field of research becomes not a particular people or organisation – far less a reified policy itself – but a 'social and political space articulated through relations of power and systems of governance' (Shore and Wright 1997: 14). The field of research in this way is a shifting and un-bounded space that encompasses a wide range of actors and traverses different scales.

Conceptualising the field of research in this way poses a problem for the ethnographer. Put simply, 'such a field is obviously too enormous to study ethnographically in its entirety' (Shore and Wright, 2011: 18). The challenge, as Shore and Wright (2011: 18) suggest, is to 'select small sites that open windows onto larger processes of political transformation'. As I detail in the following section, my approach to addressing this challenge has been to situate myself in one university and to focus particularly on health research. This site offers a useful vantage point to examine the elements the impact brings together and how they are imbricated in the subjectification of academics. It's important to note of course that the assemblage I trace and map is locally situated. However, it's been my aim to probe how the assemblage is an effectuation of an abstract machine that is productive across various settings in various forms.

Secondly, I drew inspiration from recent methodological developments that have been spurred on Deleuze and Guattari, particularly those associated with 'the affective turn' (Coleman and Ringrose, 2013). The aforementioned ethnographic studies by and large are centred on linguistic representation and meaning-making, with their methods and sensibilities remaining confined to the interpretative tradition that has long been dominant in critical policy studies. I thus found it necessary to look towards studies that have sought to be attentive to the affective and embodied dimensions of human existence. Ethnographies such as Kathleen Stewart's (2007) Ordinary Affects, for instance, proved to be particularly instructive, prompting me to foster an ethnographic sensibility that is attuned to everyday happenings and different ways of being and relating that escape representation and interpretation.

My move to engage with affect was a necessary and fruitful one. It's worth noting, however, that unlike some scholars who have been allured by the affective turn, I didn't abandon nor lessen the importance of representation and interpretation. I sought to develop a methodological approach that attends to the multiple registers of subject formation, traversing the conscious and non-conscious and the linguistic and embodied. The approach I developed thus shares similarities with

other critical policy scholars, not least Newman (2012), who have attempted to 'surface cognitive, affective, emotional and dialogic understandings of the self and self work' (Newman: 2012: 469).

Thirdly, I drew inspiration from recent writings on the performative nature of research (Law, 2004). In doing so I took seriously the notion that 'the social sciences work upon, and within, the social world, helping in turn to make and remake it' (2004: 392). Throughout out the various phases research, I continually reflected on how I bring into being what I capture, analyse and present. Crucially, this entailed a consideration of how the methods and techniques I use open up or close down certain realities (e.g., how 'conventional' qualitative methods such as in-depth interviews tend to privilege and reproduce conceptions of subjectivity centred on the thinking I (St. Pierre, 2021)). Moreover, it entailed a consideration of the ethics and politics of research, as I was confronted with question of which realities 'do we want to help make more real, and which less real? (Law and Urry, 2004: 404). My approach to dealing with this question has been to strike a balance between the two strategies that Grossberg (2010: 38) suggests Deleuze and Guattari's work offers. On one hand, I sought to 'get back to the virtual' (Grossberg, 2010: 38) and open up different ways of thinking, acting and relating. In doing so, I aimed to overcome the pitfall of many previous governmentality-inflected studies that performatively reproduce the conceptions of subjectivity they analyse and critique (Skeggs, 2014). On the other hand, I sought to identify 'the machines by which a concrete actual reality is produced and sustained' (Grossberg, 2010: 38). In doing so, I aimed to not lose sight of the stratifying forces that produce the present as we know it.

Research site(s)

King's College London (KCL) provided the central research site. Narrowing the scope further, I primarily focused on actors (e.g., research centres, schools, individual academics) who work in the field of health research. In Chapter 5 I offer a more detailed description of this site. For now I want to offer some remarks on the reasoning behind this site and how it evolved during the fieldwork period.

My focus on KCL and the health research field in part reflects the funding and institutional arrangements of this PhD. The PhD was a studentship funded by NIHR The Biomedical Research

Centre (BRC)[7] at the Guy's and St Thomas' NHS Foundation Trust (GSTT) and was hosted by KCL's School of Life Course and Population Sciences. As a BRC studentship, there were a number of predefined aspects of the research. For instance, the stated aims of the BRC studentship were to examine the different understandings of impact in the context of health research and, in doing so, clarify which notions of impact are useful for which purposes. This aim was premised on the idea of generating information which can be used to inform the work of the BRC and KCL's wider health research network known as the King's Health Partners (KHP), as well as the broader NIHR infrastructure. In addition to these aims, the general methodological approach was also predefined. More specifically, it was stated that the research would adopt a case study approach that entailed ethnographic observation and interviews with BRC affiliated researchers and staff. These aims and methodology effectively meant the research had to centre around the activities of the BRC and KHP.

It's important to note that while such limits were placed on the research, the aims and methodology were defined in rather loose and general terms, leaving me room to develop and refine my own research questions and to move the research down avenues that fitted my interests and intellectual curiosities. My capacity to shape and develop the research was also aided by the research team I was part of. My PhD fell under a broader social science programme of research that was funded by the BRC. The research team that worked on this programme of work consisted of sociologists, anthropologists and political scientists who sought to straddle the dual goal of (1) informing the BRC and the wider NIHR infrastructure and (2) undertaking critical scholarship. In a sense, the team embodied the with and against ethos I describe on page 27. We worked with the BRC and the wider NIHR infrastructure by virtue of being funded by them and undertaking research that aimed to address their needs. At the same time, we sought to carve out a space to undertake more critical research and to question the institutional structures and forms of governance that imposed limits on what we could think and do. Working in this environment granted me a degree of critical freedom and enabled me to push the research in new and different directions, and this is reflected in the room I had to evolve and expand my research site(s) once I started the fieldwork (as I discuss below).

[7] The BRC at Guy's and St. Thomas' NHS Foundation Trust forms part of wider network of 20 BRCs which are funded by the NIHR. NIHR describe the BRCs in the following terms: 'NIHR's 20 Biomedical Research Centres (BRCs) are collaborations between world-leading universities and NHS organisations that bring together academics and clinicians to translate lab-based scientific breakthroughs into potential new treatments, diagnostics and medical technologies. The centres receive substantial levels of sustained funding - £816 million over five years - to create an environment where experimental medicine can thrive. They attract the best scientists and produce world-leading research, contributing to the local and national economy. BRC funding supports researchers of the highest calibre to develop innovative research ideas that can attract investment from other funders, furthering the nation's economic growth.' (NIHR, n.d.)

While the conditions and prerequisites of the studentship steered the chosen research site, it should be recognised that I also saw KCL and the health research field as offering an interesting vantage point to explore the impact agenda. Founded in 1829, KCL is one of the oldest universities in the UK. And being a member of the 'Russell Group', it describes itself as one of the 'leading UK research intensive universities' (Kings College London, n.d.a). Like all other UK universities, it is subject to various research funding and accountability measures associated with the impact agenda (e.g., REF). What's also notable about KCL is how its Policy Institute has been pivotal in developing and assessing impact assessing frameworks and methods, including REF 2014 (Grant et al. 2017). My particular focus on health echoes the particular emphasis that KCL place on this area of research – an emphasis which reflects KCL's links with various NHS trusts (Guy's and St Thomas', King's College Hospital, and the South London and Maudsley NHS Foundation Trusts) and which is formalised in the aforementioned KHP and BRC. What's further revealing about KHP and the BRC is how they are indicative of the UK's government's plans to build the nation's knowledge economy. The policy drive to compete in the global knowledge economy has seen the UK health research system and the NHS positioned as a key field of activity to tap into and mobilise. This in turn has led to the expansion of centres such as BRC that are assigned the task of speeding up knowledge translation and fostering synergies between universities, government and industry. This policy drive, moreover, has generated a concomitant drive to demonstrate 'return on investment', as exemplified by the notable interest in assessing the impact of health research (e.g., Raftery et al., 2016).

To be clear, in suggesting that my focus on KCL and health research offers useful vantage point, I'm not claiming that I offer complete and definite account of the impact agenda. What I offer is a locally situated account of a process which takes different forms in different contexts. No doubt another researcher in another site would offer a different account of the impact agenda's concrete manifestation. That said, I have attempted to look beyond the specificities of my particular site and probe the impact agenda's abstract machine/s. In other words, I have to sought to identify how the particular concrete assemblage I trace out is an effectuation of a general function that is actualised in other settings and through different concrete assemblages. In taking this approach, I have aimed to go beyond the micro-macro binary that often characterises research studies on policy implementation (Webb, 2008). The approach I adopt is one that traverses micro and macro fields and which recognises how they fold into and co-constitute each other.

Such an approach that traverses the micro and macro was reflected in how my research site(s) evolved and shifted over the course of the fieldwork. Reflecting the aims and methodology set out in

the BRC studentship, I initially centred the fieldwork around the BRC. However, early on in my fieldwork I found that I was generating a lot of relevant material when I was in contexts beyond the BRC. Being a PhD student and located at KCL, this was somewhat unavoidable; I was continually being presented with opportunities to speak to different actors involved in health research (including researchers, research managers, impact professionals, and patients) and to attend various events that offered an insight into the unfolding of the impact agenda. These opportunities pushed me to reconsider my research site as they exposed how the BRC is a hybrid infrastructure organisation that overlaps and connects with a wide range of institutions, personnel and projects. Moreover, they opened me up to different facets of academic life that were pertinent to the dual task of (1) examining how the impact agenda is implicated in the (re)production of dominant power formations and (2) uncovering the potentials for converting the impact agenda and creating alternatives.

It became clear that focusing on the BRC as a discrete site was restrictive and untenable. In agreement with my supervisors, I thus decided to adopt a more mobile and multi-sited approach and generate material from being in various sites and situations across KCL and beyond. This was key to following the movement of the impact agenda as it entered different spaces of KCL and assembled various elements (buildings, personnel, training resources, funding, webpages, etc.) in the process. I also followed the impact agenda beyond KCL, crossing between offline (e.g., international conferences) and online (e.g., websites of research funders) environments, tracing out the relations between different local and translocal elements. Bringing elements of a mobile and multi-sited ethnography offered a way to be attentive to the impact agenda's movement and to 'study through' the particularities of my site. However, in the interests of keeping the fieldwork manageable and focused, and in recognition of the funding arrangements of the PhD, KCL remained the central site (with its connections providing the main the links to other sites), and the lives of academics working in the field of health remained the primary focal point.

Before I move onto discuss my sampling approach, I want to briefly elaborate on the limitations that pertain to the research site(s) boundaries and the kinds of cases I could work with. The conditions of the studentship meant that I couldn't deviate too far from the domain of translational health research. This limited the extent I could focus on certain academic disciplines and fields of research, not least the arts and humanities and more curiosity-driven research. The key issue here being is that much of the disquiet surrounding the impact agenda relates to concerns about the stifling of curiosity-driven research and the devaluing of non-STEM fields (Holmwood, 2011a; 2011b). It could

thus be argued that my central focus leads me to give insufficient attention to the key sites where power relations and struggles unfold. It's important to recognise however that my research site(s) enabled me to observe happenings and to speak to people from across the broad spectrum of activities that go on at a university. My site opened me up to people and projects who straddled applied and curiosity-driven research. Similarly, my site(s) opened me up to people and project who traversed different disciplines and fields, spanning the life sciences, social sciences and the arts and humanities. In this way, I was ethnographically situated within a diverse field of activity that offered interesting insights into the unfolding of the impact agenda and the power dynamics at play.

Sampling approach

My general approach to identifying research participants was 'purposeful sampling.' Patton (2002) describes purposeful sampling in the following terms:

> The logic and power of purposeful sampling lie in selecting information-rich cases for study in depth. Information rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry, thus the term purposeful sampling. (Patton, 2002: 230)

Reflecting the ways in which my research site(s) evolved, the process of purposefully selecting 'information-rich cases' was marked by two distinct phases and strategies.

The first phase took place prior to the fieldwork commencing and took the form of 'theory-based sampling,' i.e., a purposeful sampling strategy that samples people on the basis of 'their potential manifestations or representations of important theoretical constructs' (Patton, 2002: 238). The central aim of this first phase of sampling was to identify three to four BRC research projects/teams that could serve as case studies. The selection process was guided by the aims and objectives set out in the BRC studentship. More specifically, I sought cases that would offer an in-depth understanding of different constructions of impact emanating from different health areas and different types of research and would ultimately help to clarify which notions of impact are useful for which purposes. The size of the teams and organisational factors also steered selection; to help ensure I had ample opportunities to collect data and to gain an in-depth insight into the practices and views of different academics, I picked projects/teams that consisted of at least eight individuals and held regular meetings (either weekly or bi-weekly).

While the applied elements of the BRC studentship guided the identification and selection process, it was also understood that the selected cases would serve as a useful way to examine the 'critical' research questions I was interested in. In particular it was understood that the cases would provide rich data on the ways in which the impact agenda unfolds in the everyday working lives of academics, enabling me to examine the complexities of subjectification.

Initially I identified four cases to focus on. However, due to staff absences and logistical issues, I ended up focusing on three teams. These teams spanned a range of health research areas (including public health and molecular medicine) and encompassed academics from various disciplines (such as biomedical scientists, statisticians and epidemiologists). In being affiliated with the BRC, their research endeavours were focused on 'translation', yet members also undertook more basic and curiosity driven research.

In addition to identifying the case studies, in the first phase of sampling I also sought to recruit managerial staff based at the BRC. The central aim here was to interview people who could help me to further build a picture of the BRC's organisational context and to gain an insight into how impact fits with its values and strategic objectives.

The second phase of sampling occurred once the fieldwork had started and took the form of 'opportunistic or emergent sampling.' i.e., a purposeful sampling strategy that permits the sample to emerge during fieldwork and allows the researcher to 'take advantage of unforeseen opportunities after fieldwork has begun' (Patton, 2002: 240). This coincided with my evolving and expanding research site(s) which I discussed above. In the section below on my data collection methods I describe in more detail how this phase of sampling unfolded. For now, it is worth clarifying how during this phase of sampling I did not abandon my theory-based strategy. I continued to select cases on the basis that they helped me to explore different constructions of impact and how the impact agenda is implicated in the production of academic subjectivities. In this way, my opportunistic and emergent sampling wasn't driven by convenience (i.e., doing what's quick and easy) but rather the purposes of my research.

Data collection

Observation and interviews provided the central means of collecting data. As I discuss below, both these methods took various forms across various settings, generating a flexible and multi-layered approach. Such an approach was key to tracing and mapping the various elements of the impact agenda, offering a way to be attentive to the various kinds of bodies (humans, buildings, institutions, technologies, policy texts, and so on) and to traverse different scales. Moreover, such an approach was key to examining the complexities of subjectification, offering a way to attend to the shifting and multifaceted nature of subject formation.

Fieldwork commenced in May 2018 and came to an end July 2019. It's perhaps more appropriate to say that 'official' fieldwork occurred between these dates (i.e., the dates specified in my research plan and ethics form). In reality, the lines between starting and ending fieldwork are a lot more blurred. The literature review I undertook in first year, prior to starting the 'fieldwork', for instance, was instrumental in starting to trace the impact agenda. Likewise, events that occurred while 'writing up', pushed me to reflect on my analysis and argument. Despite these blurred lines, it's useful and appropriate to name May 2018 – July 2019 as the period of fieldwork as this period marked the intensive/focused phase of data collection.

It's important to keep these dates in mind and to not forget that ethnographic research such as mine offers a snapshot of a social world in flux. This is a particularly pertinent point in light of Covid 19. As I write this, the UK and rest of the world are still managing to contain the virus and to lift restrictions. This is nearly after two years of disruption to 'regular' patterns of daily, and within this period we have seen questions relating to the 'impact' of science pushed to fore of public consciousness. However, this all happened after I finished my fieldwork. I have thus been unable take into account the effects of the pandemic and to probe its potential role in converting the impact agenda.

Observation

When I first entered the field, I focused on undertaking observation with the three BRC research teams. Observation with these teams primarily involved being a 'passive participant' in their regular team/lab meetings. These meetings lasted one to two hours and occurred on a weekly or bi-weekly basis. The meetings provided the space for team members to give updates on their research and to discuss organisational issues relating to the lab. They also provided the space for the team members

to share and collectively analyse research findings. With the exception of a few meetings which I could not attend due to being holiday and needing to attend other events, I attended all of the teams' meetings between June 2018 and April 2019. In addition to their regular team/lab meetings, I also spent time with the teams as they took part in other activities. For instance, I attended several research seminars and conferences with them. I also participated in their more 'informal' social activities, such as joining them for lunch and going for a coffee.

These observations offered a valuable insight into the daily practices and working environment of academics, enabling me to explore how the impact agenda unfolds in everyday working lives and enters spaces that contain competing norms and values. Moreover, such observation enabled me to capture not just what academics say but also their tacit and embodied interactions, opening me up to the affective encounters that occur within a university setting.

As I mentioned above in relation to my evolving and expanding research site(s), in the initial stages of the fieldwork I started to generate ethnographic material from settings beyond the confines of the three research teams. This was in a large part by virtue of being a PhD student located at KCL. 'Being there' at the university on a daily basis (both physically and virtually) presented me with valuable opportunities to gain an insight into the daily life of the university and the various elements that the impact agenda brings together.[8]

For instance, through walking around campus I became attuned to the various material bodies that make up the university environment (e.g., the architecture of buildings and the different kinds of human bodies who spend at time at the university). Similarly, browsing KCL's webpages and accessing my emails, I grew an attentiveness to the role that information and communication technologies play in daily academic life and the unfolding of the impact agenda. Attending training courses also proved to be a useful window into the unfolding of the impact agenda. As a PhD student, I attended numerous courses advertised under the banner of 'impact' (including courses on public engagement, 'engaging with industry', entrepreneurism and 'engaging with the media'), opening me up to the ways in which universities at the local level communicate and 'translate' the imperatives of the impact agenda. Moreover, as I moved between sites and situations beyond KCL, such as national research and policy conferences, I found I was further presented with valuable fieldwork opportunities. Indeed, such settings and situations beyond KCL offered a valuable insight

[8] This shifting and expanding field site, while necessary and fruitful, threw up some sticky ethics issues relating to consent. I discuss these in the ethics section below.

into the ways in which the movement of the impact agenda travels between policymakers, funders and universities.

Initially these more 'impromptu' ethnographic encounters that took place across KCL and beyond were secondary to the observation I was undertaking with the three research teams. I saw them as a way to gather descriptive data on the wider organisational context of the BRC and KCL and the ways in which the impact agenda manifested itself in organisational policies and practices. In a sense, it provided the backdrop to the central happenings of the research teams. However, as I found they offered valuable ethnographic material, I felt compelled to bring them more to the fore. In line my shifting and expanding research site(s) discussed above, I therefore sought to broaden my focused and 'formal' observation beyond the research teams. In doing so I became more proactive and systematic in seeking to put myself in different sites and situations across KCL and beyond (e.g., seminars, public engagement events, training sessions) and I became more active and consistent in my notetaking and collection of ethnographic artifacts (e.g., training booklets, good practice guidelines, policy documents).

It's worth noting here two key ways in which my more systematic observation broadened. First, I decided to focus on Science Gallery London (SGL) - a space for KCL scientists to collaborate with artists which was launched in 2018. This entailed several observations of the gallery space as well as interviews with SGL staff and associated artists. Secondly, I decided to focus on a patient advisory group embedded within King's Health Partners. This entailed two observations of the group's meetings as well as interviews with patient members and associated researchers. My decision to focus on these cases reflected a desire to observe 'pathways to impact' activities or happenings that offered an insight into the interactions between the university and wider publics. Moreover, they enabled me to observe activities that traversed different disciplines and fields.

Interviews

As my fieldwork commenced, I sought to interview the various members of the research teams I was observing. I interviewed twenty-four people in total from across the teams. The mode of these interviews can be best described as 'structured conversations' (Gray, 2003: 93). I did not enter the interviews with a set of questions listed on a piece of paper, nor did I refrain from sharing my own views and experiences. This is not to suggest that they were just a 'chat'. I came with three broad themes to cover: professional biography; views on 'impact;' and values as an academic. Moreover, I used a Dictaphone to record the interviews (if consent was obtained), and I never lost sight of why I

was having the conversation (i.e., to examine interpretations of 'impact' and to generate data that can be used to examine processes of subjectification).

There were three main reasons why I decided to adopt a more conversationalist approach to interviewing. Firstly, having a more open conversation and being responsive to what the participants said and gestured enabled the dialogue to move down different pathways and touch on a wide range of issues relevant to impact and the lives of academics. Secondly, while there were many differences that could cut across our commonalities (note least discipline/field and seniority), I shared many of the same characteristics as those who I interviewed (e.g., profession and institutional location). This meant there were shared reference points, cultural repertoires and experiences that I could explicitly draw on to help establish rapport and to foster dialogue. Thirdly, I was wary that the participants may have an acute wariness of the constructed nature of the interviews and/or may have feelings of trepidation towards being 'researched' and 'objectified'. Adopting a conversationalist approach helped to recognise and work with the idea that interviews are a socially constructed event that the researcher and the participant co-produce. Moreover, it helped to create a more collegial and relaxing environment.

These interviews offered a valuable way to explore how academics interpret the impact agenda and what it means to be an academic. They thus offered a rich source of data to examine the discursive and dialogic dimensions at play in processes of subjectification. While interviews are most obviously a discursive and dialogic event, I also approached them as a way to explore the affective dimensions of subjectivity. Here I followed others such Walkerdine (2010) and Henrique (2010) who have analysed words expressed by participants to 'get at' affective states. In the data analysis section below I further address how the interviews offered a route to exploring the different dimensions of subject formation.

Alongside the interviews with members of the research teams, in the early stages of the field work, I also sought to interview key managerial and administrative staff based at the BRC. This included research managers as well those involved in managing impact and engagement activities. In total, I interviewed nine people who matched these kind of roles. To conduct these interviews I again adopted a conversational approach, though the focus was rather different to the interviews with the research teams. In these interviews the conversation centred on the ways in which impact was being embedded in organisational objectives, structures and processes. Such descriptive information

helped me to trace elements of the impact agenda and to draw connections between my site and wider networks of governance and policy.

As fieldwork progressed, and in line with my shifting and expanding sites of observation, I proceeded to interview different academics based within or affiliated with KCL. This was often prompted by an ethnographic encounter which I wanted build on and explore further. Crucially, these interviews gave me an opportunity to speak to a wider range of academics. The individuals I spoke to came from a mix of disciplines and fields – spanning the social sciences, arts, life sciences – and their involvement in 'impact' and 'engagement' activities varied both in terms of degrees and forms. In doing so, these interviews opened me up to different themes and issues relevant to the impact agenda and, concomitantly, different formations of subjectivity.

In addition to broadening my interviews with academics, I expanded the professional and managerial staff I spoke to. This included various 'impact' and/or 'engagement' managers embedded within KCL. These interviews generated further contextual information relating to organisational strategies, structures and processes, aiding my tracing of the impact agenda.

Finally, I also had the opportunity to interview a number of patients/'lay' people actively engaged in research. This opportunity came about through observing two patient advisory group meetings where patients fed into the design of research studies. I was interested in hearing patients' thoughts on the impact and the value of the meetings. The material generated proved to be a useful way to probe the affects generated by such public engagement activities.

Below is a summary of the number of interviews undertaken

- 51 academics / researchers
- 23 professional and managerial staff
- 5 patients involved in 'engagement' activities

Data analysis

Analysis, in a sense, was constant throughout the research process. In the field I was continually picking out emerging themes, noting down ideas in my field book, and referring back to literature and theory. However, what I am concerned with below is the distinct analytic stage which I carried

out once I 'left' the field and all my research material was compiled. It should also be noted that what I am particularly concerned with is the analytical task of applying key concepts and answering the research questions central to this thesis. Prior to this stage of data analysis I undertook some basic thematic coding as a way to develop a filing and retrieving system and also to identify descriptive themes that could inform the basis of outputs targeted at the BRC and associated 'end-users'[9]. While serving these useful purposes and playing a role in data familiarisation, this initial stage of 'analysis' remained descriptive and stopped short of deploying the analytical strategies and sensibilities that accorded with my theoretical and methodological approach and which enabled me to answer the research questions addressed in this thesis.

Analysis entailed various strategies and sensibilities which can be categorised under two main headings: tracing the impact agenda and mapping alternatives. As discussed in the previous chapter, a tracing and a map fold onto and feed into each other. Thus my attempts at tracing and mapping were not isolated tasks; often both were in play simultaneously and converged. That said, I adopted certain approaches and tools that were more relevant to the task of tracing than mapping (and vice versa). To demarcate these distinctions, and for ease of legibility, I will thus describe tracing and mapping under separate headings.

Tracing

The initial stages of analysis were marked by an attempt to trace out the impact agenda's expressive and content sides and, in doing so, interpret the strata they are productive of and the abstract machine they share. These early stages of analysis were thus focused on addressing the first set of questions of this thesis, namely what role does the impact agenda play in producing academic subjectivities, and what do these processes of subjectification reveal about formations and mechanisms of power? My decision to begin with the task of tracing over mapping reflects Deleuze and Guattari's view that one cannot make a map 'without understanding stratification and that one cannot understand stratification without understanding abstract machines' (Adkins, 2015: 64) Likewise it reflects the necessary analytical move to 'first look first at the power exercised by the

[9] The first step of this involved transcribing all the interviews (with the aid of Trint, a transcription software programme) and typing up all fieldnotes that hadn't been digitally filed. The next step involved developing a framework comprised of a number of general themes (e.g. the material of impact agenda, views on impact agenda) and then attaching the relevant codes to the data. To do I used the computer program Taguette. As I progressed through the various transcripts and fieldnotes, I remained flexible and grounded in the data, developing and revising the framework.

diagram, in order to better acknowledge the attempts to practice freedom' (Peters and Taglietti, 2019: 1195).

I began the task of tracing the impact agenda by focusing on its expressive side. An issue I faced at this stage of analysis was the lack of methodological guidance relating to Deleuze and Guattari's concept of expression. I therefore found it useful to turn to Foucault's archaeological method which offers a set of guidelines for the analysis of discursive formations (Foucault, 1972). As noted when discussing the concepts of strata and assemblage, Deleuze and Guattari's concept of expression and more specifically 'regime of signs' is congruent with Foucault's notion of discursive formations. Drawing on Foucault's archaeological method was thus a logical move that cohered with my wider theoretical and methodological approach.

It should be noted that I don't attempt to provide a far reaching and full-blown historical analysis of the impact agenda. Such an archaeology of the impact agenda is beyond the scope of this PhD which is primarily an ethnography concerned with present happenings and situations. My use of the archaeological method reflects a pragmatic need to apply a set of methodological guidelines that are appropriate to the task of sketching out the impact agenda's expression.

The first key step to analysing the impact agenda's discursive formation was to identify a corpus of statements[10] to analyse. This began with a 'familiarisation' phase where I looked across all relevant texts I had gathered from my fieldwork and noted down possible texts to include in my analysis. This included ethnographic texts (e.g., fieldnotes of settings and practices) as well as policy and organisational texts produced by KCL and beyond (e.g., policy reports, mission and strategy statements, training documents, posters.). When it came to selecting which texts to analyse, I aimed to include texts produced by key 'meso' and 'macro' actors (e.g., government funding agencies and intragovernmental organisations) and/or that are recognised as being pivotal in shaping the impact agenda and the higher education/science landscape more broadly. The selection of these texts was guided by the literature review I conduced at the beginning of the study, which aided my understanding of the key actors and influential texts. Moreover, reflecting the policy context in which the impact agenda has emerged — and a pragmatic need to keep things manageable — I selected texts published between 1988 and 2018. In addition to these texts produced from actors beyond my research site, I also included texts produced by KCL. This was with the aim to analyse

[10] Statements are not limited to the spoken or written word – a statement can be any enunciative event that occurs within a field of relations that defines its function.

how wider discourses are reflected in and constituted by texts emanating from my local research site. When selecting these texts, I selected those that expressed KCL's strategic direction and/or revealed the ways in which the impact agenda manifested itself in organisational policies and practices.

Once I had identified my corpus of statements, the next step was to analyse the discursive formation they constitute[11]. The central task I was confronted with was to determine the 'rules of existence' for the objects that are constituted by the statements. In other words, I needed to determine the discursive and historical conditions that account for the existence of 'impact' as an object of discourse. My analysis was guided by the 'four directions' of research identified by Foucault (1972): formation of objects; formation of enunciative modalities; formation of concepts; formation of strategies. It should be noted, my take-up of the various lines of analysis that Foucault identifies in relation to these four directions was uneven, reflecting my particular research aims and my pragmatic use of the method. The four directions proceeded as follows:

- *Formation of objects.* This direction of analysis focused on uncovering the objects that the statements speak about. It entailed examining 'surfaces of emergence' (i.e., the social fields where objects emerge, e.g., the university), 'authorities of delimitation' (i.e., the institutions that construct and define the objects, e.g., government research funders), and 'grids of specification' (i.e., systems of knowledge that classify objects, e.g., research assessment frameworks).

- *Enunciative modalities*. This direction of analysis focused on examining the subjects who produced the statements. I focused particularly on examining the legitimacy that subjects are accorded and the institutional sites they speak from. This line of analysis built on the examination of 'authorities of delimitation' and entailed the identification of the kinds of subjects who are authorised to speak about impact (e.g., 'impact experts' who work at policy-research nexus).

- *Formation of concepts.* This direction of analysis focused on uncovering concepts that are employed in the production of objects. I focused particularly on forms of 'coexistence' and 'fields of concomitance'. To do so (and with the aim to keep the analysis manageable) I took

[11] It should be noted that the corpus of statements evolved throughout the analysis process, as I collated new texts in light of emergent lines of enquiry.

two prominent concepts (innovation and public engagement) and examined how statements within the corpus of statements on impact animate and invoke statements concerning different policy domains and objects.

- *Formation of strategies.* This direction of analysis focused on analysing how the impact agenda's discursive elements (i.e., its objects, enunciative modalities and concepts) are organised in such a way that they form a 'theme'. I focused particularly on analysing the 'economy of the discursive constellation'. This involved the dual task of (1) mapping possible options that tend to remain unactualized and (2) identifying the strategic choices that authorities have made. This task necessarily involved turning towards existing literature that offered insights into the latent potentials along with literature that accounted for the broader and dominant forces at work.

In more concrete terms, my approach to applying the four directions of research was to initially take each text in turn, underlining statements and noting down points relevant to the four directions. Following this, I undertook four distinct phases of analysis, with each phase focusing on one of the four directions of research. For each phase, I looked across the different texts, identifying links and recurrences as well as discontinuities. While I undertook these four distinct phases of analysis, it's important to note they were not undertaken in isolation of each other. For example, my analysis of formations of objects fed into my analysis of the formation of enunciative modalities, and vice versa. Such inseparability between the phases of analysis was indicative of the intersections and reciprocal relations between the formation of objects, enunciative modalities, concepts and strategies.

Through this process I was able to delineate the impact agenda's discursive formation. What came into view was a form of expression that ascribes a particular understanding of what it means to do academic research and what it means to be an academic. Thus, from this position, I also began to develop a clearer view of the impact agenda's content (that is, academics and the universities they work in).

To further understand how the impact agenda's expressive side acts on and works with its content it was necessary to undertake a further stage of analysis that paid closer attention to content. Through the initial thematic coding of data I had already categorised the kinds of material bodies that constitute the university and I had coded data accordingly. I now sought to build on this initial coding through a more focused analysis of the substance and form of content.

When it came to analysing the substance of content, I not only aimed to distil the particular kinds of bodies that are selected but also probe the potentials of these bodies. Central to this line of analysis was the interpretive task of probing academics' desires and affective relations and how these flows of energy have the potential to being determined in a multitude of ways. This helped to draw out the key matter-energy that the impact agenda assembles. For this line of analysis, using the filing and retrieving system I created through the thematic coding, I identified several fragments of interview and observation data that 'glowed' (Maclure, 2010: 282)[12] and which related to the motives of academics and their interactions with others. Looking within and across these fragments of data, I sought to tease out the 'energy of connectivity' (Grossberg, 2014: 7) that the fragments were suggestive of.

My analysis of the form of the content built on and intersected with my analysis of the substance of content. Again, using the filing and retrieving system, I identified fragments of interview and observation data that 'glowed' and which were suggestive of the ways in which the materiality of the university structures social relations. My analysis of these fragments focused on the particular ways in which material bodies are brought together and how this arrangement incites certain kinds of conduct and generates certain kinds of affects. Here I drew on the work of others (Gilbert, 2020; Spencer, 2011) to help make sense of the ways academics are part of a machinic assemblage of bodies (along with other humans, digital technologies, buildings and so on) that activate and modulate their affects and desires.

With the impact agenda's content and expression sketched out, I was in a position to interpret the stratum they produce and the abstract machine they effectuate. This stage of analysis followed from my analysis of 'strategies' and involved taking a wider view to interpret the general function that gives the impact agenda its degree of consistency across different contexts and its particular character. Along with specifying the impact agenda abstract machine (i.e., the abstract machine designated with the proper name of 'impact agenda"), this stage of analysis also entailed the identification of other interconnected and mutually imbricated abstract machines at work. Here I sought to name the broader abstract machines that are central to understanding how the impact agenda is implicated in the reproduction of dominant power formations. This line of analysis again relied on a closer engagement with existing literature.

[12] Maclure (2010) uses the term 'glow' to describe the rather indefinable moment when a fragment of data grabs our attention and starts to form itself as an example.

Mapping

The central task of mapping was to probe vectors of destratification and to map the potentials of a plane of consistency. This task pertained to the second set of questions I sought to answer, namely what alternative academic subjectivities are there to those ascribed by the impact agenda, and what do these subjectivities reveal about the potentials for converting the impact agenda?

Through tracing the impact agenda, I had already developed a sense of what might open up the impact agenda to differentiation and transformation. For instance, through analysing formations of strategies and considering the economy of discursive constellation, I had probed discursive elements that tend to remain unactualized and which bring into play different understandings of what it means to be an academic. Moreover, through analysing the impact agenda's content, I had probed the bodies that are made available for being determined and which have the potential to being determined in a multitude of ways. My attempt at mapping alternatives built on and extended these lines of analysis.

My approach to mapping was to focus on five bodies (four individual academics and one research group) I had interviewed and had ethnographic encounters with and to analyse the various elements and relations at play in the production of their subjectivities. In doing so, I sought to be attentive to the complexities of subjectification and open up readings of subjectivity that take us beyond the kinds of subject positions that the impact agenda assigns. Harnessing such an attentiveness to the dynamic and multi-layered process of subjectivity did not mean abandoning the functions of tracing; I still sought to analyse how the bodies are subjected to the stratifying forces of the impact agenda. However, this phase of the analysis was marked by a shift in analytical strategies and sensibilities, as I sought to bring to light divergent subjectivities and to draw out the potentials for converting the impact agenda and creating alternatives. Before I move on to outline the approaches and tools I utilised for this phase of analysis, it's worth making a few remarks on the five bodies I focused on and the rationale behind this approach.

The five bodies I focused on include: (1) a medical doctor who straddles the worlds of clinical practice, academia and activism; (2) an artist who is involved in art-science collaborations; (3) an early career researcher who actively involves patients in their research (4); a professor who straddles basic and translational science; and (5) a group of scientists linked to a spin-out company. I chose these bodies because they offered an interesting window into the complexities of subjectification. In

certain respects, they represented the very kinds of academics that the impact agenda valorises - the outward facing agent who works at the interstices between the academy and wider society. At the same time, their ways of thinking and acting seemingly troubled and exceeded the impact agenda's imperatives and determinations. Thus the bodies appeared rather ambivalent figures, and I felt their ambiguities were conducive to the task of analysing the multi-faceted and shifting nature of subjectivity and opening up multiple readings.

A question that might well be posed at this point is why did I focus on such a relatively small sub sample of research participants. There are a number of points I would like to make in this regard.

First, focusing on a smaller number of bodies enabled a closer analysis of the complexities of subjectification. Here I took heed of critiques of thematic approaches to data analysis (Gray, 2002: 147-168). While commonly used in qualitative research – and often useful when working with a big dataset - approaches that disaggregate data into fragments and regroup them into themes can obscure the multi-layered and shifting dynamics of subjectivity. One of the key issues here being is the sense of a 'whole' person is lost. This oversight results in lack sensitivity to the various layers that make up person's subjectivity and how their subjectivity shifts and (re)forms in relation to various processes and elements. It was in recognition of such pitfalls that I favoured an approach that treated each body as whole and focused on analysing the dynamic web of relations in which their subjectivity emerges from. I should note that this approach brought an added layer of complexity when it came to analysing the research group, as I wasn't simply dealing with one person. I navigated this by viewing the group as a whole body constituted by various parts (persons, practices, technologies, and so on). In doing so I focused on the connections that gave the group a sense consistency and coherency (while also recognising how such connections didn't necessarily negate the group's differences and multiplicity). In practical terms this meant analysing each member's interview transcript as a whole, and then looking across the different transcripts to identify resonances and connections that traversed the group.

Secondly, it wouldn't have been feasible nor necessary to subject all the data I had collected to the kind of analysis that this phase of data analysis entailed. The kind of analysis I undertook was time intensive, and it simply wouldn't have been possible to apply it to my whole dataset. Moreover, the aim was to analyse processes of subjectification – an aim which is not necessarily better achieved by focusing on a larger number of participants. Indeed, as noted above, taking a few select cases and examining the elements and relations at play in the production of their subjectivities can be just as

revealing in this regard. And here I want to suggest that the kinds of elements and relations that I analysed are not isolated to the bodies I focus on. To be clear, I'm not suggesting that the bodies are 'representative' in that they accurately portray the views and attitudes of other academics. What I'm suggesting is that what I analysed point to shared social processes, formations and potentials that have wider occurrence.

Thirdly, the shape and size of my dataset reflects the BRC studentship that this thesis is based on and how I had the dual goal of (1) informing the BRC and the wider NIHR infrastructure and (2) pursuing the critical lines of inquiry that are central to this thesis. These dual goals meant my approach to data collection evolved and entailed various layers as I sought to develop a dataset that not only met the needs of the BRC and other related 'end-users' but also pursue the research questions I address in this thesis. As we saw when I described my research site(s) and sampling approach, the predefined aspects of the BRC studentship initially led me to focus on the BRC. This is reflected in the first phase of my sampling, where I recruited three BRC teams/projects as well as numerous BRC research managers. As fieldwork progressed, my research sites expanded, and my cases diversified as I adopted an emergent sampling approach. This was in recognition of the valuable ethnographic material I was generating outside of the BRC and also emerging issues and ideas that I sought to explore further. It's no coincidence that four out of the five bodies that provide the focus of the mapping analysis were recruited during this second phase of emergent sampling[13]. I recruited them as they offered interesting insights into emerging lines of inquiry that were particularly relevant to the complexities of subjectification and the ways in which the workings of power are both reinscribed and circumvented.

It's worth clarifying that while I focused on five bodies, other data played a key role in my mapping. For instance, the preliminary thematic coding which all interview and observation data were subject to informed the subsequent phasis of mapping. For instance, this initial coding helped me to identify key themes relevant to vectors of destratification and alternative subjectivities (e.g., different conceptions of impact and different academic values) which I subsequently moved onto examine in more depth by focusing on the five bodies. Moreover, as I noted above, when I traced the impact agenda's content I probed the ways in which the material bodies that the impact agenda assembles have the potential to being organised and actualised in different ways. Furthermore, when it came to focusing on the five bodies, I also turned to other transcripts and my fieldnotes to find points of

[13] The bodies recruited through my emergent sampling included the medical doctor, the artist, the early career researcher and the professor. The group of scientists on the other hand were recruited during the first sampling phase – they were one of the three BRC research teams/projects.

resonance and to help tease out the shared relations and processes at play in the production of subjectivity. Such cross referencing was particularly illuminating when it came to analysing 'the scientists' whose practices and views in many ways chimed with the other research teams.

Let's now turn to the approaches and tools I utilised in this phase of data analysis. In an attempt to attend to the multiple registers of subjectivity, I subjected the data to two distinct rounds of analysis, with the first being centred *discursive practice* and the second being centred on *refrains*. In both rounds I looked across various sources of data that were relevant to the five bodies I focused on. My starting point however was to analyse interview data, as this is offered a useful opening avenue to explore the active self-construction of subjectivity. Below I outline how I undertook both rounds of analysis.

Following other policy scholars (e.g., Kirwan, et al. 2016) who have borrowed from the work of Wetherell (Wetherell and Edley 1999), I treated data as *discursive practice*. Such an approach compelled me to view the participants not merely as objects of discourse but rather subjects who are active sense-makers and users of language. This process entailed various overlapping and iterative steps.

I began the analysis by taking each body in turn and treating them as a whole. For each body, I first read and re-read a printed version of their interview transcript, underlining statements and making notes pertaining to the ways in which they talked about impact and what it means to be an academic. I then turned to my ethnographic fieldnotes relevant to the body I was focusing on. Here I aimed to examine how the ways of talking identified in the interview data were taken up in other settings and enacted in everyday social practices. The process entailed a continuous back and forth between the interview data and ethnographic fieldnotes as I probed continuities and discontinues regarding the patterns and regularities that were emerging. Moreover, it involved referring back to my analysis of the impact agenda's expression, as I aimed to examine the ways in which participants drew on and rearticulated the dominant discourses that impact agenda expresses. Similarly, through turning back to my analysis of the impact agenda's expression, I aimed to probe the ways in which participants animated and gave voice to displaced and subordinate discourses.

Once I had gone through this process for each body, I then probed the patterns and regularities across the bodies. Here I looked across the various sources of data pertaining to the five bodies and sought to examine points of continuity and discontinuity. This stage of analysis again entailed

returning back to my analysis of expression as I sought to distil the repertories and resources that are made available to the bodies and which they put to use.

This analysis proved to be an effective way to analyse how academics interpret and negotiate the impact agenda. In particular, by identifying traces of the impact agenda's discursive formation in the participants accounts, I was able to probe how academics identify with, rework or refuse the subject positions that the impact agenda assigns to them. Moreover, by being attentive to the various knowledges that participants gave voice to, I was able to bring to light different understandings of what it means to be an academic – including ones that deviate from the subject positions made available through the impact agenda.

When it came to analysing *refrains* I drew inspiration from Goffey and Pettinger (2014). This stage of analysis followed a similar procedure to that described above in that I began by taking in each body in turn and treating them as a whole. I again started by focusing on interview data. For each body, working with a printed version of the transcript, I sought to identify moments in the interview that signalled a refrain at work. In doing so, I read and re-read the transcripts, underlining and annotating utterances that pointed to the three steps at play in the creation of existential territories: (1) the initial marking of a territory, (2) the stabilisation of that territory and (3) opening up the territory and making new connections. The kinds of refrains I identified varied, ranging from ritualistic practices to connections with material objects. From this position, I then turned to my ethnographic fieldnotes to analyse how the refrains identified through the interviews were enacted in everyday practices and happenings. Once I had gone through this process for each body, I then re-read interviews and fieldnotes in light of my analysis of the other interviews and fieldnotes, listening out for refrains that reverberated across all the bodies. The analysis of refrains proved to be an effective way to probe the different dimensions of subjectivity, particularly those that are affective and corporal and weren't picked up in my analysis of discursive practice. Moreover, it helped to illuminate how academics' subjectivities emerge out of a complex web of relations that precedes and exceeds the impact agenda and its interpellations.

Once I had applied these two approaches, I then mapped the insights I had derived from both rounds of analysis onto each other. This proved to be a useful exercise to bring to light how the data could be read in multiple ways, and how the different approaches revealed (or obscured) different facets of subject formation. Moreover, while both approaches helped to illuminate the subjectivities of all 5 bodies, for some bodies I found it more interesting and useful to draw more heavily on one

over the other (e.g., when it came to the group of scientists, I found it most instructive to listen out for refrains).

Through subjecting the data to these multiple readings, I was then in a position to undertake the interpretive task of mapping alternative subjectivities and the potentials for converting the impact agenda. At this point in the analysis, I found it useful to look beyond my empirical data and turn to existing literature, particularly more theory-orientated texts that offered insights into different ways of thinking about subjectivity. In doing so I kept close to the data and plugged-in concepts from elsewhere to help make sense of and illuminate the potentials that the data unveiled.

Ethics

Informed consent

All research participants who took part in an interview received an information sheet and consented to taking part. Most signed a consent form, though some consented verbally or via email.

Observation of the three initial research teams was arranged through a gatekeeper (a research manager and then the team leaders). Each member of the teams received an information sheet prior to the observation commencing. Most consented to being observed by signing a consent form. Those who didn't sign the form were given the opportunity to raise any issues about my presence. They were also informed that their individual actions will not be subject to focused observation and that any data that includes them will be excluded from data analysis and will not be included in the thesis or any other publication or presentation. Other pre-planned observations where I agreed with a gatekeeper that I would be carrying out observation (e.g., observing patient advisory group meeting) followed the same procedure

The more spontaneous and impromptu opportunities for observation that I was presented with by virtue of being a KCL PhD student (e.g., training events, conferences, departmental meetings, and so on) threw up some tricky issues regarding consent. The key issue being that it was not possible to gain consent from everyone present. Wherever possible I tried to inform people about my identity as an ethnographer, but I couldn't always do this, certainly not in a way that constituted 'informed'.

In such cases, the risk of slipping into covert observation was evident. In private spaces such as a departmental meeting, I was particularly aware of this and resisted the temptation to see it as fieldwork. It would be wrong to suggest however that I could simply bracket off such moments and unsee what I saw and unhear what I heard. While I didn't actively observe and record the happenings, on a certain level such moments fostered my ethnographic awareness of issues pertinent to my study. In more public spaces such as a conference or the halls of campus buildings I felt like had more freedom to treat it like fieldwork. In such spaces, I navigated the ethical challenge of non-consent by not carrying out focused observation on the specific actions of individuals. I focused on the setting and the general topics and issues that were discussed. Such material helped me to identify key themes and questions to explore in more detail and thus informed my lines of inquiry and how my fieldwork evolved. Moreover, it was key to tracing and mapping elements of the impact agenda assemblage. Another tactic I used to address the challenge of non-consent was to reflect on and draw on my own personal experiences. This enabled me to examine relevant happenings and situations without needing to make other people the primary subject of the research.

While such tactics enabled me to make use of ethnographic material where it was not possible to gain informed consent from everyone, it's worth noting that ethical challenges surrounding consent meant that some illuminating moments were excluded from my data collection and analysis. This includes, for instance, meetings I attended where preparations for REF were discussed. Such moments were particularly revealing with regards to the ways in which the impact agenda is shaping the organisation of universities. It's thus somewhat of a drawback that it was not possible to incorporate them into the study. That said, I want to suggest that the exclusion of such moments is not to the detriment to the overall quality and substance of this thesis. The richness and depth of my data set provided me with ample opportunities to examine and illustrate the kind of dynamics at play in the moments that I had to exclude.

Anonymity and confidentiality

While it's often the default in social research studies to keep the identities of all participants anonymous, it was agreed with KCL (and its ethics committee) that the identities of the participating organisation will be revealed. This decision was made in recognition of my methodological approach and my affiliation with the participating organisations. It was recognised that in ethnographic studies such as mine it's vital to (1) provide detailed contextual information about the research site and (2) reflect on the relations between the ethnographer and their research site.

While the participating organisations would be disclosed, it was agreed that the individuals and teams taking part would remain anonymous. This reflected the relative ease to maintain anonymity at this level. Moreover, it was felt that ensuring anonymity would minimise risk of causing harm to participants (discuss below) and would help with recruitment. Some participants were happy and keen to have their identity disclosed. I agreed to this, if revealing their identity didn't compromise the anonymity of other participants.

The participants discussed in this thesis whose identities are revealed are Jessica Potter (see 'The Doctor', pages 146 – 154) and Oron Cotts (see 'The Artist', pages 154 – 161). Both Jessica and Oron are participants identified through my emergent sampling. I met them at events which were co-hosted by KCL, and these ethnographic encounters provided a valuable insight into the contested nature impact and the complexities of subjectification. In wanting to build on the encounters and explore these dynamics further, I conducted interviews with both Jessica and Oron. Disclosing their identities has been advantageous in that it has enabled me to include relevant contextual and biographical details that help to 'bring to life' the relations and processes under study.

Causing harm

Revealing the identity of the participating organisations and individuals heightens the risk of causing harm (e.g., disclosing an organisation's strategies and practices could compromise their competitiveness, and disclosing an individual's views about their workplace could jeopardise their career). To mitigate this risk, I have only included information about the organisations that is public-information or routine business information. Furthermore, I have omitted any information that an individual revealed to me that I considered to be sensitive in nature, i.e., that which may cause themselves or the participating organisations harm. This only occurred a couple times, and the omissions bear no significance on my analysis and the argument of this thesis.

Politics of research

Beyond the 'usual' ethical considerations discussed above, there are fundamental ethical issues relating to the politics of research. What I specifically want to reflect on here are the power relations between the researcher and their participants. The power relations between myself and participants were far from straightforward. It wasn't simply the case that I was the all-powerful researcher who had authority over the people being researched. For instance, the funder of this research was also a participating organisation, and the funding arrangement of the PhD in certain ways shaped the paths the research could go down. That being said, such complexities didn't take away from the fact I was researching other people and I controlled how the information I 'extracted' from them is presented. While this inherent power-relation can never simply be dissipated, I attempted to foster a collaborate approach and to not simply view my participants as 'objects' to be studied. Continually at the forefront of my mind was the need to be open and treat my participants with humility and respect. I was transparent with regards to how intend to use the material I generated. I applied my conceptual framework tentatively and sensitively when carrying out analysis, keeping faithful to what I saw and heard. And I discussed emerging findings and interpretations with participants.

My positioning

I have touched on my position at various points already, both in terms of my position in relation to research participants and my position in relation to the goals of the research. I want to briefly draw out a couple of key points regarding these issues.

Firstly, the question of 'being one of them'. In certain respects, I'm a member of the 'community' being studied, and thus have an 'insider's' understanding. While I am thus, in a sense, 'one of them', being a PhD student with only a couple years working in academia granted me a degree of distance and an 'outsider's perspective. And there were often differences that cut across commonalities, not least differences in terms of discipline and field. This was brought into sharp relief when observing life scientists and I found the culture comparatively strange and alien. The boundary between outside and insider was thus fluid and blurred, fluctuating as I moved across different spaces.

Secondly the question of doing critical research in an applied setting. As discussed in the previous chapter, this research is guided by the two political poles of critical scholarship. At the same time, the research will inform the work of the BRC and KCL (the funders of the research). It's fair to say

that the critical aims don't neatly map onto the applied aims. At risk of an oversimplification, we might say that the critical aims seek to challenge and transform the dominant order, while the applied aims work within and reproduce the dominant order. I have attempted to navigate this tension by straddling both aims; I have sought to help the BRC and partners by offering useful and relevant information (and bring in a degree of criticality in the process), and I have also carved out space to move the PhD down a more critical pathway and intervene in wider debates within critical scholarship.

A note on the presentation of data

In the following two chapters (Chapter 5 and Chapter 6) I present the empirical data that this thesis rests on. The chapters' different focuses reflect the two central analytical strategies and sensibilities described above. In Chapter 5 I trace out the impact agenda assemblage's expression and content and, in doing so, interpret the strata they are productive of and the abstract machine/s they share. In providing this tracing, I focus on addressing the first set of questions that I seek to answer: what role does the impact agenda play in producing academic subjectivities, and what do these processes of subjectification reveal about formations and mechanisms of power? In chapter 6 I move onto mapping vectors of destratification and opening up the impact agenda to differentiation and transformation. In doing, I focus on addressing the second set of questions: what alternative academic subjectivities are there to those ascribed by the impact agenda, and what do these subjectivities reveal about the potentials for converting the impact agenda?

It's important to remind ourselves that a tracing and a map fold into each and intersect. Thus Chapter 5 also bears the functions of mapping, and vice versa, Chapter 6 bears the functions of tracing. For instance, in Chapter 5 the process of mapping is evident in how I bring into focus affects and desires that have the potential to be ordered in different ways. Likewise, in Chapter 6, at various points I bring to light how the stratifying forces of the impact agenda maintain their grip and shape how academics think and act. In this way, the different focuses of the chapters are a question of emphasis rather than absolute opposition.

It's also worth making some remarks on the organisation of each chapter.

In Chapter 5 I commence by describing KCL's stated approach to 'creating impact'. This serves to further contextualise my field sites. Moreover, it offers a useful entry point into the impact agenda

assemblage. The opening description of KCL's approach to creating impact sets up the more analytical task of delineating the concrete elements of impact agenda assemblage. Here I begin by tracing its expressive side, moving through the four directions of research that are central to analysing a discursive formation (formation of objects; formation of enunciative modalities; formation of concepts; formation of strategies). In doing so I draw on a range of texts emanating from my fieldsite and beyond and which traverse the micro-macro fields. I then move on to trace out the content. This entails a shift in the kind of data I draw on, as I turn to various ethnographic encounters that offer an insight into the interactivity and affective relations of the material bodies that are assembled. I then move to a more abstract level and sketch out the impact agenda's abstract machine/s. I first specify the abstract machine that is proper to the impact agenda before zooming out and specifying the broader abstract machines at work.

Chapter 6 is based around the 5 bodies who provided the focus of the mapping phases of data analysis. Rather that discussing data under a theme, I take each body in turn and treat them as whole. In doing so, I seek to bring to light the different layers that constitute the bodies' subjectivities and how their subjectivities are formed in relation to various processes and elements. To illustrate such complexities – and to help the reader see the active self-construction of subjectivity - I often present lengthy interview extracts (though this approach to data-presentation is less apparent in the section on the group of scientists where I present short snippets of quotes from the different members[14]). The accounts of the 5 bodies provide the springboard from which I proceed to map alternative subjectivities and the potentials for converting the impact agenda. In these latter stages of the chapter I look across the 5 different bodies and draw out the key ways which their subjectivities open up the impact agenda to differentiation and transformation.

[14] This means the individual group members are rather distant and disembodied figures whose distinctive voices are muffled. This reflects an attempt to present the group has a one body.

Chapter 5 Tracing the impact agenda

Entering the impact agenda assemblage

To begin our tracing of the impact agenda assemblage, let's take KCL's 'Creating Impact' webpage (King's College London, n.d. b) as our starting point. This webpage falls under the 'Research & Innovation' tab of KCL's external website, forming part of a wider collection of online communication material relating to KCL's research activities and infrastructure. Other notable webpages include 'Impact Stories' which provides regular updates on how KCL academics are generating 'world-changing ideas' and life-changing impact' (King's College London, n.d. p).

The Creating Impact webpage opens with the following statement:

> Whether translating research into a marketable product, patenting new technologies and inventions or changing policy and engaging young people, King's College London supports its researchers to maximise the impact of their work. (King's College London, n.d. b)

The webpage then proceeds to summarise and provide links to the various support mechanisms KCL puts in place. These include: (1) Innovation Institutes; (2) REF 2021; (3) Public Engagement Support; (4) Impact Acceleration Accounts; (5) IP and licensing. Let's take each of these in turn.

Innovation Institutes

The Innovation Institutes provide the central means for KCL's 'external engagement'. They effectively replaced a centralised public engagement department that closed in 2014. The introduction of the Innovation Institutes reflects an attempt by KCL to implement a 'new and innovative approach to external engagement', one where 'specialist hubs, at the interface between King's and the communities around it, broker and enable two-way engagement.' (King's College London (n.d.c, Exec Summary, para 1)

The Innovation Institutes form part of wider plans laid out in KCL's Strategic Vision 2029 (King's College London, 2016). Launched in 2016, 'Vision 2029' is centred around the tagline 'Our vision to make the world a better place' (King's College London, 2016: 3). Innovation Institutes are framed as

one of the key ‘‘business units’ that will be important to delivering our vision’ (King’s College London, 2016: 30). Echoing these statements, on KCL’s on Innovation webpage, the Innovation Institutes are positioned as a means to ‘produce knowledge that meets the needs and aspirations of society’ and as a way ‘to encourage innovation and create impact’ (King’s College London, n.d.d)

At the time of doing my fieldwork four Innovation Institutes were up and running. These are briefly described below.

King’s Commercialisation Institute

Embedded within King’s Health Partners (KHP), the King’s Commercialisation Institute aims to provide ‘entrepreneurial awareness and support for the commercial translation of life science research so it can be embraced by industry and private investors for impact delivery’ (Centre for Population Genomic Medicine, n.d.). One of the central mechanisms they put place is the ‘King’s Health Accelerator’ – an award that ‘provides project funding and specialist industrial support for its portfolio of technologies with an aim of commercially translating great science to transformative product solutions that benefit patients and society’ (Centre for Population Genomic Medicine, n.d.).

Entrepreneurship Institute

This Entrepreneurship Institute’s ‘vision is for everyone within the King’s community to recognise the benefits of an entrepreneurial mindset, develop entrepreneurial skills, and ultimately realise an entrepreneurial version of themselves’ (King’s College London, n.d. e). This vision is premised on the notion that entrepreneurship boosts ‘employability’ and is key to ‘solving problems and turning ideas into solutions’ (King’s College London, n.d. e). The Institute’s main support mechanism is Kings20 Accelerator - a programme which provides 20 ventures with coaching and office space as well as access to pots of investor money which are allocated via Dragons’ Den style ‘Pitch Nights’. The institute is based within Bush House on Strand Campus, which KCL acquired in 2015 and which The Queen formally opened in 2019. KCL’s acquisition of Bush House forms a key part of their plan to invest in ‘exceptional and sustainable estates’ (King’s College London, 2016: 23) – a point echoed in the claim that the building will help them to ‘consolidate our position as a top 25 global university’ (King’s College London, n.d.f). As the following quote from Ed Bryne (the then president of KCL) suggests, it also feeds into their plans to create impact:

> Bush House provides a creative environment that fosters innovation and collaboration and supports our vision to serve society by delivering world-class inspirational education, innovative research and life-changing impact across the globe. (King's College London, n.d.g).

Cultural Institute (now named 'King's Cultural Community')

The Cultural Institute aims to facilitate partnerships and collaborations between KCL staff, students and alumni and those working in the arts and cultural sector. In doing so it seeks to 'enhance research and drive innovation, enrich education through original learning opportunities and serve the needs of the cultural sector and, more broadly, of society' (King's College London, n.d.h). Central to its work are various 'Hubs' and 'Connected Venues' that offer exhibition and performance spaces and create an 'interface' with London. A notable example here is Science Gallery London (SGL) which opened in 2018 and forms part of a global network of galleries that provide a space for scientists and artists to collaborate. Located on Guys' Campus in the shadows of the Shard [15], SGL reflects KCL's plans to invest in 'exceptional and sustainable estates'. It also reflects KCL's plans to drive innovation through 'showcasing our research to and working with a global audience of academics, commerce, social enterprise and government' (King's College London, 2016: 10).

Policy Institute

The Policy Institute is a hybrid organisation that seeks to 'combine the rigour of academia with the agility of a consultancy and the connectedness of a think tank' (King's College London, n.d.i). Its vision is 'to contribute to building an ecosystem that enables the translation of research to inform policy and practice, and the translation of policy and practice needs into a demand-focused research culture' (King's College London, n.d. c: 6). A key thread that connects much of their work is 'communications, impact and engagement'. This is reflected in the research they have undertaken in relation to impact assessment frameworks and methods (e.g. Hinrichs, Montague and Grant, 2015). It is also reflected in the 'impact training' they offer to KCL staff and students.

[15] Shard Funding Limited, along with Wellcome trust and Guy's and St Thomas' Foundation, donated money to KCL to support the development of SGL. Shard Funding Limited is an investment company with ties to the State of Qatar who own 95% of the Shard (Sheikh Abdullah Bin Saoud Al Thani, Governor of Qatar Central Bank, is Chairman of the Board of Directors of Shard Funding Limited).

REF 2021

REF 2021 is listed as one of the key components of KCL's approach to 'creating impact', though the various roles, processes and resources tagged with the label of REF 2021 are predominantly related to the capturing and reporting of impact.

Over the course of my fieldwork KCL's preparations for REF 2021 started to ramp up. A 'REF Oversight Group (made up of various senior managers from KCL) was established in early 2018 to oversee the preparations and to monitor progress. Later in 2018 a REF Delivery Director, whose role it is to lead on all areas of REF 2021, was recruited to KCL's Professional Services. At the beginning of 2019, four 'Impact Leads' were also recruited to Professional Services. The primary role of these Impact leads is to construct Impact Case Studies (ICS) for the REF 2021 submission. To do so they work closely with academics from each faculty (who also have been assigned the role of 'Impact Lead') to identify, review and develop ICS. Both the Academic Impact Leads and the Professional Services Impact Leads make up a 'College Impact Committee' which is chaired by the 'Dean of Research Impact' appointed early 2019.

Through various means (such as guidance documents, workshops and web pages) these individuals and groups play a key role in communicating information about REF 2021 to KCL's staff. In doing so, the stakes at play and the rationales are reiterated. This can be seen in the opening passages of the Creating Impact webpage:

> The Research Excellence Framework (REF) is the system for assessing the quality of research in UK universities and higher education colleges. The outcome of REF2014 determined how around £2 billion in research funding was allocated each year from 2015-16 to present. (King's College London, n.d. b)

It also can be seen in the opening passages of KCL's REF2021 webpage:

> The key purposes of the REF are:
>
> To inform HEFCE's selective allocation of funding for research (QR Funding)
> To provide accountability for public investment in research
> To provide benchmarking information for use in the higher education sector and for public information
>
> (King's College London, n.d. j)

Eligibility criteria and definitions are also delineated. For instance, in Impact: An Introduction to Creating Impact *(*King's College London, n.d.k: 2) the need for 'impact to flow from 'underpinning research' and go 'beyond merely engaging with the public' is made clear (see Figure 1).

Going beyond merely engaging with the public through workshops or conferences, impact highlights how work has changed the understanding and/or behaviours of a specific group of stakeholders. So, typically:

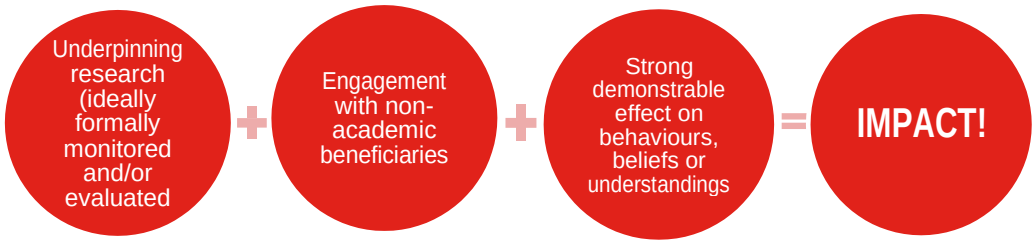

Figure 1. Steps to Creating Impact (King's College London, n.d.k: 2)

While the remit of the Impact leads is centred on REF 2021, their work extends beyond the stipulations and timescales of this cycle of REF. A key aspect of their role is to also 'support the development of research impact activities and to share best practice for impact development and evaluation in all research carried out at the College' (King's College London, n.d. j). In this way, their work is not limited to capturing and reporting impact but also includes the goal of embedding the culture of impact at King's.

Public Engagement Support

Public engagement support is the remit of 'Impact and Engagement Services' which is embedded within Science Gallery London and which grew out of a Catalyst Seed Fund[16]. The primary role of the Impact and Engagement Services team is to help researchers to 'build high-quality, high-impact public engagement into research grant proposals' (King's College London, n.d. b). The team do this by offering one-to-one consultations to researchers in the early stages of an application. They also deliver various training sessions such as 'What funders look for' and provide written guides such as 'How to write your Pathways to Impact'.

[16] Catalyst Seed Fund was a programme funded by Research Councils UK (RCUK) that sought create a culture of public engagement within universities

In addition to their advisory work, the Impact and Engagement Services team aim to bring together the various groups and individuals across KCL who support impact and engagement activities. This has led to the formalisation of an 'Impact Network' which meets bi-monthly and seeks to develop a more coordinated approach to supporting impact and engagement, as well as King's Engaged Researcher Network (KERN) which was launched in 2016 and seeks to 'foster a growing community of King's staff and students interested in developing sharing and celebrating their public engagement practices' (King's Engaged Researcher Network, n.d.)

Members of these networks include the aforementioned Innovation Institutes and Impact Leads. Other notable members include the 'patient and public engagement and engagement' (PPIE) team based within the BRC at Guys and St Thomas. This team help researchers associated with the BRC to collaborate with patients and the public throughout the various stages of research. A key aspect of this is signposting researchers to pre-established patient groups embedded in the BRC infrastructure. Reflected in NIHR's decision to make PPI a condition of funding and an assessment criterion, such collaboration is framed as a way to enhance the quality and relevance of research and thereby facilitate the translation of knowledge.

Another notable member includes the Centre for Doctoral Studies who are responsible for the professional and career development of all postgraduate researchers and research staff at KCL. Impact and engagement is a central feature in their programme of work. They offer small grants (up to £750) to support the delivery of a public engagement activity. They also offer various courses and training sessions (listed under the category of 'Communication and Impact'), such as 'Developing Your Own Public Engagement Activity', 'Expanding your Research into Consulting', 'Pitching for Funding', and 'Social Media for Researchers'. They also run the local heats of the '3 Minute Thesis Competition' – a competition where PhD students are judged on their ability to explain their research to a non-specialist audience in three minutes.

Impact Acceleration Accounts

Impact Acceleration Accounts (IAA) are block awards granted by two of UK Research and Innovation Research Councils: the Economic and Social Research Council (ESRC) and the Engineering and Physical Sciences Research Council (EPSRC). Set up in 2014, 'these awards are a mechanism for sponsoring knowledge exchange and impact by supporting new innovative and imaginative projects' (King's College London, n.d. b).

KCL have been awarded IAAs from both the ESRC and the EPSCRC, with the majority of the funding being allocated to KCL academic staff through internal competitions. KCL frame their ESRC IAA as 'the principal mechanism for supporting King's social science researchers in their knowledge-exchange and engagement activities with external partners' (King's College London, n.d. l). It's interesting to note that the fund is publicly promoted with 'external partners' particularly in mind. On KCL's website (King's College London, n.d. l), 'potential partners' are invited to put forward a project or challenge that might benefit from social science input. KCL note they are 'particularly interested in hearing from those sectors and services not typically associated with the social sciences, addressing key national and international research and innovation challenges that might usually be framed primarily in technological rather than social terms'(King's College London, n.d. l). This emphasis on engaging external partners and technological innovation is further evident in KCL's framing of the IAA EPSCR, with KCL proclaiming that the IAA EPSCR enables its researchers to work 'closely with business, clinical, and end-user partner organisations' and 'to transfer ideas and technologies [..] into society' (King's College London, n.d. m).

IP & Licensing

KCL have a team of research managers (with 'experience in the commercialisation of IP') who work 'closely with King's academics to evaluate, protect and commercialise intellectual property (IP)' (King's College London, n.d. b). Part of the team's remit is to also engage 'external partners' - a remit which is premised on the idea of speeding up commercialisation. This is illustrated in the opening statement of their webpage:

> Looking for a technology or invention to commercialise? King's has a large array of cutting-edge technologies and inventions created by our world-class academics that can be searched and licensed. Our IP & Licensing experts work closely with external partners and our academic inventors to ensure that the commercialisation process is appropriate and timely. (King's College London, n.d. n)

Expression

By sketching out KCL's approach to creating 'impact' we begin to get a sense of the various elements that the impact agenda assemblage brings together (e.g., people, money, buildings, digital technologies, concepts). The next step is to delineate how these elements function as an

assemblage. In doing so we need to distinguish the assemblage's content and expression. I will start by tracing out its expression, moving through the four directions of research that are central to analysing discursive formations: formation of objects; formation of enunciative modalities; formation of concepts; formation of strategies.

Formation of objects

Let's begin by considering a key field in which 'impact' has emerged as something which is named , assessed and designated: the university. As Pestre (2003) reminds us, universities have always carried out research that meets a practical end and is targeted at a non-academic beneficiary – what's often referred to as 'applied research' or 'instrumental knowledge'. In this sense, universities have always sought to create 'impact'. Yet, the mid-late 2000s appeared to mark a turning point. From this period onwards , the word impact has become common place in academic vernacular and an ever present watchword across universities in the UK and elsewhere. We now talk about 'creating impact', 'impact case studies', 'impact managers', and so on.

What triggered this new way of talking? There are two key events to note.

Firstly, 'impact plans' and 'pathways to impact' being added to UK research councils grant applications. Secondly, 'impact' being included as a measure of performance in the 2014 REF. These two developments effectively made applied research less of a professional choice and more of a 'policy imperative' (Ball et al., 2011: 612). Moreover, they had the effect of making 'impact' a measure of performance that academics can be judged and compared against, rendering non-academic research impacts as something which is not merely to be pursued and created but *demonstrated*.

Of course, it's not these two events alone that have given rise to the language of impact. These events form part of a wider set developments across the globe where the assessment of impact has been driven by governments and funding bodies keen to hold universities to account for the societal value of their research. These two events, however, have provided the impetus for others to follow, and their significance in many ways marks the emergence of the impact agenda and the growing pressure for academics to demonstrate the non-academic impact of their research.

This demonstration or 'performance' of impact can manifest itself in various ways. Perhaps most obviously it can be seen in the demonstration of impact to funders when applying for funding and participating in audit systems. What's notable here is how universities are now channelling resources to support such activities (exemplified by the aforementioned KCL Impact and Engagement Services Team and the REF Impact Leads). The performance of impact can also be seen in the public profiles of universities and academics where the prestige of achieving impact is expressed to broader publics (KCL's 'Impact Stories' being a good example).

Here we begin to see then how, in light of impact becoming a measure of academic value tied up with funding and audit systems, the act of doing research with the aim to make a difference beyond the academy has been ascribed with new meanings. This coding extends to a range of activities, particularly those associated with 'engaged scholarship' (Van de Ven, 2007) and 'Mode 2' knowledge production (Boaz, et al., 2016). For instance, the involvement of non-academic groups in designing, undertaking and communicating research has taken on an elevated status as such collaborative research is assigned the function of a 'pathway to impact'. Similarly, in being heralded as key to delivering impact, interdisciplinary research has assumed new significance. Such collaborative and interdisciplinary forms of research have of course long been justified in terms of aiding knowledge translation. What's different now is that they need to be documented and made to count within funding and audit regimes. A related consequence is that academics are opened up to a further array of performance measures. It's not simply the impact of research that is placed under the spotlight but also academics' ability to undertake different kinds of practices which are deemed conducive to the creation of impact.

Corresponding to this rise of 'impact talk' and its constitutive effects, there is a growing body of literature that focuses on reviewing and developing impact assessment approaches (e.g. Grant et al 2010; Penfield et al. 2013; Greenhalgh et al. 2016; Milat et al., 2015; Hinrichs-Krapels and Grant, 2016). This literature tends to be grounded in the interdisciplinary fields of 'research evaluation' or 'research policy', and those working in these fields tend to work at the 'research-policy' nexus. This is reflected in the institutional settings of those who have been particular prominent in informing impact assessment approaches, with many authoritative figures working in research environments that traverse and blur the boundaries between academia, government and the private sector. The way in which the King's Policy Institute combines 'the rigour of academia with the agility of a consultancy and the connectedness of a think tank' is a good case in point (King's College London,

n.d.i). As noted in the section above, the Policy Institute is home to a number of people who have played a key role in informing impact assessment approaches.

This body of impact literature has been key to laying the foundations for the impact assessment systems and programmes introduced by governments and its funding agencies across the globe. A question that arises here is what understanding of impact do the adopted approaches to impact assessment instil? While there is great degree of variability in the adopted approaches, we can nevertheless identify three dominant tendencies.

Firstly, an object of evaluation (an 'evaluand') is specified (e.g., an individual academic, a research group, a university, a programme of research). This has the effect of instilling the idea that impact is produced by a recognisable and discrete thing or person/s. Moreover, as impact assessments seek to assign relative value, those things or person/s are constructed as competitive objects.

Secondly, impact is framed in terms of the effects of research being translated into domains outside of the university and being taken up by non-academic end-users. This framing of impact instils an applied/instrumental notion of research, i.e., research that solves an articulated problem and directly benefits a specified beneficiary.

Thirdly, an economic register is dominant. While adopted approaches to impact assessment work with a definition of impact that encompasses a range of social, culture, economic outcomes, the rationale for undertaking impact assessments tends to be couched in economic terms. The notion that impact assessment is necessary and vital for promoting the effective and efficient use of resources is one that governments and funding agencies (and, in turn, universities) across the globe espouse. This rationale for impact assessment carries the dual logic of (1) demonstrating how funds are effectivity being utilised and (2) informing decisions as to what and who receives funding (with the assumption being that funding is channelled towards the 'best' or 'excellent'). Moreover, it's a rationale which has assumed new significance in the wake of the fiscal austerity following the 2008 financial crisis.

From the discussion thus far we begin to see how 'impact' has become a discursive object in that it expresses a new way of evaluating, classifying and performing academic research. The key point I want to draw out here is how academics are correspondingly constructed as objects of discourse. To put it another way, the key question to ask is what kind of academic subjects are constructed by

statements on impact? In short, academics are constructed as enterprising subjects who demonstrate their value through the effective and efficient pursuit of research impact. The characteristics of this figure – what we can call the 'impactful academic' – will become clearer as I move onto discuss the formation of concepts and strategies. For now, let's briefly breakdown their key features.

'An enterprising subject'. The impactful academic is a flexible, multiskilled academic who gains the competitive advantage over others by adapting to changing demands. For them, impact (and associated practices) is a skill area to invest in and a means to advance their profile and career.

'Demonstrate their value'. The impactful academic demonstrates their value over others by ensuring their activities and outputs count within funding and audit regimes and by crafting a public profile that is visible to interested parties. They don't simply plan for and achieve impact, they make sure it meets and pleases the gaze of others in a position of judgement.

'The effective and efficient pursuit of research impact'. The impactful academic is responsive to the needs of non-academic stakeholders, and they design, undertake and communicate their research accordingly. They are effective in this pursuit of impact as they ensure research translates into the desired benefits. Moreover they are efficient as they 'accelerate' this translation of knowledge.

The impactful academic can be applied to all levels of subjectivity. It's not just an individual academic who we can of think of terms of the impactful academic, but also a research group, a department, a university, a research field/discipline, and so on. Moreover, there can be various inflections of the impactful academic. For example, the academic entrepreneur who creates a spin out, the interdisciplinary researcher who solves complex problems, or the publicly engaged academic who is responsive to the needs of stakeholders.

It's important to recognise how academics have long been impelled to think of themselves in terms that accord with the impactful academic. Writing just over 20 years ago in reference to the rise of performativity, Ball (2000: 18) describes how academics are encouraged to become "enterprising subjects' who calculate about themselves, 'add value' to themselves, improve their productivity, live an existence of calculation'. The impactful academic doesn't represent a break from this kind of subject but rather a further inflection of it. And we might add here that this further inflection bears characteristics that suggest an intensification and augmentation of the demands to add value to

ourselves, improve our productivity and maximise our utility. With impact now a measure of academic value, we are impelled to demonstrate our value in ever-expansive ways. We are expected to produce outputs that are responsive to the needs of non-academic beneficiaries. And we are obliged to produce these non-academic outputs efficiently and effectively.

Formation of enunciative modalities

Who are the authors of the statements that constitute this emerging system of signs? Or to put it another way, who are the individuals and groups that are given the right to speak about impact? There are various people who speak of impact, not least academics who have been vocal critics. The key question who is deemed legitimate. It might well be the case that some critics of the impact agenda have shaped how impact is defined and measured - a point which is indicated by the move away from a purely economic definition of impact (Donovan, 2011). However, critics can often find themselves marginalised and positioned outside the realms of what's reasonable and realistic, especially those who critique the impact agenda not merely on technical grounds but rather political and ideological grounds. This is something I've felt numerous times. In conversations with colleagues, when I've questioned the impact agenda on the basis of it being a further imposition of market logics, the response I've often got is something along lines of 'don't bury your head in the sand - this is the reality, plus we have an obligation to account for our use of public money'. It's perhaps quite revealing that such responses often come from senior academics in management positions.

If 'impact critics' often find themselves derided and silenced, who then has the right to speak?

Firstly, 'impact agenda setters'; that is, central government agencies at the national level along with inter-governmental organisation (e.g. OECD) who put the assessment of impact on the political agenda. Their legitimacy reflects how they are central nodal points in the policy making process and how they have oversight of the distribution of funding.

Secondly, 'impact funders'; that is funding agencies who have an interest in creating impact and who undertake impact assessments. The fact that they award funds and set out the terms and conditions of assessments grants them the authority of speaking. They are the ones whose judgement of what's and who's impactful carries both notable financial and symbolic rewards. Here we can include both public and private (e.g. charities, industry, venture capitalists) funders, but we might say public

funders are granted particular clout, given they form a key part of the various regulatory bodies that govern universities.

Thirdly, 'impact experts', that is, the academics/researchers who 'assess the assessment' and offer expert advice on the development and implementation of impact assessments. Their status as academics with specialist knowledge in research evaluation and research policy makes them qualified to talk about impact. Moreover, their legitimacy is underpinned by the kinds of institutional settings they are located within. By straddling the academy-government divide and working at the 'policy-research' nexus, they are recognised as academics/researchers who are responsive to the needs of the 'end-user' and offer pragmatic solutions. In this way, they are impactful academics.

Fourthly, 'impact leaders', that is, the senior management of universities who decide how to 'respond' to the impact agenda (they enter into dialogue with agenda setters and funders to 'represent' the 'interests' of universities, and they set out the strategies and plans for their respective universities). Their legitimacy reflects the expansion of managerialism in the higher education sector (Clarke, 2015). They are recognised as the individuals who provide effective strategic leadership and can ensure universities are 'well-managed' organisations.

In concrete reality, the distinctions between these four positions are often blurred. Individuals may occupy and move between different positions (for instance an individual may be both an impact expert and impact leader). And this is reflective of the hybrid and collaborative relations between organisations (for instance, how impact funders commission impact experts to 'assess the assessment'). What this all points to is how the legitimacy of the positions in part rests on their interrelations and institutional ties (for instance, the research of the impact experts grant the impact funders' assessment approaches legitimacy, and vice versa, by commissioning the impact experts, the impact funders qualify them as the 'experts').

Formation of concepts

Statements on impact articulate an array of concepts. To name but a few, this includes excellence, accountability, value, efficiency, innovation and public engagement. Rather than attempt to provide a survey of the concepts that constitute this grouping, I will take two of the most prominent concepts - innovation and public engagement - and focus on 'forms of coexistence'. In particular I will consider 'fields of concomitance', drawing attention to how statements concerning impact

animate and resonate with statements concerning different domains and objects. In doing so I aim to bring to light the dominant ways of thinking that these concepts ascribe and how they help to provide the vocabulary that brings the impactful academic into being.

Innovation

The term innovation is seemingly pervasive across a wide array of policy domains, from youth work (Offord, 2016), to the environment (Diaz-Garcia, et al. 2015) to homelessness (Gosme and Anderson, 2015). While frequently promoted as the means to achieve an array of policy aims, innovation is a term that often lacks clear definition. As Bontems (2014: 39) notes, the term is rarely defined in policy texts, and thus 'its meaning is taken for granted and evident'. This is not to suggest there are no texts that attempt to provide a clear definition. The Oslo Manual produced by the OECD is notable in this regard. In the 2nd edition published in 1997, innovation is defined as follows:

> Technological product and process (TPP) innovations comprise implemented technologically new products and processes and significant technological improvements in products and processes. A TPP innovation has been implemented if it has been introduced on the market (product innovation) or used within a production process (process innovation). TPP innovations involve a series of scientific, technological, organisational, financial and commercial activities. The TPP innovating firm is one that has implemented technologically new or significantly technologically improved products or processes during the period under review. (OECD, 1997: 31)

There are a number of points to draw out from this definition. The first is the technological framing of innovation. This is indicative of how 'innovation policy' has 'emerged as an amalgam of science and technology policy and industrial policy' and how 'its appearance signals a growing recognition that knowledge in all its forms plays a crucial role in economic progress, that innovation is at the heart of this "knowledge-based economy" (OECD, 1997: 6). The second is the emphasis on implementation. For a new technology to be defined as an innovation it has to be implemented. Later on in the manual, the authors build on this definition and underscore the role of 'diffusion' (i.e., the spread of a technology beyond its initial implementation) (OECD, 1997: 6). Without diffusion, the authors state, an innovation 'will have no economic impact' (OECD, 1997: 6). The third is how innovation is defined at the level of the firm. This concentration on the firm reflects the 'neo-

Schumpeterian approach' which 'views innovation in terms of interaction between market opportunities and the firm's knowledge base and capabilities' (OECD, 1997:7). The authors go on to state that the 'innovative firm' has a number of characteristics that can be grouped into two categories: 'strategic skills' (e.g., 'ability to identify and even anticipate market trends') and 'organisational skills' (e.g., 'taste for and mastery of risk') (OECD, 1997: 15).

More recently, and in tune with other intergovernmental organisations' promotion of 'social innovation' (e.g., Bureau of European Policy Advisers, 2010), the OECD have moved away from a narrow technological and economic framing of innovation. This is evident in the OECD Innovation Strategy (OECD, 2010). The opening paragraphs of the Forward reads as follows:

> In the post-crisis world, and with a still fragile recovery, we are facing significant economic, environmental and social challenges. While no single policy instrument holds all the answers, innovation is the key ingredient of any effort to improve people's quality of life. It is also essential for addressing some of society's most pressing issues, such as climate change, health and poverty. Innovation today is a pervasive phenomenon and involves a wider range of actors than ever before. Once largely carried out by research and university laboratories in the private and government sectors, it is now also the domain of civil society, philanthropic organisations and, indeed, individuals. Therefore, policies to promote it should be adapted to today's environment and equip a wide variety of actors to undertake innovative actions and benefit from its results. Effective mechanisms for international co-operation in science, technology and innovation will also need to be put in place in order to make innovation an engine for development and growth.
> This report presents the OECD Innovation Strategy, the culmination of a three-year, multi-disciplinary and multi-stakeholder effort. It provides analysis and policy guidance on a broad range of issues from education and training to business environment, infrastructure and actions to foster the creation and diffusion of knowledge. These elements can support governments in developing effective innovation strategies to achieve key economic and social objectives. (OECD, 2010: 3)

In the statements above, innovation is framed as a means to address a range of economic and social objectives. Yet we see hints of a dominant economic framing. For instance, the reference to the post- crisis recovery and making 'innovation an engine for development and growth' indicate that

economic values subsume extra-economic values. This is further suggested throughout the report in the recurring refrains of 'growth', 'productivity' and 'efficiency'. Such statements don't indicate that extra-economic values are simply eschewed in favour of economic values. Rather they indicate how values such as improving health are integrated into the overarching mission of economic growth and how any apparent incompatibilities between economic and extra-economic values are thus rendered obsolete.

What's further revealing about this text is the emphasis placed on individual enterprise. Echoing the Oslo Manual's focus on the firm, the entrepreneur is positioned as the key innovator. This is evident in the strategic goal of 'people should be empowered to innovate' (which entails the call for education and training policies that 'help foster an entrepreneurial culture by instilling the skills and attitudes needed for creative enterprise') (OECD, 2010: 11). It's also evident in the strategic goal of 'innovation in firms must be 'unleashed', which entails the call for 'well-functioning venture capital markets and the securitisation of innovation-related assets (e.g. intellectual property)' (OECD, 2010: 12).

Moving to the national policy level, we can see how these strategic goals are reflected in the social innovation policies of national governments. In the UK, for instance, a notable development came with the launch of Big Society Capital - a 'social investment fund' which proclaims to improve 'the lives of people in the UK by connecting social investment to charities and social enterprises' (Big Society Capital, n.d.). The promotion surrounding this initiative echoes the emphasis the OECD places on the entrepreneur as the key driver of social innovation. Moreover, bearing the imprint of a dominant economic framing, the initiative is promoted as a cost-efficient and effective way of addressing social problems. These market-economic imbued constructions of social innovation are evident in a statement that David Cameron, the then Prime minister, when made promoting Big Society Capital and the use of 'social impact bonds':

> Big Society Capital matters because it is giving brilliant social entrepreneurs with dreams bigger than their budgets, the means to prove themselves, scale up and do more. Take the story of Jim Clifford and his wife Sue who have nine adopted children. They are at the centre of the first social impact bond for adoption being created today. How does it work? Every child who remains in the care system costs the taxpayer around three quarters of a million pounds. The fact is that government has never been that good at finding homes for them. This government is changing

> the rules, promoting adoption doing everything we can to give children the chance of a loving home and one of the ways we can do that is by using voluntary groups and social enterprises to find homes for the hardest to place children. So Jim has created a social impact bond that will help them access that finance from socially minded investors. The way a social impact bond works is simple. When it succeeds, investors are paid from the savings to the taxpayer, but if it doesn't work, the taxpayer doesn't pay a penny. By scaling up Jim's programme nationwide over the next decade, it's not just investors who could get a return. 2,000 children who would otherwise have been overlooked could get loving homes and the taxpayer could save as much as £1.5 billion in fostering fees. That's the power of social investment. And it's why I want to work with our international partners – and the new Social Impact Investment Taskforce to grow a bigger global market in social investment that can change more lives here in Britain and right across the world. (Cameron, 2013)

So far I have considered the conceptualisation of innovation across different (though not unrelated) policy domains and objects. Let's now turn to statements on impact.

The first point to note is that uses of the term innovation are characterised by the same conceptual fuzziness that we see more widely in other domains. It's a term that crops up frequently, yet is rarely accompanied by a clear definition. Moreover, it is a term that is applied in different ways. Most commonly, the term functions to refer to the application of new knowledge beyond the academy. As we saw in the opening section of this chapter, it's this function that the KCL Innovation Institutes express. Moreover, it's this function that comes through in the Nurse review (Nurse, 2015) which led to the UK government's seven Research Councils falling under the same umbrella organisation as Innovate UK[17] - a move which saw 'Research Councils UK' (RCUK) become 'UK Research and Innovation' (UKRI). At the same time, the term is also used to refer to new or novel ways of producing knowledge (e.g. innovative methods, innovative public engagement). The key point to note here is how this use of term often intersects with the dominant use of referring to the application of new knowledge beyond the academy. For instance, KCL's project 'Co-researching for innovation and change' is focused on supporting 'innovative approaches to co-research' with the aim to benefit society more widely (King's College London (n.d.o).

[17] Research Councils are organised according to different academic disciplines and have historically been responsible for funding academic research. Innovate UK, on the other hand, 'helps businesses develop the new products, services and processes they need to grow through innovation' (UK Research and Innovation, n.d.b).

So here we begin to see how innovation expresses an understanding of academic research that is centred on the translation of knowledge beyond the academy. Thus to innovate is to 'transfer' or 'translate' new knowledge and ultimately create impact. This voicing of innovation bears similarities with OECD's emphasis on implementation and diffusion. We also see similarities in the ways in which an economic framing often takes precedence. The Warry report, for instance, frames science and innovation in terms of building the UK's economy:

> Science and innovation underpin the UK's position in the global economy. The UK needs to maintain its position as a world leader in high value added industries to ensure growth in our prosperity and quality of life. Research Councils have pivotal roles, both as funding bodies and as leaders of the research base. They are increasing their emphasis on knowledge transfer and the economic impact of their work. They must increase that emphasis further without sacrificing the research excellence for which the UK is rightly admired. (Warry, 2006: 2)

Echoing the Warry report, the NIHR's funding of BRCs is justified in terms of 'driving innovation' and 'contributing to the nation's international competitiveness as a major component of our knowledge economy' (King's Health Partners, n.d.). At the more local level, it's instructive to think back to various ways in which KCL proclaims to create impact. For example, there is the 'King's Health Accelerator' – an award set up by King's Commercialisation Institute that 'provides project funding and specialist industrial support for its portfolio of technologies with an aim of commercially translating great science to transformative product solutions that benefit patients and society' (Centre for Population Genomic Medicine, n.d.).

While such an economic framing of innovation is given a prominent voicing, extra-economic values are simultaneously invoked. We can see this, for instance, in the stated aims of KCL's Innovation Institutes which articulate 'marketable products' together with 'actionable policy' and 'university and culture sector collaborations' (King's College London, n.d.d). We also see it in how the NIHR articulates 'wealth' with 'health' (NIHR, n.d.). And we see it in how the Nurse Review articulates 'economic growth' with 'improving health, prosperity and the quality of life' (Nurse, 2015: 2). It's worth quoting the Nurse Review at length to illustrate how such disparate and diverging aims and values are brought together.

> Why do we do research?
> Research in all disciplines, including the natural and social sciences, medicine, mathematics, technologies, the arts and the humanities, produces knowledge that enhances our culture and civilisation and can be used for the public good. It is aimed at generating knowledge of the natural world and of ourselves, and also at developing that knowledge into useful applications, including driving innovation for sustainable productive economic growth and better public services, improving health, prosperity and the quality of life, and protecting the environment. This has always been the case since the beginning of modern science in the seventeenth century, when Francis Bacon argued that science improved learning and knowledge which "leads to the relief of man's estate", and Robert Hooke maintained that "discoveries concerning motion, light, gravity and the heavens helped to improve shipping, watches and engines for trade and carriage". Today, for advanced nations such as the UK to prosper as knowledge economies, scientific research is essential – both to produce that knowledge and also the skills and people to use it. This is why science should occupy a central place in Government thinking, if the UK is to thrive in our increasingly sophisticated scientific and technological age. (Nurse, 2015: 2)

What's revealing about this quote is how science's role in helping nations to 'prosper as knowledge economies' is positioned as the central rationale for doing research and driving innovation. In this way, all the different reasons for doing research are articulated with and subordinate to this dominant rationale. This is similar to the way in which OECD's (2010) Innovation Strategy integrates social objectives into the overarching goal of economic growth. What's also revealing about the Nurse Review is how it echoes the OECD in emphasising the role of business enterprise. For instance, in proclaiming such interactions 'drives productivity and economic growth', it recommends that academics should work more closely with businesses (Nurse, 2015: 20). These comments reiterate recommendations made in the Warry report (Warry, 2006: 4). Moreover, as we see in the opening section, they chime with the various mechanisms KCL put in place to foster collaborations with 'external partners' and create impact (e.g. Impact Acceleration Accounts and IP & licensing).

Within the body of statements on impact, there are further dimensions to the emphasis on enterprise. Not only are academics encouraged to collaborate with businesses, they themselves are encouraged to set up their own businesses. This in part reflects pressures for universities to diversify their sources of revenue as government direct block funding has been cut. It also reflects the rise of

social innovation and 'social Impact investments', which has seen a growing interest among venture capitalists (VC) in investing in university spin-outs and start-ups. Here it's instructive to think back to Entrepreneurial Institute and it's Kings20 Accelerator which enables KCL staff and students to compete for VC money. What's also revealing about the Entrepreneurship Institute is how their promotion of entrepreneurism extends beyond business enterprise. As their vision suggests, it also about fostering a mindset that applies to all aspects of lives:

> Our vision is for everyone within the King's community to recognise the benefits of an entrepreneurial mindset, develop entrepreneurial skills, and ultimately realise an entrepreneurial version of themselves King's College London (n.d. e)

To push this line of analysis further, we also might want to consider the elasticity and ubiquity of the concept of innovation and the function this serves. In its ubiquity and elasticity, we might say that the concept takes on the function of assigning a general outlook and disposition – one where to be innovative is to be always on the move, searching for the new, striving for something better (i.e. the kind of dynamic agent that resonates with the neo-Schumpeterian vision of the entrepreneur).

Public engagement

Much like innovation, public engagement (and analogous terms such as citizen engagement) is promoted across a range of policy domains, from health (Department of Health, 2017), to local planning (Ministry of Housing, Communities & Local Government, 2020), to children and young people (House of Lords, 2018). Along with its ubiquitous, the term has a degree of looseness and variability; it encompasses a wide range of activities and tools (e.g. from citizen juries to e-platforms) and invokes a range of rationales and values (e.g. from economic accountability to social justice). While it expresses such diversity, public engagement tends to take on a instrumental and technocratic framing and be positioned as a way to enhance the efficiency and effectiveness of the public services. It's instructive again to turn to the OECD. In Public Engagement for Better Policy and Services (OECD, 2009), they justify public engagement in terms of the following:

> Governments everywhere are under pressure to do more with less. Open and inclusive policy making offers one way to improve policy performance and meet citizens rising expectations. Public engagement in the design and delivery of public policy and services can help governments better understand people's needs,

> leverage a wider pool of information and resources, improve compliance, contain costs and reduce the risk of conflict and delays downstream. (OECD, 2009: 21)

The emphasis on public engagement's role in improving the efficiency and effectiveness of public services – within the context of being 'under pressure to do more with less' – is further reiterated in the aforementioned OECD (2010) Innovation Strategy. Here public engagement is positioned as a way to unleash innovation in the public sector and ultimately 'enhance productivity, contain costs and boost public satisfaction' (OECD, 2010: 154). In doing so, the authors place particular emphasis on the role of e-government:

> Today, recovery from the financial and economic crisis has drawn governments' attention to the need to realise the long-promised benefits from e-government investments. This involves an equal focus on cost saving and better quality of public services. Public-sector use of participative web tools (such as wikis, blogs and social bookmarking) is growing, both within government (to improve knowledge management and efficiency) and externally (to provide additional channels for interaction with citizens and business). (OECD, 2010: 156)

The UK Government's data.gov website is indicative of how governments are turning towards e-government in light of the financial and economic crisis. Writing in Telegraph at the time of its launch, David Cameron (Cameron, 2011) claimed the website will not only improve transparency and raise standards but also 'help mend our economy'. These claims rest on the notion that making data on the performance of public services more accessible will not only help the public to hold 'public-services to account' and 'get real value for taxpayer's money' but also help 'with the other side of the economic equation too - boosting enterprise' (Cameron, 2011).

So far we have seen how across different policy domains public engagement is promoted as a way to enhance the efficiency and effectiveness of public services. Moreover, we have seen how this instrumental framing of public engagement is propagated on the basis of achieving economic prosperity. As I will now move on to show, this voicing of public engagement is one that is echoed across statements on impact.

Within the corpus of statements of impact, public engagement tends to be defined rather broadly, referring to the various ways universities interact with wider publics. As the National Co-ordinating Centre for Public Engagement (NCCPE), put it:

> Public engagement describes the myriad of ways in which the activity and benefits of higher education and research can be shared with the public. Engagement is by definition a two-way process, involving interaction and listening, with the goal of generating mutual benefit. (National Co-ordinating Centre for Public Engagement, n.d.).

Public engagement in the sense functions a general category, encompassing various types of engagement such as 'outreach, patient-involvement, collaborative research, citizen science, participatory arts, lifelong learning, community engagement, and engagement with partners' (National Co-ordinating Centre for Public Engagement, n.d.).

Reflecting this broad categorisation, the rationales for public engagement are multiple and diverse. We see this for instance in the Research Councils UK Public Engagement with Research Strategy:

> Research improves lives. It brings benefits to individuals and societies, as beneficiaries of research and through a sustained engagement between researchers and their publics, stimulated by new knowledge and understanding. Relevance, trust, accountability and transparency are the cornerstones of the relationship between research and society. It is vital that the public have both access to the knowledge research generates and the opportunity to influence the questions that research is seeking to address. In enriching citizenship and providing wider perspectives on research public engagement improves the quality of research. It inspires people of all ages, firing the imaginations of our future researchers and feeding the skills and knowledge that are essential to the UK's economy. As a world leader in research, the UK must embrace the opportunities a changing research environment and wider cultural shifts provide to build on current successes and deliver future innovations that place research and its benefits at the centre of national economic, cultural and social prosperity. (Research Councils UK, 2014)

Along with the rather ambiguous mix of democratic, moral and instrumental rationales that are voiced, what's perhaps most revealing about this opening passage is the final paragraph which lays out the overarching vision. The phrases 'world leader in research' and 'national economic, cultural and social prosperity' are particularly evocative, invoking the rationale of competing in a global knowledge economy. This again is suggestive of how the goal of economic growth becomes a dominant narrative in which all other rationales are articulated around.

One of key inferences here being is that public engagement is a key vehicle to achieving this national vision. Public engagement is positioned as a means to deliver future innovations and by extension help build national economic, cultural and social prosperity. This instrumental framing of public engagement is one that is echoed by various government agencies and funders. In Best Research for Best Health (2006) (the policy document that paved the way for the NIHR), for instance, public engagement (or what the NIHR refer to as 'patient and public involvement'[18]) is placed at the centre of the government's plans to facilitate knowledge translation and ultimately 'improve the nation's health and increase the nation's wealth' (BRfBH, 2006: 3). The status which is assigned to public engagement rests on the notion that 'engaging patients and members of the public leads to research that is more relevant to people's needs and concerns, more reliable and more likely to be put into practice' (BRfBH, 2006: 34). It's interesting to note that public engagement is discussed under the strategic goal 5 ('Act as sound custodians of public money for public good') (BRfBH, 2006: 31), revealing an understanding of public accountability that is narrowly defined in terms of public money being used effectively and efficiently.

So far we have seen statements on impact give voice to a construction of public engagement that is centred on the notion of enhancing the efficiency and effectiveness of public services. There is a further dimension to the instrumentalisation of public engagement, one that is particularly pertinent to public engagement that takes the form of 'broadcasting' or 'showcasing', i.e. where universities communicate their research to wider publics (e.g. on social media or in a gallery setting). Such public engagement is often justified in terms similar to those in the Research Councils UK's statement above (engaging 'end-users',

[18] PPI or 'patient and public involvement' is a term commonly used in the health research field to describe the involvement of 'lay' people in research (not as research participants but collaborators). PPI is commonly distinguished other kinds of public engagement that are centred on the communication of research to lay audiences. In 2016, NIHR made PPI a research requirement and an assessment criterion.- a move in may ways which foreshadowed the Research Councils' decision to add an 'pathways to impact' section to their grant applications.

inspiring young people, and so on). However, overlaying these justifications is the idea that engagement is about being 'visible' and building a public profile/reputation (whether an institution, department, group or individual). This is a message I often heard in in training sessions on impact and engagement, with the common line being 'as an early career academic you need to be on social media to build your reputation'. It's a message that is inferred in much of the promotion surrounding KCL's public engagement 'hubs' and activities, with Science Gallery London being positioned as one of the central platforms to 'showcase':

> The Science Gallery London, completed in September 2018, brings together scientific researchers, academics, artists and the local community to inspire and engage the public with cutting-edge research through collaboration. The project was developed with the aim of showcasing King's College London's world-leading research within one of the wings of the 18th century Guy's Hospital building. The design includes a glazed facade 'shop front' for the flexible exhibition space, in addition to a café and a 150-seat auditorium. Eighty-five per cent of the existing building was maintained whilst making it more accessible and open to all, and restoring the Georgian Courtyard. (New London Architecture, n.d.)

There is a circular logic at play in the different justifications for showcasing. For instance being a publicly engaged university or academic who has a reputation for innovation and creating impact is more likely to attract interest from potential investors and partners, which will in turn put them in a better position to drive innovations and create impact. In this circular logic we again see something that is evocative of an entrepreneurial outlook and disposition. We see an understanding of public engagement that doesn't merely instil the imperative of being responsive to the needs of stakeholders, but also the imperative to proactively make one's value visible to relevant stakeholders and to demonstrate one's readiness to collaborate and/or be invested in.

Formation of strategies

From the preceding discussion on concepts, we begin to see hints and traces of different ways in which these concepts could have appeared and functioned. A consideration of the concept public engagement alone opens us up to a vast array of different bodies of thought. To name but a few, here we can include the service user-movement (e.g., Rose and Lucas, 2007) and participatory-

action research (e.g., Greenwood and Levin, 1998). Each of these different bodies of thought have their own complex and diverse histories which are irreducible to the impact agenda and which point to alternative ways of thinking and acting to those that the impact agenda tends to ascribe. In particular they point to forms of collectivity that are against and beyond the figure of the competitive economic actor. Moreover, they point to understandings of accountability that are more about addressing broader questions of public legitimacy and social transformation than they are using public resources efficiently and effectively. Similarly if we take the concept of innovation, we can find histories and knowledges that take us beyond the dominant market-economic framing that statements on impact give voice to. For instance, innovation as social transformation opens up conceptualisations of innovation that are less about solving problems defined by the social order than they are about enhancing human capacities for radical social change (Jessop, et al. 2013) Moreover, when viewing innovation in terms of radical social transformation, the vehicle of innovation isn't so much individual enterprises than it is the social movement.

The key question that follows is why do these alternative ways of conceptualising public engagement and innovation tend to remain unactualized? To address this we need to consider the strategic choices that authorities make. More specifically, we need to consider how the desires[19] and interests of 'impact agenda setters' take shape in two intimately interwoven ways: (1) the imaginary of the knowledge economy and (2) a neoliberal mode of governance. I will first discuss these in turn, before moving onto to consider their intersection.

The imaginary of the knowledge economy

To view the knowledge economy as an imaginary is to view it as a vision or narrative that guides economic strategies and government policies. It thus involves considering how the knowledge economy imaginary 'contributes performatively to the emergence of an already posited, but still incomplete, transition towards knowledge-based economies.' (Jessop, 2017: 854).

What then defines the knowledge economy imaginary? As Jessop (2017: 854) suggests, 'at the centre of this imaginary is the production, valorisation and application of knowledge as a key driver of the economic efficiency, competitiveness, profitability or effectiveness of the private, public and

[19] The use of term desire here refers to 'molar' desire, that is 'desire that adheres to and reinforces social norms and expectations' (Thompson et al., 2021: 14). There is of course another modality of desire – that which seeks to break away from, and disrupt, social norms and expectations. This other (molecular) modality is brought into focus on the section below on Content and is explored further in the following chapter.

third economic sectors, of good governance and of an enhanced quality of life.' In the section above we got a sense of this imaginary at work across different policy domains (industry, health, higher education) and in the formation of different concepts (innovation and public engagement).

While it's theoretical roots can be traced back to the work of Schumpeter, to understand how the knowledge economy imaginary has gained such traction, it's necessary to view it in light of the post-war crisis in/of Fordism. It's within this context that a 'knowledge economy' was 'discovered', offering new ways to gain competitive advantage in the capitalist world market. The 1980s saw this newly find economy imaginary become more solidified in government strategies and policies, with the US being the forerunners. Others soon followed, with developments occurring at various scales of governance (from cities to supranational organisations). Illustrative examples here include OECD's The Knowledge-based Economy (OECD, 1996), EU's Lisbon Strategy (European Commission, 2000), and the UK Government's Investing in Innovation (Treasury, HM, 2002). More recently, in the wake of the 2008 financial crisis, we have seen the continuation of the knowledge economy imaginary in the claims that innovation will help boost growth and beat the recession (Leadbeater et al, 2008; OECD, 2010).

So here we begin to see how the knowledge economy has become a dominant imaginary that frames economic strategies and societal visions. How has this played out in the field of higher education? A central trend has been a shift away from basic, curiosity-driven research and a move towards applied and utilitarian research. As noted above, universities have long carried out research that seeks to meet a practical end. However, the demand for more 'useful' knowledge has become more pronounced with the rise of the knowledge economy imaginary. Indeed, as universities are assigned the role of stimulating economic growth and boosting the nation's competitiveness, the belief that basic research and open-ended enquiry is a public good or an end in itself has been challenged. This is reflected in the pressures for universities to work more closely with government and industry and to engage in knowledge transfer (exemplified by the expansion of science and technology parks, spin out companies and so on). Such developments are most apparent in science, technology, engineering, mathematics (STEM) subjects but as Jessop notes they have 'penetrated the social sciences and even the arts and humanities when deemed relevant to competitiveness, government agendas or social control' (Jessop, 2017: 855).

Further key trends can be found in changes to university governance. As universities have become construed as economic actors contributing to the knowledge economy, they have thus been

increasingly regulated in terms of economic efficiency and 'return on investment'. This is reflected in how governments have allocated resources to research areas deemed of most value (with STEM often being the prize-winners). As Jessop suggests it's also reflected in a shift away from the traditional 'Humboldtian' model of governance and a move towards to managerialism: He notes:

> Reflecting this reorientation towards serving the KBE, universities have adopted the latest management fads for increasing efficiency, such as New Public Management principles, enterprise resource planning, business process re-engineering, total financial management, customer relations management (for students), data mining and the sale of data to outside commercial interests (Eaton et al. 2013). In addition, employers and practitioners are getting more involved in curriculum development, managers of private enterprise are drawn into educational governance and agenda setting, accountants and financial managers acquire more influence over strategic formulation, and mobility is fostered between the academy and non-academic worlds. (Jessop, 2017: 856)

While it's true the rise of managerialism has dovetailed with the reorientation 'towards serving the KBE', managerialism can't simply be reduced to the knowledge economy imaginary. Another (though intimately connected) key factor we need to consider is the onset of neoliberal public sector reforms.

A neoliberal mode of public governance

As noted in the first chapter, signally a shift to a neoliberal mode governance, the 1980s saw a swathe of public sector reforms across the UK that refashioned the ways in which workplaces are governed. These reforms are commonly associated with the onset of 'new public management' and 'managerialism' (Peters et al. 2012), and they have given rise to what some policy scholars often refer to as an 'audit culture' (Shore and Wright, 2015b) or a culture of 'performativity' (Ball, 2000). While marked by a notable degree of variability, these reforms are evident across numerous advanced capitalist countries and have been propagated by intergovernmental organisations such as the OECD (Hood, 1995).

Bearing the influence of public choice theory (Buchanan & Tollison, 1984) at the heart of this move towards a neoliberal mode of governance is the idea that market-like arrangements enhance

productivity and efficiency. This idea rests on the notion of the homo economicus - i.e. the economic man who thinks in terms of self-interest and utility calculations. In seeking to treat (or rather 'mould') people as such, governments sought to apply the logic of market competition to all spheres of activity. Thus what we see with these reforms is an confluence between 'marketising' and 'economising' (Kurunmäki, et al. 2016). For its proponents, cultivating a culture of market competition (marketising) enhances costs efficiency and effectiveness (economising). At same time, making things comparable in financial terms (economising) opens up new performance measures and facilitates a culture of competition (marketising).

A central way in these ideas have been implanted is through the introduction of systems of audit and performance management that demand public sector organisations and workers demonstrate their worth and compete against each other. This also coincides with the adoption of other kinds of corporate management practices designed to ensure organisations are 'well-managed' (e.g., corporative objectives, strategic leadership).

While these reforms have been far reaching, since the late 1990s terms such as 'post NPM' and 'new public governance'(NPG) have been applied to draw attention to patterns of governance that diverge from NPM and signal an interest in promoting participatory democracy and fostering partnerships between different actors (Dent and Radcliffe 2005; Osborne, 2006). Some commentators go so far to suggest that NPM is 'dead' (Dunleavy et al., 2006). Yet, while we have seen an interest in such deliberate forms of democracy, we have also seen the continuation and expansion of systems of audit and performance measurement. Moreover, as we see above in relation to the concepts of public engagement and innovation, participatory and horizontal modes of governance can imbue and instil the market-economic logics the characterise NPM. Viewed in this light, claims that NPM is dead appear misguided. This is not to suggest that the current situation exactly mirrors that of the mid-80s and the 90s. The terrain we now find ourselves is characterised by a more complex mix of traditions, technologies, practices, discursive repertoires and so on that are put to work in processes of governing. However, what we see is the continuing dominance of an approach to public sector management that seeks to instil the logic of market-competition and which bears the traits of NPM and the concomitant shift towards a neoliberal mode governance.

The impact agenda is a good case in point. For instance, the introduction of an impact criterion that came with REF represents an expansion of the realms of performance measurement and academic competition. Looking beyond the UK, it's also interesting to note how those countries who have

been keen to assess the impact of research (e.g., Australia, New Zealand, Sweden, Canada) (Adam, et al. 2018) are those where NPM took a strong hold (Hood, 1995). What's also revealing about the impact agenda is how it brings together tools and techniques associated with NPM (e.g., quality-related funding and performance measurement) with tools and techniques associated with NPG (e.g. public engagement and participatory knowledge production). What we see here is a 'perverse' confluence between ideas associated with neoliberal market competition and those associated with collective democracy. We see this in how public engagement becomes an assessment criterion and thereby further instils and extends the realms of academic competition. The key point to grasp is how, in this process, the ideas of collectivity that the concept of public engagement animates are thus rendered subordinate to the logic of competition.

A more pronounced connection?

The imaginary of the knowledge economy and a neoliberal mode of university governance have long been intimately interwoven and mutually interdependent, as Jessop (2017) alludes to when he notes how the shift away from a 'Humboldtian' model of governance coincided with universities being construed as economic actors contributing to the knowledge economy. What we see with the impact agenda is a further expression of this connection. Moreover, we might say the impact agenda reveals a more pronounced connection. Here it's worth reflecting on how the regimes of audit and performance measurement that grew out of the neoliberal public sector reforms of the 1980s have been centred on 'academic' outputs (e.g., publications, citations, grants) as opposed to 'non-academic' impact. This all changes with the arrival of the impact agenda as 'impact' is rendered a measure of performance. In effect, the drive for knowledge transfer that is characteristic knowledge economy imaginary becomes more bound up with regimes of audit and performance measurement that are characteristic of a neoliberal mode of governance.

At this point it's instructive to turn to the Warry Report (Warry, 2006). What's particularly revealing in this report are two central recommendations. Firstly, 'influencing' – that is, 'Research Councils should influence the behaviour of universities, research institutes and Funding Councils in ways that will increase the economic impact of Research Council funding' (Warry, 2006: 3). Secondly, 'metrics' – that is, 'Research Councils should make strenuous efforts to demonstrate more clearly the impact they already achieve from their investments' (Warry, 2006: 5). Both these recommendations are positioned as a way of ensuring the UK is able to compete and maintain its leading position in the global knowledge economy. Thus what we see here is the knowledge economy imaginary being

articulated together with a neoliberal mode of governance. It's worth reminding ourselves that the Warry report is the key policy text that paved the way for the introduction of impact statements and the introduction of impact in the REF. This tells us much about the desires and interests that have driven the impact agenda and which direct the ways in which its discursive elements take shape.

Interrelations

By following the four directions of archaeological analysis identified by Foucault, I have set out the body of rules that govern the impact agenda's discursive formation. In doing so, I have traced out the discursive and historical conditions that account for existence of 'impact' and the 'impactful academic' as objects of discourse. What comes into view is a semiotic system that ascribes a particular understanding of what it means to do academic research and what it means to be an academic. Before moving onto consider how this semiotic system acts and works with the impact agenda's content, I want to briefly distil the key interrelations between the formation of objects, enunciative modalities, concepts and strategies. In treating them as separate subgroups as I have done so above, there is the risk of overlooking their intersections and reciprocal relations.

A key interrelation to note is between objects and enunciative modalities. The formation of impact as a discursive object relies on statements that are considered meaningful and accepted, which, in turn, requires subjects who are authorised to speak about impact and are deemed legitimate. At the same time, the construction of impact constitutes the conditions of existence of enunciative modalities. For instance, the emergence of impact as a new way of assessing academic performance enables researchers working in the field of research evaluation to review and inform impact assessment approaches and become 'impact experts'. A further set of key interrelations come with the formation of concepts. Concepts provide the vocabulary that is employed to constitute objects. As we see above, the concepts of innovation and public engagement help to express what it means to create impact and to be an impactful academic. A key point to note here is how these concepts have possible meanings and functions that tend to remain unactualized. What this brings into play is a recognition of authorities' interests and desires and their strategic choices as to what is permitted and legitimate

Content

In the section above we see how ‘impact’ has become a new way of judging and assessing the performance of universities and academics. Accordingly, we see the emergence of a semiotic system that provides the language to understand what it means to do academic research and what is means to be an academic. I now turn to the impact agenda’s content and attempt to trace out the material arrangement of the university.

Let’s begin with a short ethnographic vignette that captures a typical journey to ‘campus’. On this occasion I was on my way to a ‘lab meeting’ held in the Guy’s Tower of Guy’s Hospital.

> I reach the exit of London Bridge Station. The Shard looms over my head. With little thought, and while continuing to bustle my way through the commuters and day trippers, I reach into my pocket and I get out my phone. I instantly go to check my emails. Another email with from Acadmeia.ec the subject line "J. Paylor": mentioned in an influential paper’, which is strange as I haven’t yet published a journal article. My phone goes back in my pocket. I continue making the short walk towards the main entrance of Guy’s Hospital, passing the ‘soon to be opened’ Science Gallery as well as numerous colleagues (marked by the KCL badges around their neck) walking towards the entrance to KCL’s New Hunts Library. As I near the entrance of Guy’s Hospital, an ambulances pulls up. A few patients, distinguished by their ‘overnight’ clothes, are standing and sitting to right of entrance. I presume in need of some fresh air (or a smoke). As I enter the reception area, I’m hit by a familiar smell and a tackiness underfoot that tells me in a hospital. I’m also hit by a peculiar atmosphere that seems unique to hospitals – a certain sterileness mixed with a sense of conviviality. There’s the usual hum of activity. Nurses and doctors moving between buildings. Patients being discharged to be met by loved ones. Patients arriving to be directed to the right floor. Passing between the different bodies, I make it to the lift to find a big que. I reach for my phone again. (Fieldnotes, September 2018)

This vignette brings into focus the different kinds of bodies that can make up a university. We can categorise these under three broad headings: human bodies; the physical environment: and the virtual environment.

Human bodies

There are various kinds of human bodies that constitute a university's content. Perhaps most significantly are the academics (and 'research staff') who undertake research and teach across a wide range of disciplines and fields. And, of course, there are the students, from undergraduates to PhD students. Administrative staff (or 'professional services') also make up a notable addition (e.g., departmental managers, research managers, finance administrators). There also people from 'outside' of the university who help to constitute its content. For instance, 'knowledge users' or stakeholders such as policy makers, health practitioners, local communities who are positioned as collaborators and/or beneficiaries in the production and translation of knowledge.

All these different human bodies come with their own proprieties and potentials. What's of particular interest here is how these bodies, not least academics, are driven to engage with and impact wider society. Many of the academics I spoke to expressed how they have always carried out research with the aim to benefit wider society, and have always sought to engage wider publics through various kinds of participatory modes of knowledge production. Indeed many expressed how their passion to help others and 'make a difference' was what spurred them on to become academics. This passion was often articulated in terms of social justice or an ethics of care. It was also often articulated with reference to kinships and everyday social relations (e.g., a family member who had cancer or encounters with patients on the wards). For some academics, the words weren't readily available to articulate their passion- 'I don't know, it's always where my interests have lied' as one academic put it.

There is one particular ethnographic encounter that has remained firmly lodged in mind and which speaks to this passion. After a seminar held in the Guy's Tower, I got chatting to an academic associated with the BRC. I was telling him about my research, and the conversation moved onto the different motives for doing research. He made a brief reference to walking through the entrance of the hospital. He didn't expand on what he meant, and the conversation moved on too quickly for me to probe. We can speculate that seeing patients helps to remind him of 'end-beneficiaries'. Along with this, we might want to speculate about the affective dimensions at play. Think back to the opening vignette and the different human bodies flowing in and around the entrance to the hospital. There is of course no way of knowing the different affective states being experienced in that moment, but we might want to ponder about the corporeal experience of feeling connected to other humans (especially at times when people's health is at stake.) What I have in mind here is a (rather undefinable) life-affirming feeling that moves us to act in the world.

Physical environment

Figure 2. Entrance to Guy's Hospital (Author's own photo)

Let's zoom out a bit and consider the spatial location and lay out of the hospital. In Figure 2 we can see the main entrance to Guy's Hospital. This photo was taken with my back against the wall of KCL's News Hunts Library building, which gives an indication of how Guy's Hospital and Guy's campus intersect. The building on the left is the Shard, and the tower next to it is Guy's tower – the largest hospital tower in the world. Guy's tower is not just home to hospital wards but also various research labs and centres (including the BRC) that are part of KCL. This coextensive nature of KCL and Guy's Hospital reflects how KCL has a long history of being a teaching hospital, and it serves as a reminder that universities have never simply been 'ivory towers'.

While KCL has never simply been an enclosed space that is detached from the 'real world', its openness to its immediate 'outside' environment has taken on new dimensions in recent years. A notable development is the arrival of Science Gallery London (SGL), which forms part of a wider set of changes that have come with KCL's strategic goal of investing in 'exceptional and sustainable estates' (King's College London, 2016: 23) (the opening of Bush House being the other notable example). It's worth dwelling for a moment on the architectural design of SGL (which also in many ways mirrors the design of Bush House). A good starting point for doing is the quote shown above in reference to public engagement as 'showcasing'.

Figure 3. The 'shop front' of Science Gallery London (Author's own photo)

In Figure 3 we see a photo of the 'glazed facade 'shop front' for the flexible exhibition space' (New London Architecture, n.d.). The use of Glass façade is typical of contemporary commercial buildings and large structures such as skyscrapers, tying SGL in with the Shard that sits opposite. The use of glass façade also suggests an attempt to create an open and transparent shop front.

Figure 4. Guy's 'Georgian Courtyard' (Author's own photo)

In Figure 4 we see a photo of Guy's 'Georgian Courtyard' (New London Architecture, n.d.). This was previously used as a car park, but is now a 'public square' which can also be hired for 'cultural' events. The large steps lead up to the courtyard entrance to the SGL where there is a café terrace and seating area. The building directly behind is the Shard.

Figure 5. Render of Science Gallery Café (Dawood, 2015)

In figure 5 we see a render of the café. This representation captures the layout and style of the final design, which is in keeping with the minimalist and 'open' feel that is typical of many modern restaurant interior designs, and is quite unlike the McDonald's fast-food restaurant that previously occupied the building.

From this brief consideration of SGL architecture, we can see how KCL and its architects sought to create a space where the spatial and experiential boundaries between KCL and its immediate 'outside' become blurred and permeable. As KCL proclaim, 'Science Gallery London acts as a porous membrane between King's and the city' (King's College London, n.d. c). It's instructive note how SGL forms part of the redevelopment of London Bridge Station – what has been dubbed 'the London Bridge Quarter'. With Shard as it's centre piece, Southwark Council see this development as "an opening up' of the station, to the theatres, markets, shops, hospital facilities, university buildings, hotels, offices and the homes in other communities and beyond the area' (Herbert, 2018 27). The local authority believe by creating an 'ever-stronger destination for culture, commerce and enterprise' that London Bridge quarter will 'open up opportunities to everyone in the borough (Herbert, 2018: 27).

SGL's function as 'a porous membrane', coupled with it role in developing the London Bridge Quarter, is suggestive of how SGL is envisaged as forming a 'univer-city'; that is, a kind of "third place', existing between home and work and combining 'shopping, learning, meeting, playing, transport, socializing, playing, walking, living' (Spencer, 2011: 16). Such a space is indicative of the 'spatiality of contemporary capitalism' whereby the production of all social space tends to 'converge upon a single organizational paradigm designed to generate and service mobility, connectivity and flexibility' (Spencer, 2011: 9). Networked, landscaped, borderless and reprogrammable, this is a space that functions 'to mobilize the subject as a communicative and enterprising social actant' (Spencer, 2011: 9). Such processes of subjectification don't simply work through the creation of 'smooth' spaces that dissolve boundaries and open up sites of encounter and exchange, but also the creation of 'atmospheres' that incite the 'requisite connective, flexible, and informal modes of conduct' (Spencer, 2011: 16).

KCL's shifting physical landscape needs to be understood in relation to changes in the funding landscape of universities. As is often remarked, due to cuts in block funding and needing to attract students in an increasingly competitive marketplace, universities have developed an interest in real estate portfolios and developing 'shiny buildings' (Hale and Vina, 2016). There is, however, a further

dimension to the 'shinification' of campuses that SGL and its role in creating a 'univer-city' point to. Here it's instructive to think back to the concept of innovation and how flows of venture capital and private money are now being directed towards university start-ups and spin-outs. It's also worth taking note of how SGL is promoted 'as driving innovation' and as a space to 'showcase the work of existing developers and entrepreneurs' (Science Gallery London, 2014). Viewed in this light, the emphasis universities place on developing real estate is not just about attracting students but also investors of start-ups and spin-outs.

Virtual environment

It's not just changes to the physical environment that are rendering universities more permeable and visible to the 'outside' world, but also the virtual environment. Indeed, reflecting the central role digital media now plays in our everyday lives, websites and other digital platforms are now a key interface between universities and wider publics. We see this, for instance, on KCL's Research and Innovation webpages where audiences are fed regularly 'Impact Stories' that showcase how KCL are 'creating impact' (King's College London, n.d. p). And most (if not all) departments and individual academics have a profile page. Alongside its website, KCL and its various staff also have a visible presence on social media platforms. This includes more generic platforms (e.g., Twitter and LinkedIn) as well as more academic/research specific ones (e.g. ResearchGate, Academia.edu, OurResearch). Regarding the latter, it's interesting note how some of these platforms use various metrics and rankings to measure and display the performance of academics. A related though somewhat different kind of digital platform that has emerged is ResearchFish. Both UKRI and the NIHR ask their award holders to use this platform to capture and record the outcomes (including the non-academic impacts) of their research. In a way, it offers funders a more 'live' and ongoing assessment of feedback to that of the REF.

As the ethnographic vignette above points to, such platforms are with us wherever we go. Moreover, we frequently plug into them with little conscious thought. It's quite revealing to be down the pub with colleagues or friends and see the ease and frequency in which people check their phone and surf the platforms. Such moments are suggestive of how digital platforms penetrate all aspects of our everyday lives, dissolving boundaries between work and leisure. Moreover, they point to how platforms demand that we are not merely visible but visibly active and engaged (we need to be responsive to chats, keep our profiles up to date, and so on).

To understand the habitual (and sometime compulsive) kinds of behaviour that platforms can induce, we need to also recognise how such activity operates at the level of affects. Here we might consider how there are an ambiguous mix of sad and joyful affects that are potentially activated and mobilised. There are the pleasures of getting a 'like' or finding out your articles has been cited. However, as Gilbert notes (2020: 162) such pleasures that platforms generate tend not to be the 'joyous affect' of open-ended lateral relationship-building, but rather a sense of 'machinic enslavement' (Lazzarato and Jordan 12–17) whereby the user is compelled to engage with the system monotonously, repetitively, but entirely unproductively'[20].

Gilbert's comments shift attention to how the increasing role of platforms in academic life needs to be understood in relation to both the extension of mechanisms of surveillance and an overall sense of reduced possibility and resources that has followed the 2008 financial crisis (Read, 2019). Viewed in this light, the joyful affects that platforms offer (a like, a new contact and so on) are less about experimenting with new affective encounters and opening up new modes of existence, than they are finding small pleasures within a context of limited possibilities for joy (Read, 2019). Moreover, such (limited) joys are inseparable from sad affects. For instance, the pleasures of getting 'a like' coexist with and emerge from a sense of fear of not showcasing one's value (and a concomitant sense of insecurity that stems from a precarious job market).

To push this line of analysis a bit further, I will now turn to an ethnographic encounter that further reveals platforms' ability to penetrate our daily lives and produce certain kinds of affects. I was in the process of interviewing a senior academic, and around 20 mins in we got onto the topic of ResearchFish. Somewhat despondently, the academic asked if had ever been on the site, to which I responded 'no'. He then said 'shall we have a quick look'. At this point I was bit puzzled as I wasn't sure how we could access the website there and then. Then I realised the meeting room we were sat in had a screen on the wall linked up to a PC. Before I knew it we were both looking at his profile/dashboard. We then proceeded to look at one of his NIHR grants that require him to record data on ResearchFish. In a rather perfunctorily fashion he went through various categories in which data is recorded under (publications, engagement, IP). I interrupted him to ask whether he thinks it's a useful tool. In a matter of fact tone he replied, 'well, it's funder driven, and it's tax-payer's money'.

[20] Machninic enslavement is a term first used by Deleuze and Guattari and has more recently been taken up Lazzarato to describe mechanisms of control that are a-signifying , that is signs that 'tune in directly to the body (to its affects, its desires, its emotions and perceptions) and 'trigger an action, a reaction, a behaviour, an attitude, a posture.' (Lazzarato, 2006, para 7).

Along with the ease in which we accessed the ResearchFish, what was perhaps most revealing about this moment was the way in the academic used and spoke about the platform. He appeared to show a passive, if not begrudging, acquiescence that bore the traits of the 'disaffected consent' that Gilbert (2015) has observed in relation to managerialism and neoliberal hegemony more widely. He wasn't enthusiastic about the platform, nor was vehemently opposed. It came across that he viewed it as another thing he needed to do to meet the conditions and requirements of funders – a view that seemed to be accompanied with feelings of dismay. At the same time his comment about tax-payers' money suggest he feels it's right that he is held accountable for the public money he uses - a comment which perhaps indicates an attempt to rationalise his use of the platform and/or how audit systems 'work on and through our capacities as moral agents and professionals' (Shore 2008: 291). Thus, there a degree of ambivalence to his use of the platform, one that entails an ambiguous mix of feelings and thoughts and which leaves him in a state of acquiescence.

This kind of response (not just in relation to ResearchFish but 'impact' in general) was pretty common amongst the academics I met and interviewed. Indeed, the topic of impact often provoked comments such as 'needing to play the game' or 'it's another box to tick' which were imbued with a sense of dismay or fustration. The key point to reflect on here is how such disaffected consent points to a central way in which the dominant social order asserts its control. As Gilbert (2012) notes, the cultivation of frustration - the key element of the experience of disaffected consent – works to inhibit the very kind of collective creativity that holds the potential for alternative futures:

> For capital, uncommodified collective creativity is always dangerous, and the point of managerialist bureaucratisation is precisely to inhibit it, to destabilise it, to ensnare it. That's why we experience bureaucracy as so frustrating: because to frustrate is precisely its intention. The very purpose of managerialist bureaucracy is to frustrate the expression of that creative potential for collaboration which, according to Deleuze (or really, according to my reading of John Protevi's reading of Deleuze's reading of Spinoza) is the very stuff of joy. And according to Deleuze & Guattari and to their follower Negri, the expression of this joy, of this positive desire and potential for connectivity, is also the very stuff of revolution, and of democracy as such. (Gilbert, 2012: para 18)

The porous university?

By considering the different material elements that constitute the university, we begin to see the contours of its form. If there was one word to capture this form, we might want to borrow KCL's descriptor of SGL and say 'porous.' The various human bodies that comprise the university are not limited to academics, students or administrative staff but also include a range of 'non-academics' who are enrolled in the production and translation of knowledge. The physical environment of the university is coexistent with its surroundings, with buildings such as SGL helping to form a third space (a univer-city) that dissolves the boundaries between academia, culture, commerce and enterprise. The virtual environment renders the university and academics visible and transparent to ever expanding audiences and further blurs the boundaries between work and leisure.

While the boundaries of the university seem be becoming ever more porous, the university can simultaneously be a bounded and striated space. Staff members and students are identified by name badges which grant access to buildings, and we are all incited to see ourselves as part of 'the family' and contributing to the mission/vision (departmental meetings and the like serve as regular reminders of such attachments and the norms of conduct to follow). Furthermore, some 'outsiders' perhaps find it more easily than others to pass through its 'porous membrane'. SGL café is illuminating in this regard. While one of SGL's stated aims is to engage young people from the local community, it's somewhat ironic that the McDonald's that previously occupied the building seemingly attracted more young people. This could be to do with the popularity of the McDonald's brand. But we might also want to consider SGL café's interior design along with the style of service (you have to wait to be seated) – all features of a dining experience we might say business workers from the nearby offices are more accustomed to.

Boundaries can also be drawn within the King's 'family' of staff and students. This was starkly apparent when 13 students and one staff member were barred from entering university buildings on the day the Queen visited to formally open Bush House. With no prior wanting, the ID swipe cards of the said students and staff member were deactivated, meaning they could not pass through security gates. It materialised that the KCL security team identified them as 'protestors' who could potentially disrupt the ceremony. The potential 'protesters' were identified through previous protests held on campus and included members of campaign groups such as KCL Justice Four Cleaners and KCL Action Palestine. A consideration of who was blocked as opposed to who was invited to the meet the Queen (e.g. the Entrepreneurship Institute) maybe tells us something about the kinds of public engagement that are deemed permissible and of value.

It would thus be wrong to simply view the university as being porous and entirely co-extensive with its surroundings. It's more appropriate to view its form as a mixture of openness and closure. The key point to distil is how this form of content mobilises affects and incites certain kinds of conduct that are conducive to the production of the impactful academic. There are various elements at play here, including an ambiguous mix of joyful and sad affects. On one hand, we see spatial and experiential configurations that mobilise academics' desires to connect with other bodies and experience joy. At the same time, these configurations are 'structured' as boundaries are drawn and limits are placed on what and who is permissible. Moreover, joyful affects co-exist with and are overshadowed by sad affects that inhibit the potential of collective creativity and entail the imposition of competitive social relations.

Abstract Machine/s

Having now traced out the impact agenda's expression and content, we now need to ask what places these two sides of the assemblage in relation with each other? Put another way, we need to ask what abstract machine do they share? I will address this question by first specifying the impact agenda abstract machine (that which defines the impact agenda and its particular machinic function) before zooming out and pointing to broader abstract machines at work. It's important to not forget that an abstract machine has two sides or 'states': one that is enveloped in a stratum (and which defines a stratum's unity of composition) and another which develops on a destratified plane of consistency. My focus here is the former, while the following chapters seek to bring to light the latter.

The impact agenda abstract machine

I want to suggest that what defines the particular machinic function of the impact agenda is the production of the 'impactful academic' (i.e. an enterprising subject who demonstrates their value through the effective and efficient pursuit of research impact). It's my contention that this general function is what gives the impact agenda its particular character and a degree of consistency across different settings. When we speak of an impact agenda in this sense we are not merely referring to one particular audit technology (e.g. REF) but rather a productive force that can be effectuated by different concrete assemblages across a range of settings. While the concrete assemblages may vary (different evaluation devices, concepts, and so), we can nevertheless distil the distinctive functions

of the impact agenda's expression and content. The impact agenda's expression ascribes a particular understanding of what it is do academic research and what it is be an academic (i.e the impactful academic). Content on the other hand concerns the arrangement of the material bodies that constitute universities. Its functional qualities lie in the ability to activate and mobilise affects and incite certain kinds of conduct that are conducive to the production of impactful academic.

So far I have specified the impact agenda stratum's unity of composition (the production of the impactful academic). To further delineate the impact agenda, it's necessary to specify when it emerged. Periodisation is always a fraught task, as historical formations are never clear cut. However, it's a necessary one. As Buchanan notes, 'all strata, via the abstract machine they encapsulate (as its unifying principle), are named and dated.' (Buchanan, 2021: 49). The first point to note here is that the level we are dealing with relates to the governance of universities. If we take a broader view (as we will shortly) the impact agenda can be seen to form a layer within larger strata that have been taking shape for decades. So when did the impact agenda, as a distinct period in the governance of universities, begin? I want to suggest that 2006 is the year that marks the emergence of the impact agenda. While the seeds had been sown prior to 2006, and while the term 'impact agenda' was not yet vernacular, this year saw the publication of the pivotal Warry Report (Warry, 2006) which led to Research Councils UK to introduce impact plans to their grant applications and which also paved the way for the inclusion of impact in the REF. It's these events that rendered 'impact' a new way of classifying, assessing and performing academic research and which gave rise to the construction of impactful academic. In effect we see a new phase in the governance of universities, one that reveals are more pronounced connection between a neoliberal mode of governance and the imaginary of the knowledge economy.

In outlining the impact agenda's expression and content separately as I have done so above, the ways which these two sides of the concrete assemblage come together to effectuate the impact agenda abstract machine is somewhat obscured. To that end, I will now seek to bring to light the workings of the assemblage by focusing on the enactment of public engagement[21].

Think back to academics' passion to engage with wider publics and 'make a difference' that I discussed when working through the impact agenda's content. Here I touched on how many academics spoke about having always engaged with non-academics. For some, such public

[21] Many of the issues discussed below will be picked up in following chapter where they will be illustrated by ethnographic and interview data.

engagement was actively built into their research studies. For others, it took on more 'informal' and spontaneous qualities (e.g., interactions with other people that would happen routinely in their everyday lives, whether that be at work or elsewhere). Both these modes of 'public engagement' speak to an energy of connectivity that traverses academia and beyond. We can think of this energy of connectivity as the key matter-energy that the impact agenda assembles, and to grasp such processes of assemblage it's instructive to consider how public engagement is 'fabricated' (Ball, 2000).

The introduction of Pathways to Impact and REF Impact case studies effectively made public engagement a condition of funding and an assessment criterion. In other words, it became a 'policy imperative' that academics need to perform. One of the key consequences being, by academics own admission, is that public engagement tends to take on the traits of 'impression management' – i.e. it's choreographed to meet and please the funder's gaze.

Such acts of impression management can entail 'constitutive fabrications' (Ball, 2000) whereby academics change their public engagement practices to fit the expectations and requirements of funders. For instance, academics spoke about how they engaged with formally recognised patient/public advisory groups in order to document 'proper' public engagement and not merely be reliant on more 'informal' interactions with wider publics. Acts of impression management can also entail 'representational fabrications' (Ball, 2000) whereby academics present their public engagement in a way that fits funders' requirements and expectations. For instance, academics intimated how in their grant applications they repackaged their public engagement in terms that fit funders' definitions and how they embellished the extent to which public engagement had enhanced the relevance of research.

These constitutive and representational fabrications are reflected in institutional structures and processes. Think back to the public engagement support listed under the ways in which KCL seeks to create impact. Here we saw how Impact and Engagement Services help researchers 'build high-quality, high-impact public engagement into research grant proposals' and how their training includes sessions such as 'What funders look for' (King's College London, n.d. b). We also saw how public engagement managers can link up researchers with pre-established user/lay groups who are embedded within the university (i.e., groups that can provide the necessary 'formal' and auditable engagement).

At play in the fabrication of public engagement are complex liaisons and interactions between the impact agenda's expression and content. The first key point to glean is how the ritualistic practices of fabricating public engagement carry and embody the ways of thinking that impact agenda's expression ascribes. As the emphasis is placed on 'showing' and meeting the gaze of those in a position of judgement (not least funders), academics are compelled to demonstrate a notion of public engagement that is centred on the instrumental idea of facilitating knowledge translation and using public funds efficiently and effectively. At the same time, this act of demonstrating the legitimate kind of public engagement becomes a way of demonstrating one's value and gaining an advantage in the competitive game of procuring research funds.

A second point to glean is how fabricating public involvement entails the production of affects. It's interesting to note here how, among academics I spoke to and spent time with, the demand to perform public engagement provoked a varied and somewhat ambivalent mix of reactions. Some appeared to find pleasures in the increased opportunities to do (and the greater valued assigned to) public engagement. Such pleasures speak to how the imperative to perform public engagement taps into and animates flows of desire and affect and incites academics to become more engaged, mobile and visible. At the same time, it's hard to separate the joy of connecting with others from the pleasures academics seemed to derive from becoming skilled in public engagement and boosting their academic profile. In this way, the joy of public engagement becomes less about the joy of collective creativity than the pleasures of investing in one's human capital and succeeding in the game of grant seeking. While some found pleasures in the enhanced emphasis on public engagement, others displayed feelings of dismay and frustration. Bearing the traits of disaffected consent, academics bemoaned the need to tick another box and were uneasy about the inauthenticity and plasticity that characterises the fabrication of public engagement. As noted above, such sad affects inhibit the potential of collective creativity and leave academics acquiescent with a culture of performativity that instils the logic of market competition.

What we then see with the fabrication of public engagement are the different elements and processes (both expressive and material) that come together to produce the impactful academic. Put another way, in the practices of fabricating public engagement we see the work of a concrete assemblage effectuating the impact agenda's general function. Of course, fabricating public engagement far from exhausts the different ways in which this function is effectuated. It does however offer a useful illustration of the kinds of relations at play. It also should be noted that in the short account of fabricating public engagement above that I obscure and fail to account for elements

and processes that escape the stratifying grip of the impact agenda. Here we should remind ourselves that assemblages move in different directions, both towards the strata and the plane of consistency, and it's in the following chapter where I bring such complexities to fore. Before then, it's necessary to step back a bit further and trace out the broader abstract machine's that the impact agenda assemblage effectuates.

Broader abstract machines: neoliberalism and societies of control

We could potentially identify a multitude of interconnecting abstract machines that the impact agenda effectuates. I want to focus on two that are particularly revealing of contemporary mechanisms and formations of power: neoliberalism and control society.

Neoliberalism

Neoliberalism is term that is defined and applied in various ways, and these variations are well documented (Gilbert, 2013b; Birch, 2015; Jessop, 2013), so I'm not going to reiterate them here. What I will say is that the approach I adopt (to view neoliberalism as an abstract machine) doesn't exhaust all other approaches nor is it necessarily incompatible with other approaches. I take heed of Jessop's (2013: 70) comment that a 'diversity of approach can be intellectually productive for a complex, overdetermined, fluid and necessarily impure phenomenon like neoliberalism.'

To grasp what it means to think of neoliberalism in terms of an abstract machine, it's instructive to turn to the work of Gilbert (2013b). Gilbert (2013b: 21) suggests that what defines the machinic function of neoliberalism 'is the tendency to potentiate individuals qua individuals while simultaneously inhibiting the emergence of all forms of potent collectivity.' For Gilbert (2013a) it's this general function that gives neoliberalism its consistency across disparate settings (from the coup in Chile in 1971, to Thatcher's and Reagan's reign in the 1980s, to the public-sector cuts imposed on Greece after the 2008 financial crisis, and much more of course).

Let's briefly unpack the two key terms in the above quote: individuals and potent collectivities. Neoliberalism rests on the idea that the social world is made up of autonomous individuals who act in terms of their self-interest. Accordingly, people are encouraged see themselves as individuals rather than as members of collectivities, and competitive market-relations are promoted across all spheres of life. Potent collectivities is a term Gilbert (2016: para 13) coined to refer 'groups on

various scales that are capable of making some shared decisions and acting on them in ways that change something'. For Gilbert, the basic objective of all democratic politics is to enable potent collectivities to come into existence. Seen through the lens of neoliberalism, such an objective appears unworkable as it runs counter to the very notion of the autonomous and competitive individual.

The mechanisms by which neoliberalism's general function is effectuated are diverse, and many of which are evident in the impact agenda assemblage. Of particular note is a mode of public sector governance that instils the logic of market competition. We see this in how the impact agenda renders impact a new measure of performance and how the impactful academic in turn is rendered an enterprising subject. Tied to this is the way in which neoliberalism re-engineers subjectivity through 'the active production and careful management of inequalities and insecurities – 'precarity' – in labour markets, in order to compel workers to behave in accordance with a particular neoliberal ideal of the self-motivated, entrepreneurial' (Gilbert, 2013a: 45). It's important to consider here how the impact agenda has taken hold in a post-financial crisis time of austerity – a time when the pressures of scarcity and precarity have been particularly pronounced. Pressures to demonstrate impact are inseparable from the pressures to procure research funds and the pressures to prove one's worth in a competitive job market. Under these conditions, academics are compelled to compete more vehemently. Moreover, under these conditions, demands to invest in one's own capital and gain the competitive advantage over others are overlayed by enhanced demands to not waste money. Thus, demonstrating one's ability to create impact (and thus use funds efficiently and effectively) becomes a significant way to demonstrate one's value.

Control society

In his short yet evermore prescient essay 'Postscript on the Societies of Control', Deleuze (2002) posits that the disciplinary societies that characterised the 18th and 19th centuries are giving way to a new kind of society – what is referred to as societies of control or the 'control society'. What then distinguishes control from discipline?

The first key distinction to note is the shift from enclosed environments to open environments. Whereas disciplinary power works through institutions that constitute spaces of enclosure (the school, the hospital, the barracks), control works through mechanisms that are built into and move with the flows of everyday life. Disciplinary power is bounded and time-limited. Control is

unbounded and continuous. A second distinction is a shift from individuals to dividuals. Whereas disciplinary power treats each member of the population as an individuated subject, control slices people up into parts (affects, perceptions, intelligence, physical force..) and treats these as components in the assemblages that constitute society. And this brings us onto a third distinction - a shift from moulding to modulation. Whereas disciplinary power moulds individuals by imposing norms of conduct and assigning roles, control works by modulating the 'pre-individual' or intensive elements of subjectivity in order to make them function like cogs or gears in societies' assemblages. If we follow Lazzarato (2006; 2014), we can equate individuals and moulding with 'subjection' and dividuals and modulation with 'machinic enslavement'.

While discipline and control are two distinct strata, it's not simply the case that mechanisms of discipline have disappeared. As Celis Beuno (2020) demonstrates, both mechanisms of discipline and control can be at play simultaneously. In this way discipline and control can be seen as two complimentary and intersecting abstract machines. The key point to draw out here is how the coexistence of discipline and control is key to understanding how the production of subjectivity in contemporary capitalism (with its concomitant vision of the neoliberal individual and the productive knowledge worker) works by traversing the multiple dimensions of human existence and oscillating between movements of destratification and stratification. Put simply, mechanisms of control animate desire and enable joyous affects so as to construct productive workers, while simultaneously limiting those flows of desire and affect so as to inhibit the kind collective creativity that poses a threat to the dominant order. Mechanisms of discipline, on the other hand, ascribe certain roles and delimit the possibilities of subject formation, thereby ensuring people think of and understand themselves as individuals.

If we again reflect back on the impact agenda, we can see how it effectuates both control and discipline. We see a university whose boundaries are permeable and coextensive with boundaries of other institutions, rendering academics visible in ever-expansive ways (open-environment). At the same time, we see an internal system of university governance that imposes standards of behaviour and norms of conduct (enclosure). We see audit systems that treat academics as mere units of resource (dividuals). At the same time, we see audit systems that recognise us named authors (individuals). We see an arrangement of material bodies that activates a mixture of joyful and sad affects that are conducive to the production of the impactful academic (modulation). At the same time, we see a semiotic system that ascribes what it means to be an impactful academic (moulding).

Moving from tracing to mapping

In this chapter I have traced a concrete assemblage of the impact agenda and have interpreted the strata that this assemblage is productive of and the abstract/s it effectuates. In doing so I have focused on addressing the first set of questions that this thesis seeks to answer: what role does the impact agenda play in producing academic subjectivities, and what do these processes of subjectification reveal about formations and mechanisms of power? I now want to focus on addressing the second set of questions: what alternative academic subjectivities are there to those ascribed by the impact agenda, and what do these subjectivities reveal about the potentials for converting the impact agenda? This shift in focus comes with a shift in analytical and communicative strategies, as I move from tracing to mapping.

Chapter 6 Mapping alternatives

In the preceding chapter we saw how the defining function of the impact agenda is the production of the impactful academic. I now want to turn to the ambiguities that characterise processes of subjectification and bring to light elements and processes at play in the production of subjectivity which exceed and precede the stratifying forces of the impact agenda. To do so I will focus on the 5 bodies that provided the focal point for the mapping phases of data analysis, namely a *professor* who straddles basic and translational science, a group of *scientists* linked to a spin-out company, an *early career researcher* who actively involves patients in their research, a *doctor* who straddles the worlds of clinical practice, academia and activism, and an *artist* who is involved in art-science collaborations. On the face of it, these bodies fit the impactful academic; they engage wider publics and they seek to 'make a difference' beyond the academy. However, by zooming in on their active self-construction of subjectivity and probing the corporeal and affective processes and relations at play, we will see how their subjectivities trouble and surpass the figure of the impactful academic. Moreover, by dwelling on the complexities of subjectification, we will be able to uncover conceptions of subjectivity that open us up to ways of doing the impact agenda otherwise. I will take each body in turn, before moving on to draw out the ways which their subjectivities point to the potentials for converting the impact agenda.

Impactful academics?

The Professor

> After making my 'pitch' and passing on my contact details, I asked if anyone had any questions. 15 or so silent seconds went by (which had the rather awkward sense of no one being interested/engaged) and then one academic called out 'are not you worried that you will have skewed sample?'. I asked him to clarify what he meant'. 'Well, are you not concerned you will only speak to people who are more receptive impact? he replied. The inference I took from this was that he like other people in this room are rather sceptical towards the impact and thus unlikely to want to take part in interview. Aiming to conjure up some interest, I responded by emphasising that 'I'm not waving the flag for impact' and that I wish to speak to researchers with

> differing perspectives. That bought my presentation to a close, and I left feeling rather dismayed that I missed a good recruitment opportunity.
> (Fieldnotes, October 2018)

This fieldnote is from a seminar where I had the opportunity to present my research and invite those in attendance (mostly molecular biologists) to take part in an interview. What's revealing about the fieldnote, beyond perhaps the differing epistemological positions I shared with those present, is the sense of scepticism towards impact that surfaced in the room. As a colleague remarked to me after the seminar, 'old traditional scientists often switch off when they hear the word impact'. It is one of many fieldnotes that points to the sense of dissatisfaction that many academics feel towards the impact agenda. But do such grumbles and expressions of scepticism merely reflect engrained paternalistic and elitist attitudes, or are there other dynamics at play?

To explore this further I will draw on an interview I held with Peter – the 'sceptical' academic I encountered at the aforementioned seminar. Peter, as I later discovered, is a professor of micro-biology and is well established in his respective field. He leads a programme of research that has resulted in a scientific advancement that could lead to new treatments. He is thus recognised as a scientist who is bridging the 'benchside to bedside' gap. While he appeared sceptical of impact, he is nevertheless positioned as someone who is creating impact.

A few months after presenting at the seminar, and having not heard from anyone, I decided to contact him directly to see if he would take part in an interview. To my somewhat surprise he responded very quickly with a time and date to meet up. When I sat down with him, he began by framing impact (and its connection with patient involvement or 'PPI') as being an additional feature in the growing stipulations and expectations of funders:

> Peter: As someone who does research I feel both the importance of impact. But then I think there is a conflict because funders are pushing you to tick so many boxes that it then becomes something of a trial. Because you think, well, they're spreading me so thin and they want me to do so many things that actually then takes away your kind of enthusiasm. I think if there was a bit more flexibility, so that, you know, we've outlined the kind of the spectrum of these activities, and if you could kind of pick one aspect of it which fitted more closely with the nature of whatever research project you were doing, that might allow you to kind of focus on

that aspect of it rather than having to spread or, at least sort of, shall we say, in terms of trying to get money, spread yourself so thin.

JP: And what exactly are those expectations and requirements that funders are imposing?

Peter: Well, I think they work at two levels. So when you come to apply for a grant, there are progressively now more and more sections or boxes addressing different aspects of impact that they want you to fill in. Okay. And I think this is getting, there's more emphasis on this. So, you know, you know, back in the day, you could fill it with rather generic text. But now I think people want more specificity. So take the subject of, you know, patient involvement. I think you know now, you have to you have to be a bit more specific and you have to say, well, we know what you're going to do, and how you're going to feed information back to patients. And our patients are going to feed information back to you. I mean, don't get me wrong. I think that's a good thing. But I think that it's more suitable for some projects than others. And I think that the role of, you know, the trend now, there's pressure now from funders to actually involve patients in the design of research projects. And I think that it's good to make sure that you're trying to address questions that are relevant to a patient population. But the applicability of that depends a little bit on the nature of your research. So, you know, some things that I do, are much more either laboratory based or, you know, really quite mathematical. And I guess that the details of that, it's very difficult to get patient input.

In one sense, the disaffection that Peter expresses in this extract is emblematic of researchers' concerns about the impact agenda undermining academic autonomy. As his comments about being pushed to 'tick so many boxes' and it becoming 'something of a trial' suggest, much of this has to do with (1) impact and public engagement being prescribed rather than based on researchers' own judgment and creative agency and/or (2) the enhanced visibility of researchers through being subject to further measures of value and accountability. In another (interlinked) sense, his disaffection could reflect a discomfort with the multiple and diverse range of activities researchers are now required to perform. His dismay about having to 'spread yourself so thin' in particular suggests a resistance to being

push and pulled in different directions – or rather to being 'modulated in order to execute to multiple subjective becomings' (Webb, 2011: 739).

Peter's disaffection also appears to be stirred up by the fabrications that researchers are impelled to produce. Above we see him intimate how the stipulations and requirements of funders lead to inappropriate and futile public involvement, a point which he again later emphasised when he said 'I'm keen on PPI but then it becomes irksome when you're trying to fit in a PPI component that actually isn't germane to the nature of the research'. Here he also spoke about the fabrication of 'impact', expressing his unease about 'the tendency to just drift into bullshit, not necessarily because you're naturally that way inclined, but because of the pressure to overreach, overstate and over interpret'.

The feelings of disaffection that surfaced in Peter's account need to further be understood in light of the 'unprescribed'/'informal' interactions he has with patients. In the extract below we can see the sense of dismay brought on by pressure to 'formalise' such engagement with wider publics:

> Peter: Nowadays, I think people are much more interested in asking you questions, which is great. So if I ask people, will you give me a sample, they want to know what you do or how are you going to analyse it and what are you going to learn. Which you can explain to people. I think people, as I say, are much more likely to ask those questions. So I think the difficulty in terms of that is to sort of try and formalize that feedback.
>
> JP: So you see at as PPI?
>
> Peter: Yes, it is. It is. But I think everybody wants you to sort of formalise it almost like you're sort of a mad scientist just going to take blood off people and you have no motivation to communicate with them. And I think that's a sort of poor assumption about human behaviour, because most people that do science do it for the love of it. Then if anybody is going to ask you a question, particularly somebody who's, you know, perhaps got an illness that you're researching, you're going to want to tell them. The difficult is not shutting up about it because you're by definition highly enthused about it. You don't do it for the money (laughs). There's

> plenty of other things in life that are going to pay you more money. [..]And I guess the point I made right in the beginning and that is that the best way to dampen someone's enthusiasm about something is to legislate about it, sort of make you feel that you've got do something your inclined to do anyway.

Peter's comments are suggestive of how 'unprescribed'/'informal' interactions have propensity to cultivate and harness joyful affects, whereas prescribed/formal interactions have propensity to produce sad affects. Indeed, as his comments about dampening someone's enthusiasm suggest, it appears that prescription to formalise PPI diminishes rather than enhances his capacity act.

Woven into Peter's expressions of disaffection are evocations of traditional notions of professionalism and scientific expertise. This can be seen in the limits he places on the scope and value of public engagement and his remarks regarding the kind of analyses he undertakes. We also get a hint of this in the 'do science' remark – a phrase (or similar, e.g., 'doing science' or 'the science') which was repeated at other times in the interview and which invoked ideas of science being a vocation that is centred on the pursuit of knowledge and a disciplinary sensibility.

This appeal to disciplines and drawing of professional-lay boundaries could simply be read as the surfacing of engrained paternalistic and elitist attitudes. However, viewed in light of the claims to be 'keen on PPI' and the disaffections induced and compounded by public engagement's entanglement with regimes of performativity and managerialism, such boundary marking perhaps reveals a more complex set of relations: (1) an appeal to professional judgement and integrity; (2) a resistance towards becoming more flexible and malleable; (3) and the seeking of a 'authentic' sense of self.

We can take this line of analysis in two directions. On one hand, to follow Ball and Olmedo (2013), we might say that what we see here are practices of resistance that are centred on the 'care of self'. In this way, the connections Peter makes with notions of professionalism and scientific expertise (which can be thought of subjugated or displaced knowledges in this context) reveal an attempt to loosen the grip of subjection and take an active role in defining the kind of academic he wants to become – in other words 'begin to care for themselves' (Ball & Olmedo, 2013: 86). On other the hand, to follow Gerlach and Jellis (2015), we might

say that what we are seeing here is the construction of an existential territory based around the discipline of science. In this way, science and its refrains (dispositions, practices, conventions, values and so on) offers Peter a sense of stability and comfort in the face of the disorientations and dissatisfactions brought by the demand to perform (or rather 'fabricate') impact and engagement.

By drawing attention to these two lines of analysis, I'm not suggesting that paternalism and elitism are absent and benign forces. Indeed, we need to be wary of how a sense of professionalism can lead to a hardening of professional-lay boundaries and close down spaces of collective democratic participation. Moreover, we need to be wary of how a sense of professionalism can slip into a fixation on a lost 'academic community' – a fixation that leaves us in a 'immobilising condition' (Clarke, 2015: 147)

However, I do want to make the case that the agonisms and struggles we find in Peter's account force us to move beyond analyses which simply frame the drawing of professional-lay boundaries in terms of an unwillingness to climb down from the ivory tower. What is of particular note here is how Peter's account pushes us to consider how the voicing of professional expertise may not be driven by a self-interest in preserving the superiority and exclusivity of academia but rather a desire to be responsible public academics who keep their integrity intact.

The Scientists

> With everyone now sat around the table, the meeting started with the usual housekeeping. Sarah, the lab leader, announced that the Department they are part of are planning to get rid of a machine (didn't gather what particular kind) because it's too costly to run. The group expressed their disbelief and dismay, and suggested that the 'administrator' doesn't get how science works and the complexities of doing science. They agreed to challenge and make their voice heard. There were further routine talks about getting lab materials and associated costs before the start of this week's presentation. This week was George, another PhD student. The presentation followed the usual format of a power point and the usual structure (research questions, experiments/procedures, results, thank yous), with the group members

> interjecting at various points to ask questions and comments. The results ignited much discussion and probing. The results created more questions than answers. Members directed queries and challenges to George and each other, collectively trying to make sense of what the figures mean and to work out what further experiments and procedures need to be undertaken. With the meeting nearly up, Sarah brings the discussion to end by saying well done to George and there should be a paper in there. (Fieldnotes, December 2018)

This fieldnote is from an observation of a research group having their bi-weekly one-hour 'lab meeting'. What's captured is fairly typical of the standard proceedings and their ritualistic traits (housekeeping, followed a power point presentation from a member). The group is one of many research groups that form part of King's Health Partners and undertake research in the fields of Advanced Therapeutics. Much like other research groups that form part of this network, the group is headed up by a Professor (Sarah), with the remaining members (eight) being PhD students or post-docs. What's notable about this group is that Sarah has set up a 'spin out' with venture capital money. This has brought accolade: the group is often lauded for leveraging money from venture capital and for driving innovation.

I thus commenced my research with the group expecting to find a team of researchers who welcome and champion funder's interest in promoting and assessing impact. Yet, things weren't so clear cut. While the group were far from univocal in their thoughts towards 'impact', a general sense of scepticism surfaced in my interviews with the group members. Echoing Peter, many expressed concerns about 'researchers making up something that isn't actually there' and that it 'becomes a game'. Similarly, some expressed concerns that the drive for impact will lead to the creation of start-ups that are based on unsound science. As one member suggested, 'having a start-up doesn't necessarily mean that the science behind it is good – it means that some people are better than others at presenting themselves or their ideas'. Others expressed concerns about funders imposing rigid timelines and evaluation criteria that don't take into account unexpected results and 'failure' ('funding is so harsh sometimes because we're using imperfect systems to test something that might fail anyway', as one member bemoaned).

In this way, members saw funder's interest in impact as feeding into and augmenting what some referred to as the 'external pressures' or 'corrupting forces' that are distorting and undermining the pursuit of science. Here members spoke about a wider culture of 'gameplaying' and fabrication that

often finds it expression in the realms of publishing ('negative results not getting published' was commonly voiced concern). Such gameplaying was viewed as being indicative of the competitive nature of academia and the precarious position that academics often find themselves in. As one member suggested, 'if a scientist is scared to lose his or her job, then there is a huge pressure to bend'.

It was clear that such 'external pressures' induced feeling of despair. Indeed, a culture of gameplaying and plasticity appeared to destabilise members understanding of what it meant to 'do science' and to be a scientist (integrity and rigour were commonly referenced values). It's perhaps not surprising then that many members felt that 'academia wasn't for them' and were thus considering moving into industry which was considered 'more secure' and less effected by funding regimes and performance measurement. Though this appeared to be a difficult decision to make as they valued the relative freedom that academia offers to 'explore the unexpected' and 'do new experiments'. As they remain in an academic setting, how then do the members deal the with external pressures and corrupting forces? To put it another way, how do they make academic life liveable?

To address this question, it's instructive to consider how the group construct a territory centred around 'the lab'. This territory doesn't merely pertain to the physical lab nor the formal recognition of the group, but rather the group's existence as *scientists.* What refrains are at work in the production of this existential territory? Let's first reflect on the 'lab meeting'. These regular meetings provide the opportunity for members of the group to come together and discuss their respective research projects as well as any another housekeeping issues that relate to the day-to-day activities of the lab. They thus function as a way to form affinities and connections and to give a sense of coherency to the group's different activities. Moreover, we might also say that they open up a space for moments of joy. As an observer, it was always quite striking to sense the energy in the room when the group worked collectively to make sense of data, particularly unexpected results (as with George above). In such moments, the group members would become rather engrossed with the data, often meaning that the meeting ran over time and/or Sarah brought the discussion to an end. For some members such engrossment was about being 'attentive' and 'rigorous' or 'curios'. We might also add that it is indicative of how members' capacities to act are enhanced through collaborating with each other.

Alongside the lab meeting, we also need to consider the everyday, routine practices of the wet lab. Much like the lab meeting, members viewed the wet lab as a space where values of being attentive and rigorous come into play. The wet lab, however, shifts our attention to a somewhat different set of material bodies and affective relations to that of the lab meeting. In particular it brings into focus the 'affective dimension of human/non-human relations and associations in scientific practices' (Latimer and Miela, 2013:8). While members sometimes spoke about the downsides of being in the wet lab ('lots of it is quite boring' or 'it's tedious'), they all it viewed it as a necessary and a fundamental part of doing science. Moreover, it was clear that their relations with the materials they worked with (from mice to incubators to pipets) play a vital role in their scientific practices. This was evident in the attachments members formed with the materials they work with ('you care for the mice way more than you would care for any pets'). It was also evident in how members spoke about their fondness of being 'in the lab' ('I enjoy being in the lab, but I don't actually enjoy the writing of it as much'). It was also evident in how members' experiments were impacted by the materials they work ('cells didn't grow because they were ill') and how they had to 'keep doing more experiments'. Such human/non-human relations not only point to how scientists depend on their materials, but also how, as one member put it, 'science takes time'.

Beyond the more obvious realms of the lab meeting and the wet lab, there are other routine and habitual practices that work to construct and sustain 'the lab'. In particular there are practices of sociality (e.g. grabbing a coffee with a colleague, having lunch as a group, post-work drinks) that open up a space for members to connect with each other outside the formalities and codes of the work place. Members inferred how such moments didn't merely offer some respite from the grind of working but also opened up opportunities for mutual support and collegiality. For some, this involved stepping back from 'daily work' and reflecting 'why I do science'. For others, it involved discussions about the pressures of work and life and how they intertwined.

With the refrains of the lab meeting, the wet lab and practices of sociality now in view, we're in a better position to draw out how the territory of 'the lab' offers members a way to make academic life liveable. I want to first suggest the territory offers the members access to different temporalities to those generated by external pressures. If we take the lab meeting, for instance, we might say that the collective experience of being engrossed in the data and exploring unexpected results momentarily 'suspends' the external pressures to continually produce outputs that are counted within regimes of performance measurement. In a sense, such moments entail a 'slowing down' as the focus is on the process of doing science and sticking with the complexities rather than the fast

production of countable academic outputs. Likewise, if we take the wet lab, we might say that members enter a temporality that is less determined by external pressures than it is the material objects they work with. While such lab work itself may be fast-paced and hard work, it entails a slowing down in the sense that the focus is on the process of 'being careful' and being rigorous rather than meeting the demands of performance measurement. Similarly, if we take the everyday practices of sociality, we might say such moments allow members to step outside of a culture that impels them to see themselves and others as competitors in the race for academic success.

We can begin to see how these different temporalities speak to values that resonate with the epistemic practices of science (rigour, careful, attentive, curious, collegiality) - values which members held dear but felt were being undermined by external pressures and corrupting forces. This brings us onto another (interrelated) way in which the territory of the lab and its refrains offers the means to make academic life liveable: it offers a way for the members to project and enact a set of values that counteract the destabilising effects of external pressures and corrupting forces. That is to say, through the refrains of the lab meeting, the wet lab and the practices of sociality - and the different temporalities they offer - members are able exercise and give voice to values that are important to them. This in turn helps them to fend off the external pressures and corrupting forces that destabilise their sense of self and induce feelings of despair.

A temporality of slowing down coupled with the projection of scientific values could lead some to argue that the kind of territory being constructed here is not too dissimilar from the ivory tower. It's important keep in mind that the territory being constructed is a defence mechanism against the pressures and forces associated with a culture of audit and performativity, not wider society at large. Indeed, members emphasised how they want to do research that 'benefits society and 'has an impact'. Moreover, some spoke about interactions with wider publics they have had since joining the lab and how it has impacted them. This included more 'informal' interactions with patients such as collecting blood examples ('it made me think there is a purpose of why we're doing it, that's why I'm doing this'), as well more 'formal' activities such as yearly science communication event ('it's really nice for people to work together and foster the community between the people who have the disease that people who are working on it'). It's interesting to note that members spoke about wanting to do more public engagement activities, pointing to how they seek to make new connections and open up the territory of the lab to new possible futures. Yet such possibilities appear to be constrained; members spoke about have how they have little time for public engagement due to demands of doing research.

At this point, it's important to emphasise that while the group find ways to make academic life liveable, external pressures are never too far away. We get a hint of their omnipresence in the field note above when Sarah brings the discussion to an end and congratulates George. There was of course the matter of keeping on time, but it was also suggestive of how Sarah sought 'to bring them back' when they 'would go on a tangent' and how she saw her role as the leader ('my role is to look at the bigger picture and guide people to be able to develop a nice story so we can then work on that, publish it, IP protect it, whatever it is that we can get out of it). It's also important to note how members appeared to comply with (or embrace) the imperatives and demands of performativity and an audit culture, which was perhaps most evident in the emphasis placed on seeking to publish articles in certain journals, and the joys of getting one accepted. Moreover, we need to recognise how the scientific values and temporalties of 'slowing down' are not in direct opposition to such demands and imperatives (doing 'sound' science is of course promoted as a prerequisite for publishing papers, creating impact, building a successful career and so on).

We shouldn't thus downplay how external pressures puncture and converge with the boundaries of the lab. At same time, the lab and it refrains remind us not to assume too quickly that apparent 'academic entrepreneurs' neatly fit the 'Schumpeterian ideal-typical entrepreneur' (Shore and McLauchlan, 2012: 283) Indeed, the connections members form with each other and other bodies (human and non-human) suggest a rather different subjectivity to that of 'individualistic operators' (Shore and McLauchlan, 2012: 283).

The early career researcher

> Kerry introduces Kate, a psychology PhD student who has previously presented to the group. She is here to give an update on her project (a trial of an exercise-focused intervention) and to gather further input. Kate steps up to the desk, gets up her power-point presentation and starts by thanking the group for their previous input. Her enthusiastic and engaging style suggests she is well-versed in presenting in a forum like this one. She moves on to briefly describe the progress of her study before introducing a worksheet exercise. She hands out a sheet to each group member. The sheet shows multiple factors that could shape patient participation in exercise-focused interventions. She asks the group to consider which factors they

> think are most important and whether any factors are missing. The group are quick to jump in and make their views heard. One group member emphasises the importance of social factors, noting the benefits of receiving and giving peer support. Another stresses that they all can play a part and that their relative importance comes down to the individual. The group then start to direct comments not just Kate but to each other. A rather lively and free-flowing discussion ensues with diverging and converging views being voiced and recognised. The group seems energised. Kate, who is now perching on a table closer to where the group members sit, let's the conversion flow, intervening intermittently to further elicit the views of the different group members. Recognising her time is nearly up, Kate curtails the conversation and brings it to an end by thanking the group for their time and input. (Fieldnotes, December 2019)

In this fieldnote extract I describe the proceedings of a patient and public involvement (PPI) meeting. The group in focus is one of the many condition-specific PPI groups that exist across King's Health Partners. Like other groups in the network, it meets regularly (quarterly in this case) and provides a space for researchers to get feedback on their research. Such settings tend to bear many of the ritualistic practices that previous studies of PPI have identified: a rigid time structure; a pre-defined agenda set by the researchers; a focus on 'technical' regarding the conduct of studies (Komporozos-Athanasiou et al., 2018). It's often argued that such forms of PPI reproduce power differentials between academics and 'lay' contributors, with power remaining in the hands of the academics as they delineate the scope and the terms of involvement. But what does such contained engagement reveal about the subjectification of academics? To explore this further I will draw on an interview I held with Kate a few weeks after the PPI meeting.

When I met Kate she started by telling me how she first came across PPI when she worked as a research assistant (at the same department she is doing her PhD). 'Being the junior member of the staff', she was given the role of running the different PPI groups attached to research groups. This led her to setting up new models of PPI (one of which was awarded a prize for innovation in PPI). By her own admission she's 'very active' when comes to PPI. I asked what drove her to engage with PPI on this level:

> Kate: I think my personal motivation for becoming increasingly involved in it is seeing the value of it in practice. So having done a lot of the work as a research

assistant, and being responsible for having to initiate a lot of the patient involvement activities, projects and seeing real time benefits of that. And it makes you quite passionate about trying to do that on a wider scale and doing it well across the Department. And also, I guess, experiencing how challenging it can be and the work that goes into it and thinking there must be ways we can do this better and getting the most out of it, because there's definitely a lot of variation in when it works well and it doesn't work so well. And especially because we don't want to waste time and resources. I think that's on every level. There's the research side - that kind of money and time resources. But also we don't want to waste people's valuable time if they're coming to contribute to our projects.

Of particular note is how Kate puts an emphasis on not wanting to 'waste time and resources', in relation to both PPI and research. Although not explicitly stated, the inference made here is that doing PPI in a more efficient and effective way leads to more efficient and effective research. Later on in the interview, Kate again emphasised the role PPI plays in 'maximising resources'. Interestingly, she positioned this as being secondary to the 'moral justification' or 'ethical imperative' of patients having a right to be involved in research that affects them:

Kate: The philosophy of 'nothing about us without us' - it makes total sense that people should have the opportunity to have a say in research that ultimately would affect the care that either they themselves or people like themselves would receive. I have taught a session on patient involvement for our Masters students recently. So as part of preparing for this session, I revisited some of the stuff about the history of patient and public involvement and how in the same way, like the development of ethics procedures and research, it took a scandal and bad things happening for people to go 'mmm wait a minute, maybe we should actually talk to the people who are research activities are going to affect', and that's quite a lot of the history of where this comes from. And I think it's important not to forget that - the risks of not involving people in what we do. And part of that is again is about maximising resources and doing the best job possible. And especially considering a lot of our research is funded through public money, there's a real imperative to make sure we're doing that research in the best way possible. So I guess underneath, I guess I've got assumptions that it does improve the quality of the work or the relevance of

> what we're doing. But I think that is probably still secondary to the kind of the moral justification that I think there is an ethical imperative to work with the communities your work might affect.

Kate's privileging of a moral/ethical rationale and her appeal to not forget the antecedents of PPI suggests an awareness - and wariness - of the dominant framing of public engagement that defines accountability in terms using public resources efficiently and effectively. Here we can see Kate folding the forces of impact agenda, rearticulating dominant representations by giving voice to displaced and subordinate knowledges, particularly those that are more 'democratic' than 'technocratic' in character (Martin, 2009).

While there are hints of 'talking back to dominant understandings' (Clarke et al., 2015: 40), the 'translation' that Kate engages in isn't the kind that seeks to radically oppose and transform policy. Rather, it reveals the work involved in being opened up to and negotiating the different elements (rationales, histories, and so on) that the concept of public engagement and its articulation with impact assembles. What is particularly notable is how Kate's voicing of a moral/ethical rationale is closely articulated with the technocratic rationale of improving the efficiency and effectiveness of research. We can see this in how she draws connections between the antecedents of PPI and the imperative to use public money effectively by 'doing the best job possible'. Thus, while she speaks of privileging a moral/ethical rationale, she views this in relation to – and through the prism of – the rationale of enhancing efficiency and effectiveness. Later on in the interview, Kate reflected on entanglements between these different rationales:

> Kate: I think it is hard to disentangle them. And I think. Yeah, I think there's a gut instinct to say that, of course, the moral imperative would override all the other reasons for involving people. But it is hard to disentangle. Because part of, I guess, part of that moral imperative is still about how the potential for impact on your work and the potential for it to be different and look different if you involve the right people. So it is very meshed in.

The difficulties in disentangling these different rationales points to how public engagement animates and sediments 'synapses' between (1) the neoliberal and managerial logics of cost-efficiency and effectiveness and (2) patients'/publics' desires for greater voice, accountability and responsiveness (Clarke et al., 2007: 29). Moreover, they shift attention to how technologies of governance 'work on

and through our capacities as moral agents and professionals' (Shore, 2008: 291). As we see, the imperative to think and act in terms of efficiency and effectiveness taps into and mobilises academics' motives to act 'ethically'.

Kate's account so far has drawn attention to how an understanding of public engagement centred on efficiency and effectiveness provides the discursive frames for academics to understand what it means to do public engagement. Kate's account is revealing in a further regard: public engagement's role in the production of enterprising subjects. We catch a glimpse of this when Kate justifies her PPI in terms of 'professional development':

> Kate: As a junior researcher, there's also kind of a professional development element to it. I guess I see this as something that it's important to be good at. I think it's important to have and develop skills in involving members of the public in your work, because we know how important it is because of the impact it can have on our work. We know that there are policy pressures to do it increasingly. So there is increasingly more time and resources spent on it. So if I'm going to pursue a career in research, it's important to be something I can do well. That's probably part of it, too. And I think one of my personal frustrations is that I feel like it's not reflected and valued enough in the university structures. So things like when we have our performance development review. In my opinion, we should be asking people about patient and public involvement as part of that structure, seeing it as part of your professional development and a skill that is valued.

Kate was not the only researcher I spoke to who viewed PPI (or public engagement more widely) in relation to their professional development. Particularly among early career academics, PPI was viewed as skill to acquire, or at least be familiar with, in order to maintain/advance their career. At the same time there was a degree of uncertainty surrounding the value that universities/employers ascribe to PPI. Echoing Kate's comments about the value of PPI not being reflected in 'university structures', academics often spoken about a mismatch between the rhetoric of public engagement and the prevailing institutional structures, practices and epistemic cultures. The implication being that the prioritisation of more 'conventional' academic pursuits such as publishing journal articles offers a safer route to securing future employment. Nevertheless, in a landscape where public engagement seems to increasingly prescribed and credentialised, there are perhaps multiple opportunities to anticipate, seize and build upon:

> Kate: I think I have learned so much from doing public involvement. And I think it is important. It is so important in its own right. But if that's not enough to persuade an early career researcher to get involved, they need to think about it as part of professional development and as an opportunity to develop broader skills alongside the benefit it can have to research. I think for me, it's improved my skills and communication, the ability to speak to the variety of audiences. It's challenged me to think about the assumptions that we make with them. Are we using this method? What would you do differently? And it made me think about, I guess, the kind of broader scientific community and how we work in science and how we work with the public and what that should look like.

Kate's comments points how public engagement is inscribed with the logic of continuous training that is fundamental to the neoliberal notion of the entrepreneurial self. Public engagement is framed as a skill to learn and a means to develop a broader range of skills. What is particularly notable is her explicit desire to be upskilled and judged according to her public engagement. This seeming desire for subjection points to the ways in which researchers' aspirations to 'perform well' and 'do quality research' connect with neoliberalism's demands for self-motivating and calculable subjects. They also point to a labour market where researchers (particularly 'early career') experience increasingly precarious and competitive working conditions and are impelled to consider what attributes/qualities will make them marketable. Viewed against this backdrop, given her existing skills and knowledge, it's perhaps not surprising Kate would desire the further credentialization of PPI and its inclusion in systems of performance management.

We need to be careful and not simply paint Kate as an individual who is primarily concerned with her own self-investment. Her narratives reveal an ambiguous mix of passions and affinities, with some conjuring up images of a civic-minded scientist who is concerned with the collective advancement of her profession. We get a hint of this in the extract above when she appeals to the 'broader scientific community', and throughout the interview she frequently made similar remarks ('our research community', 'community of researchers'). Such remarks were often accompanied with expressions of professional values centred around the notion of improving lives of others through improving the quality of research. What emerges is a rather a different notion of 'excellence' to that which is instilled by systems of performance measurement. To excel is not to compete with and outdo

others, but rather to collectively improve skills/conduct and thereby enhance the value of research and impact wider society.

I now want to switch register and return back to the fieldwork meeting I opened this section with. So far I have focused on Kate's account as a way to explore the role PPI plays in the subjection of academics. There's a danger that such a focus risks obscuring the potential of PPI to generate moments of joy. By seeking to bring such potentials to the fore it's not my intention to suggest the absence of sad affects or the individualising tendencies of PPI meetings (some moments can palpably be characterised by a debilitating sense of perfunctory rigidity) but rather give recognition to the potential of PPI to cultivate a sense of collective togetherness and empowerment.

One of things that most struck me when I observed PPI meetings was the convivial and lively atmosphere I was hit with when I entered the room. This atmosphere - harnessed by jovial interactions and refreshments on offer - produced feelings of warmth and openness and helped my own entrance into the setting. This 'social' aspect of PPI meetings was a commonly voiced by the patient members I interviewed. Many spoke about having the opportunity to meet others and 'feel part of something'.

The joy of being together doesn't just emanate from the 'social' aspect of meeting but also the collective experience of discussing research and developing research ideas. I sensed this most when there would seemingly be a 'synchronisation of corporeal and affective states' – what Gilbert (2013c: 687) refers to as 'entrainment'. At this point it's worth reflecting on the discussion that Kate facilitated. Here I felt a shift in affective becomings. The bodies in room became more dynamic, more involved, more energised – their role as active co-producers in an emergent process of collective empowerment became more apparent. To understand how Kate appeared to go some way to cultivating/amplifying the entrainment of the PPI meeting we need to not only consider the topic and format of her worksheet exercise (which seemingly worked together to give the group space to engage in an open dialogue and to become 'co-producers') but her 'sensitivity to flows of affect'; that is her sensitivity to the sensations and capacities that move between the group and constitute a 'collective scene of engagement', and her 'improvisatory capacity to 'direct', deflect or 'channel' those flows without becoming overly directive or didactic' (Gilbert, 2013c: 685). Sensing the heightened liveliness/dynamism and the capacities of the group to become active participants, Kate let the discussion largely run its own course, intervening only momentarily/intermittently and

in such way that corresponded with the rhythm, tone, mood of the dialogue and helped to facilitate active participation of the different group members.

I also don't want to overstate the 'success' of the entrainment and the joyful affects. There were factors limiting/constraining the enhanced collective capacities of the group, not least the rigid time schedules. Nevertheless we do catch a glimpse into how such encounters can generate joy. And what I want to suggest here is that these joyful affects shape and capacitate future actions. For instance, we need to understand the motives of lay people to continue their PPI activities in relation to the joys of feeling part of something. Similarly, we need to consider the motives of researchers, such as Kate, to enact PPI in relation to the joys of interacting with patients and 'seeing real time benefits'. The impact of PPI in this sense is not just about the enhancement of knowledge production/translation but also the enhancement of researchers' and lay people's capacities to act (during and after the PPI encounter).

We of course need to be alert to mechanisms of power that operate at the level of affects. Indeed, it's vital to keep in mind how the joyful affects of PPI can be mobilised so as to incite/provoke academics to become more efficient and effective and more agile and enterprising. However, at the same time we should not lose site of the ambiguities and potentials that the affective dimensions of PPI present. What I particularly want to bring into focus here is how the joyful affects of PPI complicate the neo-liberal figure of the self-interested individual. Shifting our attention towards these affects we see how PPI can be just as much about the cultivation of 'feeling together' as it is about the accrual of capital and/or the instrumental logics of efficiency and effectiveness.

The Doctor

> The final presenter, Jessica Potter, addressed the question can activists be serious academics? By drawing on her own experiences, Jessica made the case as to why the answer should be yes. We heard how after medical school she started working as a doctor in Newham East London. This was circa 2008, a time when the UK saw the highest TB rates since the 1980s, with the vast majority of cases being in London and in particular Newham. For Jessica, it was clear that the cases in her locality reflected the high of levels of poverty and the high number of migrants who faced barriers to healthcare. At a similar time to the TB crises, Jessica became increasingly aware of

> the 'hostile environment' rhetoric that was starting to gain momentum and that posed a further threat to healthcare access among migrant groups. Driven by a desire to improve the lives of her patients, she therefore embarked on a PhD that sought to examine the relationship between healthcare access and government migrant policy. Upon on embarking on her PhD, Jessica also started to write articles in the media, with the aim to challenge the hostile environment policies. Then, in not wanting to acting alone, she joined Docs Not Cops and Medact – two activist groups that campaign for universal health and are at the forefront of the fight against the hostile environment. Various kinds of activities ensued: participating in protests outside the home office, being interviewed on national TV, writing weblogs (cost of living blog), giving evidence at select committees, writing newspaper articles. For Jessica, these activities all play a role in generating 'impact' – impact in terms of policy and also wider political and change. They are activities that also compliment her research: the data she generates informs her activism, while the activism also provides her with insights and relations that inform her research. It's in this way that Jessica believes we can be both serious academics and activists.
> (Fieldnotes, July 2018)

This fieldnote is from a workshop on 'Translational Research'. The workshop was part of The London Interdisciplinary Social Science Doctoral Training Partnership (LISS DTP) - a programme (funded by the Economic & Social Research Council) that provides studentships and training for social scientists who straddle other disciplines and fields. Over the course of the two days, the students who attended heard from a wide range of people (including academics, health professionals and artists) who shared their thoughts on 'how to produce research that makes a difference'.

It's one of several trainings I attended over the course of my fieldwork that was targeted at PhD students and focused on the topic of 'impact'. In these events the imperatives and obligations of the impact agenda were given voice. No doubt the students who attended the 'Translational Research' workshop left with a heightened awareness of the imperative to create 'impact' and the stakes at play. Such disciplinary functions were acutely at play in a 'Impact and Engagement' course I attended a few weeks earlier. Here the trainer (a 'public engagement professional') said we need to know about impact 'because of the REF' and that we need to 'recognise the priorities of funders' and align our research accordingly. Their other key message: we need think to about our 'profile' and create a

coherent and accessible 'story' about our work (three minute thesis competition, conference poster competitions and the like were promoted as key platforms).

Yet, as the field note above points to, such trainings are irreducible to the impact agenda. The orchestration and delivery of training involves the work of various people who all bring their own qualities and properties. This includes local actors (e.g., training leads,) who devise and create training opportunities, as well those who are present on the day (e.g., presenters and participants). The different knowledges, interests, beliefs, and so on that these bodies bring means that there always is the potential for the slippages and subversions in ways in which the signs of the impact agenda are articulated.

To bring to light such slippages and subversions I want to dwell for a moment on Jessica's presentation. Her presentation stood in stark contrast to the statements of the 'public engagement professional' I heard a few weeks earlier. Jessica articulated an understanding of impact that was less about responding to the imperatives of audit and performance measurement than it was responding to the needs and circumstances of the patients she cared for. Furthermore her articulation of impact was less about directing her research towards the priorities of funders than it was challenging social order and bringing about social change. Moreover, her articulation of engagement was less about 'showcasing' and profile building than it was working collectively with other activists to create conditions of social change.

Jessica's presentation was also quite different to others who spoke at the Translational Research workshop. Whereas other presenters tended to be speak from one position (e.g. an academic or a policy maker) Jessica spoke from multiple positions. It was striking to hear her journey of becoming a medical doctor/academic/activist and how she traverses different domains and fields. Her account conjured up images of a 'nomadic' scientist[22] who explores new pathways and who works outside of and on the borders of dominant institutions. By the same token, to use Braidotti's (2011) terms, her account exemplified a 'nomadic subject' who occupies a 'smooth' space and explores new subjective becomings.

[22] Deleuze and Guattari (1987) draw a distinction between nomadic (or minor) science and royal (or major) science. Nomad science occupies a 'smooth' space where scientific research operates outside of established disciplines and institutions. Nomad science thus develops in unpredictable ways, moves down new pathways and disrupts the political/scientific order. Royal science on the other hand occupies a 'striated' space where scientific research operates within and reproduces established disciplines and institutions. (See Jensen and Rodje, 2010: 12-13).

The key questions to ask at this point is what function did Jessica's presentation play. Here I want to suggest that we can think of her presentation as a practice of self-constitution. Through her articulation of her journey and her understanding of impact, Jessica can be seen to be examining her self in relation to prevailing discourses. In this process, she bends the forces of the impact agenda and forges a sense of self that is set over and against the discourses they hail her. Of note here is how she draws on knowledges that are submerged and/or contained by the impact agenda – knowledges that animate ideas and beliefs relating to equality and radical politics and which exceed the logics of efficiency and effectiveness. Also of note is how her articulation of motives and collective working practices trouble the figure of an individual who is concerned about their personal gain. The figure that emerges is one who cares about/cares for others and who recognises how their own existence and activities are dependent on the interactions they have with other bodies.

The processes of subject formation at play were of course not limited to Jessica's self-constitution. In that moment, spurred on/guided by Jessica's presentation, all those present were negotiating and reflecting on what it means to be an academic and kinds of academic we might become. In this way, we might say that moment offered a space of collective subjective becoming, one that offered possibilities for us to think of ourselves in ways that surpass the dominant discourses that determine the pathways in which we are able to think.

Feeling enlivened by Jessica's presentation, after the workshop I asked if she would like to take part in an interview, which she agreed to. I now want to draw on this interview to further explore some of the themes discussed thus far. In particular I want to further probe her nomadic journey and consider what this reveals about her subjective becomings.

When I sat down with Jessica she started by telling me about her transition from a practising medical doctor to a PhD student:

> Jessica: I always said I'm never going to do a PhD or research because my kind of understanding of research from university was spending time in the lab watching a mouse which didn't really appeal to me. And then when I progressed through my training after I graduated from medical school, it became clear to me that in order to change the experiences of my patients, I needed to better understand what those experiences were, whether quantitative or qualitatively. And I was particularly interested in tuberculosis. I was working in East London around the height of the

> epidemic. We had the busiest TB centre in the UK. And it was abundantly clear to me that the people in front of me were largely from either migrant backgrounds or lower socio-economic backgrounds. I said it was about who they were and the lives that they led and the social conditions that they lived in that had an impact on their health outcomes in relation to their TB, which is an infectious disease. So I kind of started of thinking, well, maybe I do want to do some research. And I ended up having an interview with a very senior biomedical professor to potentially go and do a PhD in their lab. And they sent me away with some things to read. And I was like, oh, my God. I don't really understand this language. And it just didn't really excite me. And then the other offer on the table was someone who had done a little bit of qualitative research in the past and who was interested in healthcare access and the experiences of patients. And that appealed to me much more. And so I ended up working with them and essentially slowly taking that project on as my own and evolving it. And then it very much became my PhD, which was looking at how people with TB who weren't born in the UK access healthcare. And the impact that I wanted to have was to improve the experiences of those individuals to shorten the time to diagnosis, which would hopefully reduce the number of people who died, reduce the amount of illness they suffered, and also be of benefit to public health by reducing transmission rates.

In this extract we see hints of a nomadic scientist. She doesn't keep confined to the conventions and paths she is expected to follow. She enters new fields and domains, and adopts new methods and approaches. What drives and orients these movements are the experiences and circumstances of her patients. It's the needs of her patients that ignited her interest in doing a PhD. The PhD is a route to helping her patients - it's a means to help reduce their suffering and mortality. Her motives for helping her patients and doing the PhD reflect her strong attachment to the value of equal healthcare access (which she expressed at various points throughout the interview). It's important to not merely see this as an identification with an abstract moral principle. Her comments about her encounters with her patients are suggestive of how motives are grounded in the everyday interactions with patients and the connections she forms with them.

I now want to turn to another key moment in her journey: writing an 'opinion piece' in the early stages of her PhD research. This can be seen as the entry point into the world of activism. Jessica explained that this moment was spurred on by reading policy documents:

> Jessica: So I guess going back to my research, I was sitting there reading all of these policy document about how we should restrict healthcare access to migrants and getting increasingly angry about it and thinking this is not going to help my patients who I'm going to interview about their experiences. And there's something wrong with the policy itself already without me having to even interview people yet to find out how they've experienced the policy and practice, which is always important because you get to the nitty gritty of it. But fundamentally, I thought there were lots of things wrong with the policy straight away. And then more and more things were coming out - the news around the hostile environment and data sharing. And these were all my TB patients that I was seeing in clinic all the time who were being placed at risk, just by accessing health services, of deportation or just being made to feel like they were less worthy of healthcare. And so that's when I wrote an opinion piece on data sharing.

What's notable about Jessica's comments is the anger she felt when reading the policy documents and reflecting on the implications for her patients. The anger she felt however was not debilitating; it's what spurred her on to write the opinion piece. Moreover, it's what spurred her to connect with activists 'who feel the same way':

> Jessica: And then after that, I got involved with some activist groups - Medact initially and then Docs not Cops where lots of other people were feeling the same way. And it wasn't just me sitting on my own in my office reading theoretically about why this was all rubbish. And they were doing something. They were having an impact just by making people aware that this thing was happening. And that was what I wanted from my research, was to have an impact that improved the conditions of my patients. And what I realised is the research was definitely helpful to that cause.

The extract above reveals how Jessica sees her work as a collective endeavour. As she suggests, the research she does and its effectiveness in improving the conditions of her patients is dependent on linking up with others. A big part of this is the sharing of her data to support the 'cause'. It's also necessary to consider the affective dimensions at play. Her comments are suggestive of how the connections she forged with the activist groups offered joyful encounters and propelled her to

become more involved in their activities. We can also see this later on in the interview when Jess spoke about being invited to replace a leader of a refugee solidarity group:

> Jessica: I was a little bit hesitant at the time because I was trying to do my PhD. And I had a two year old at home. But it was so inspiring because you go and all these people have given up their two or three hours in an evening every month to sit around and think about things. And they really taught me to be critical. I'm such an establishment person, like I was brought up in the establishment to not question it. And I went to a private school. I went to Oxford. But I had no reason to question the establishment. I came from a middle-class family, you know. It didn't come very naturally. Every time I phrase something in a certain way, someone would say, so what you've implied by that is this. And they do it in a really nice way. It was never a kind of like a judgey way. It always felt like we were all mutually learning, particularly I would say in Docs not Cops, which is a bit probably more radical [..] You'd sit and around together and someone would say, well, you know, hang on how is it fair that they're paying all of these different taxes and they're not entitled to the immigration health surcharge and not entitled to IVF? What about colonialism, for example, which you would never talk about in medical school. So, yeah, to me, it was a huge learning thing. And it happened during the time when doctors were generally becoming much more political. Because of the doctor strikes, and people are increasingly critical of the establishment because they have to be.

The words 'so inspiring' and the glee she spoke about when sitting and talking with others are particularly suggestive of the joyful encounters that the activist meetings offered. What's also illuminating about the extract above is how such affective encounters opened up space for new subjective becomings. For Jess this entailed becoming more 'critical' and 'political' and loosening the grip of the 'establishment' that stratifies her.

So far I sought to bring to light Jessica's multi-layered and dynamic subjectivity – how she enters new territories and opens herself up to new life worlds. Important to understanding these nomadic journeys is how Jessica's movements are launched from a place of stability. Here I want to draw attention to a refrain at work in Jessica's accounts - that of the 'patient refrain'. At regular intervals, both in her presentation and interviews, she refers to her 'patients'. It's her patients who triggered her to do a PhD. It's her patients (in conjunction with the policy documents) that trigger her to write

an opinion piece and to then engage with activists. This attachment to patients is grounded in Jessica's work as medical doctor (it's in this role that she cares for patients on a daily basis). We might say that such a grounding offers a system of values and affective connections that orients what she does and gives a sense of consistency to the various elements of her world. The patient refrain thus offers a kind of 'protective comfort zone' that wards of the dangers of destratification. At the same time, the patient refrain can also be seen to trigger new connections and open Jessica up to new territories and new references of value. In this way the patient refrain marks both a kind of 'existential territory and its opening up onto something else' (Goffey and Pettinger, 2014: 398).

I want to close this section by briefly addressing some of ambiguities and tensions that Jessica's journey presents. A key issue to reflect on here is how she works the borders of different domains, straddling both 'nomadic' and 'royal' sciences. For instance, while she crosses different disciplines and fields, she remains a medical doctor within the NHS. Likewise, while she's active in 'grassroot' activist groups who challenges the boundaries of citizenship, she engages with 'formal' state politics by contributing to select committees. In this way, while she operates across the smooth space characteristic of nomadic science, she also remains lodged within the striated space of state politics and science. On one hand, it could thus be argued that the radical potentials of her nomadic journey and subject becomings remain inhibited as the stratifying forces of the dominant institutions maintain their grip. By the same token, to follow Svirsky (2010), it could be suggested that the radical potential of the activism she's involved in is at risk of being appropriated and contained by the 'royal science of politics'. Yet, it's important to remind ourselves of how Deleuze and Guattari warn of the dangers of too much destratification, too quickly. Jessica's place on the strata can be seen to offer her a solid ground in which she can plot movements of destratification. Moreover, it's also important to remind ourselves how Deleuze and Guattari suggest the straited spaces of royal science and the smooth space of nomadic science are not binary opposites but rather inseparable entities that fold on to each other and mutually implicate each other's development. In many ways, Jessica's straddling reflects this intermixture.

A second key issue to reflect on is how Jessica's subjectivity resonates with the very kind of subjectivity that the impact agenda ascribes. In a sense, Jessica's fluid and multifaceted subjectivity speaks to the malleable and enterprising academic that the impact agenda summons. Similarly, her public presence (whether on TV or twitter) bears traits of the public-facing and visible academic that is demanded by the impact agenda. Here it's worth noting how Jessica won the 'Rising Star' award in the 2018 Queen Mary 'Media Relations Awards' - an award that is given to a PhD candidate or early

career researcher who has established a media profile. Such awards point to how the joy of connecting with others via media platforms can co-exist with and be overshadowed by the pleasures of showcasing one's value and building a public profile. However, the processes of subjectification that we see with Jessica suggest a rather different kind of subjectivity to that which the impact agenda ascribes. Her movement across different territories and her new subjective becomings appear to be less to do with a rational interest in investing in one's own human capital and being 'marketable' than they do with flows of desire and an energy of affectivity that passes between and connects different bodies. Likewise, her engagement with wider public through various media appears less to do the with public performance of one's value than it does collectively creating social change.

The Artist

> Alongside Oron Catts and Joanna Zylinska, those in attendance included a couple of SGL staff members and presumably students from KCL. On one of the walls surrounding us was a collection of A4 texts hung up on pegs including posts taken from the online invisible illness movement #HospitalGlam and a copy of Laboria Cuboniks Xenofeminism: A Politics for Alienation.
>
> We started by each reading a paragraph or two from Oron Catts' and Ionat Zurr's Towards a New Class of Being: The Extended Body'. This was followed by an open discussion which touched on questions about the multiplicity and fluidity of subjectivity as well as the capitalist logics that drive and capture developments in the life sciences (there seemed to be a general interest in exploring the possibilities of escaping/resisting these logics).
>
> We then moved onto read sections from Joanna Zylinska's The End of Man: A Feminist Counterapocalypse. This again opened up a discussion focused on subjectivity and the political and economic structures that shape science and technology. At one point the discussion moved onto 'public engagement'. One attendee, knowing what my PhD is about, asked for my opinion. I was wary of being seen to judge (or even worse disqualify) the science gallery. However, the preceding discussions and the general tone and 'vibe' of the event made me feel I could speak

> freely and critically. In an attempt to remain somewhat impartial, I responded by trying to link public engagement to the themes of multiplicity and entanglements that were invoked in the two texts we read. I finished by saying something along the lines of 'public engagement can get instrumentalised and succumb to utilitarian and economic logics, yet that doesn't explain everything - the fact we're having this conversation suggests there are moments and spaces that exceed and frustrate these logics'. (Fieldnotes, April 2019)

This field note extract is from a Reading Group session which was part of the SPARE PARTS exhibition at Science Gallery London. The aim of the reading group was to bring together researchers, artists and 'all other curious individuals' for a 'transdisciplinary enquiry into questions raised by exhibition'. The event was quite different to another evening I spent at SGL a few months earlier. At an event celebrating impact and engagement at KCL, we heard from a senior manager from KCL who proclaimed the need to do public engagement because funders are interested in it and also because the success KCL's new AI centre (funded UK Government's Industrial Strategy Challenge Fund) relies on gaining 'patient consent'.

These two very different moments point to the ambiguous and shifting character of SGL. It's a body that the impact agenda assembles; it's positioned as a site to showcase research of KCL and to lubricate the channels of innovation and knowledge translation. At same time, its irreducible to the impact agenda. SGL itself is part of a global network of galleries that precede and exceed advancement of the impact agenda, and it brings together a range bodies (e.g. artists and art curators) who all possess their own properties and capacities.

To explore these dynamics further, I will focus particularly on Oron Catts who I interviewed a few weeks after meeting him at the reading group. Oron provides an interested focal point. His narratives and experiences are illustrative of how bodies that the impact agenda enrols can subvert and escape it's stratifying powers. At the same time, they are also illustrative of how the stratifying powers of the impact agenda are never too far way.

Oron is based at the University of Western Australia, where he is the director of Symbiotica - an art and research laboratory which focuses on ethical and cultural issues relating to the life sciences and bio-technology. The work of the lab is associated with the field of 'Bio-art' – an art practice that adapts bioscience methods and is centred on the use of live tissues and living organisms.

Oron has a long-standing relationship with the Science Gallery Network, having previously worked with the Science Gallery Dublin. Reflecting this, Oron played an active role in curating the SPARE PARTS exhibition. His work also featured in the exhibition (see Figure 6). In this piece he worked with his long-term colleague Ionat Zurr as well as stem cell researchers at KCL to create an incubator using compost. The piece was located outside the Guy's Square entrance to SGL and was in dialogue with Hivecubator 2.0 by Michael Bianco located inside the gallery. These works were a continuation of early works by Oron and Ionat which explored the key role incubators play in the life sciences as well as the social and material interconnections that exist life. More broadly, they reflect Oron's and Ionat's interests in the 'Semi Living'[23]. For a detailed account of these themes see Catts & Zurr (2018).

Figure 6. Vessels of Care and Control: Compostcubator 2.0. (Oron Catts and Ionat Zurr 2019) (Author's own photo).

[23] Oron and Ionat coined the term Semi-Livings to describe the living tissue constructs that are grown/constructed out of tissues taken from complex organisms and maintained alive with the aid of technological intervention.

Much like Jessica, Oron is someone moves between and across different disciplines and domains. This is reflected in the way Symbiotica traverses the fields of art and biological science. It is also reflected in the various kinds of activities Oron is involved in. As well producing art, he also undertakes research and writes academic journal articles. While occupying multiple positions, Oron foremostly sees himself as an 'artist'. This was apparent at the beginning of my interview with him when he spoke about his main interests and how Symbotica shifted from being an 'art and science collaborative research lab' towards a focus on 'biological art':

> Oron: The main interest is, and this is something that I suppose was in the back of my mind for many many years, but initially, when we set up Symbiotica we [undecipherable] as an art and science collaborative research lab. It shifted towards the focus on biological art and my posture and discourse around it shifted from this idea of art and science collaboration to the interest and impact on a relationship to life. So the interest is life. The reason why we are based in a biological science department is due to the fact that that's where the most radical shifts in our understanding and relationship to the concept of life are taking place.

This shift that Oron speaks of reveals a move to disidentify with kinds of 'science communicator' role that has emerged in the wake of the demands to 'showcase' science and facilitate innovation and knowledge translation. Becoming a biological artist offers a different kind of role – a different kind of understanding of being an artist - one that less it about being an instrument for communicating and translating science than it is probing and questioning life itself. Oron's voicing of this non-utilitarian understanding of art further came to the fore when he spoke about his transition from a product designer to an 'artist':

> Oron: And the interest I had after I finished my product design degree was actually looking more at the questions that this instrumentalisation of life generates rather than try to instrumentalise life. Rather than being the solutionist, I felt that I should really identify the issues and pursue my career as an artist. Now, within that there's kind of an interesting correlation as well, between what I would see, again, a very ideal and somewhat the puristic notion, that there is close similarity in this context between kind of pure scientists and pure artists as opposed to the applied knowledge that is being driven by engineering and technology on one hand and design and architect, for example, on the other. And I use that as a way to attract

> scientists. When I talk to them, 'you started your career because you were a curios person, now you're basically working as a glorified technician trying to find solutions. If you work with us, you know, this kind of idea of open-based problem-seeking approach as opposed to the solution-ist approach would be available to you'. And then many scientists find it very refreshing because they are really constrained by the way in which contemporary sciences, especially life science, operates which drives them towards possibly trying to find solutions rather than identify issues and problems.

What's revealing here is how Oron draws a connection between 'pure artists' (which he infers includes himself) and pure scientists – both are interested in identifying problems rather than solutions, yet both are impelled to do the latter. Such resistance to applied forms of science and art is often met with charges of being insular and/or elitist. Yet, the kind problem-seeking approach that Oron gives voice to can be seen to play a democratic role: challenging the dominant order and fostering ways of new and different ways of thinking. Oron moves onto suggest, that in an era of declining trust in science brought on by a culture of hype/promises, that such a role is becoming particularly pertinent. Moreover, it's a role that organisations like SGL can enable:

> Oron: That's where the Science Gallery can either work against or become instruments in this new dark age of acceptance. And, you know people just accepting everything they're being fed and the amount of empty promises. And this is, again, when I give a talk to scientists, I often use the line of the fact that we are critiquing the hype around science not because we don't trust science, but because we believe that this is what causes people to stop trusting science, when scientists keep on promising unrealistic things or unrealistic timelines in regard to when things are going to be achieved, which they're kind of almost by design and forced to do through funding systems and the way they're being trained to talk to the public. This is exactly where people are losing trust in them because they're not delivering, delivering what they promised. And we need to find another system and I think this where Science Gallery can help.

In various extracts above we can see the characteristics of a 'sceptical subject' (Clarke et al. 2007: 142; Shore and Wright, 2011: 27). While Oron doesn't refer to the 'impact agenda' or use the term 'impact', Oron recognises and reflects on the dominant discourses that the impact agenda puts into

circulation and the subject positions they assign. What's more, he critiques these discourses and distances himself from the subject positions. To do so, he draws on alternative knowledges that enable him to construct a different understanding of what it means to be artist who works with scientists and is publicly engaged.

At this point it is instructive to briefly think back to the fieldnote I opened this section with and to reflect on the processes of subjectification. At that event, we reflected on the forces of subjection, spoke back and brought into play a range of discursive resources that offered alternative points of subjectification. To understand the alternative points of subjectification that were generated we need to recognise how the collective experience of the event operated not only at the discursive and intellectual level but also the corporeal and affective level. We might say that our ability to speak and give voice to alternative knowledges was bounded up with the feelings of empowerment that were generated by forming productive connections with other bodies (not least other humans but also literature, art works and other bodies that constituted the event's assemblage). I know I felt energised by the event's 'vibe'.

To continue this line of thought, we can consider how particular art objects offer alternative points of subjectification. It was always quite interesting to see people walk by Catt's and Zurr's Compostcubator 2.0 (Figure 6). Some people would give it a momentary glance while continuing to walk. Some people, after a momentary glance, would stop and have a closer and more sustained look. While we can only speculate what those people thought and felt, I want to suggest such moments are revealing of art's role in creating what Deleuze calls an 'encounter'. As Sullivan (2010: 197) suggests, what's at stake here is twofold: (1) 'the rupturing quality of art' - i.e., 'its power to break our habitual ways of being and acting in the world (our reactive selves)'; and (2) art's capacity to create new ways of being and relating to the world – i.e. to produce new subjectivities.

When considering how Compostcubator 2.0 may offer such an encounter, it's useful to first note the piece's indeterminate or even 'bothersome' (Sullivan, 2010: 199) character. Neither clearly part of the gallery nor part of the garden, and neither clearly an art piece nor a compost heap, the piece can generate a sense of puzzlement and bewilderment. Perhaps when one colleague bemoaned the Science Gallery on the basis that it is neither 'proper art' nor 'proper science communication', maybe this is one of the pieces they had mind. Either way, the key point I want to draw out is how such bewilderment speaks to art's role in producing 'affective ruptures'. Art in this sense is not about representation nor signification but rather an encounter that involves 'a short- circuiting of sorts of

our cognitive and conceptual capacities' (O Sullivan, 2010: 197). And moreover, such an encounter might 'operate to rupture certain circuits of reception and consumption and other habits of 'spectatorship' (those that reinforce a certain 'knowledge' of art, or even a given subjectivity) whilst opening us up to other perhaps more unfamiliar but more productive economies' (Sullivan, 2010: 197) . The question that arises here is what new way ways of thinking and acting may the work of Catt's and Zurr's grant us access to? To follow Lapworth (2015) who has studied the Bio-Art of work Catt and Zurr in detail, and who takes his cue from Haraway (2008), we might say such work has the potential to generate 'response-able modes of ethical comportment' that are attuned to the impacts arising from biotechnology's manipulation of living systems and organisms.

Whether such potentials are realised is another question. And here we might want to consider how the indeterminacy of works such as Compostcubator 2.0 not only leave it open to multiple possible encounters and responses but also the stratifying forces of the impact agenda. Think back to the previous chapter and SGL's role in creatin a 'univer-city' (Spencer, 2011). It's plausible to think how the piece helps to constitute a 'smooth' space where commerce, culture and learning converge. Likewise. it's also plausible to think how the piece helps to create a 'playful' atmosphere that serves to incite the 'requisite connective, flexible, and informal conduct' that is characteristic of the communicative and enterprising subject (Spencer, 2011: 16). In a similar vein, we can of think of how the piece of work becomes means to showcase KCL. It's interesting to note here how the marketing of SPARE PARTS placed a notable emphasis on the KCL's involvement in the exhibition (despite many of the exhibiting pieces being conceived by artists in another context). We get hints of this in the way the Compostcubator 2.0 label emphasises the involvement of the KCL technician (see Figure 7).

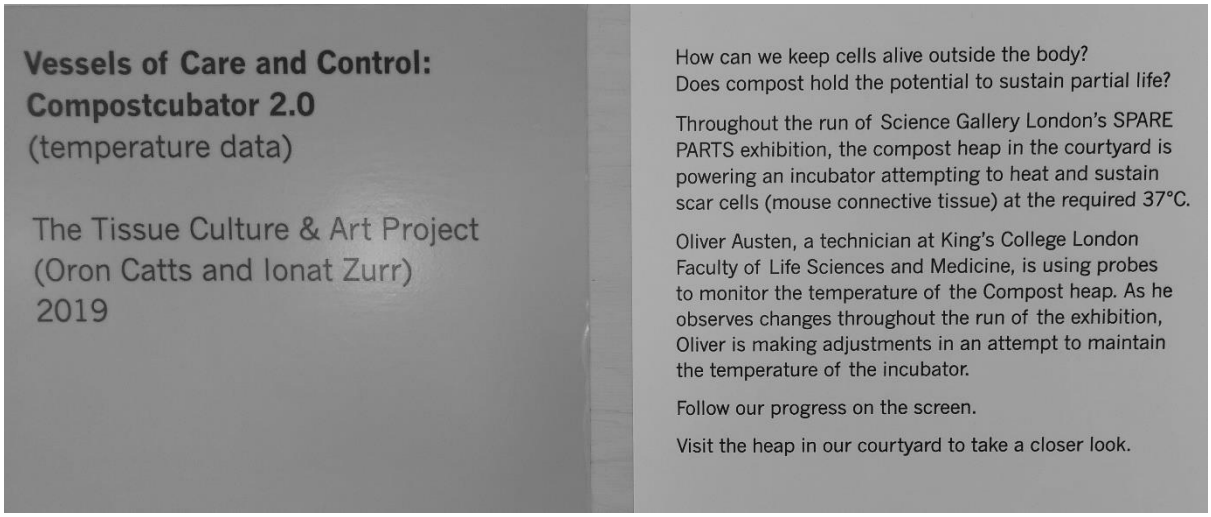

Figure 7. Compostcubator 2.0 label (Author's own photo).

Oron himself reflected on the marketing emphasis:

> Oron: Within science communication there's this sense that they are trying to instrumentalize what they're doing and don't really see value besides the marketing side of things. So I can see it, you know, you could see with SPARE PARTS in London. About six or seven works in the show originated from a lab in Australia. But all of the PR for the show was framed around come and see the outcomes of the research from Kings College. So it was very, very focused from the PR perspective that the Science Gallery is a show window to what's happening within King's College.

Oron's reflection on the 'PR' surrounding SPARE PARTS points to how the stratifying forces of impact agenda have a propensity to maintain strong grip of the SGL. That said, Oron's recognition of such forces reminds us of the need to not simply reduce SGL to such forces. In his recognition of such forces, alongside his art practices discussed above, we see a subject who reflects upon dominant discourses and their interpellations. Moreover, we see a subject who actively contests these constructions and who exercises their creativity in 'shaping the kind of institutions and policy worlds that they would wish to inhabit.' (Shore and Wright, 2011: 27).

Ambiguities and Alternatives

In certain ways, the bodies discussed above are archetypal impactful academics. They cross the borders of different fields, they engage with wider publics, and they are involved in knowledge production processes that aim to have an impact beyond the academy. In this sense, they are the kinds of bodies that the impact agenda seeks to assemble and construct as enterprising subjects who demonstrate their value through the effective and efficient pursuit of research impact. And in the accounts above, we see traces and hints of the ways in which the impact agenda compels academics to think and act in such terms. This includes mechanisms of control that operate at the level of affects. For example, the joys of engaging with wider publics that we see with the early career researcher and the doctor alert us to the ways which the impact agenda mobilises joyful encounters and incites academics to become more engaged and visible. Somewhat conversely, the professor and the scientists shift our attention to the ways which the impact agenda induces and compounds feelings of disaffected consent that can leave academics debilitated and acquiescence with a

neoliberal mode of governance centred on market-competition. It also includes mechanisms of discipline that operate at the level of language and subjective interpretation. For example, the artist's involvement with SGL points to a dominant system of signs that codes 'artists' as science communicators who showcase research and help drive technological innovation. By the same token, the early career researcher's interpretation of public engagement bears the imprint of an instrumental construction of public engagement that instils the idea of using public resources efficiently and effectively.

We can of course detect other traces of discipline and control in the above accounts, though my intention in this chapter is not to dwell on these but rather probe vectors of destratification and open up the impact agenda to differentiation and transformation. Here it's important to first reflect on how governing processes are characterised by ambiguities and slippages. As we see above the bodies are not simply subjected to the disciplinary power of the impact agenda's expression but are active sense makers who (re)interpret and refuse the roles and identities assigned to them. In this active self-construction of subjectivity, we see the bodies give voice to knowledges that are devalued and deemed less permissible within the impact agenda's discursive formation. For instance, we see the early career researcher speak of the 'ethical imperative' to enable patients to take part in decisions -making processes that affect them. In doing so she articulates a notion of public engagement that less about using public funds efficiently and effectively than it is enacting collective democracy. Similarly, in animating ideas relating to activism and radical politics, the doctor expresses an understanding of public engagement that is centred on different people coming together to collectively challenge the dominant order. What also comes into view here is an understanding of innovation that is less about enterprises finding effective and efficient solutions to policy problems than it is social movements working towards social transformation. The notion of 'pure artists' invoked by the artist also brings into view a different conceptualisation of innovation to that deployed by the impact agenda – one that isn't about solving problems through developing new technologies but rather seeking problems and opening up new ways of thinking, acting and relating. And this alternative understanding of innovation carries an alternative understanding of public engagement, one that isn't about lubricating the knowledge translation pipeline but rather enriching the public sphere and opening up space to imagine and create alternative futures. The professor's and the scientist's affinities academic professionalism and disciplines reveal a further way to think about the public role universities, one that is less about the production of measurable outcomes than it is the process of doing science responsibly and ethically.

In drawing on and giving voice to these different discursive repertoires and cultural resources, the bodies can be seen to construct alternative understandings of impact to that which the impact agenda constructs. Impact is not simply framed in terms of the effects of research being translated into domains outside of the university and being taken up by non-academic end-users. Rather we see a broader construction of impact that encompasses more diffused and long-term impacts that occur from research with no direct practical application or particular beneficiary in mind, as well as processual or intermediate impacts that occur during the research process. This broader construction also carries a more encompassing framing of the societal functions of the university. What comes into view are multiple functions that take us beyond the dominant imaginary of the knowledge economy and bring forth non-economic values. At the same, this broader construction of impact carries a more encompassing framing of public accountability. Here we see notions of accountability that take us beyond a neoliberal performance-based accountability and which recast accountability in terms of promoting ethical and responsible conduct and creating spaces where academics and wider publics can collectively address questions about the direction of science and society.

These different understandings of impact can be seen to offer the bodies alternative points of subjectification that enable them to think of and understand themselves in ways that exceed the impact agenda's construction of the impactful academic. In other words, they can be seen as attempts to lessen the grip of subjection and to construct an alternative sense of self. Thus the kind of subjectivities that emerge can't simply be defined in terms of an enterprising subject who is concerned about investing in one's human capital and demonstrating one's value, nor can they be simply defined in terms of an knowledge worker who is focused on accelerating innovation and using public funds efficiently and effectively. The subjectivities that come into view point to rather different ways of thinking and acting – ways that we might say are more collective and social than individual and economic.

If we shift our attention to the affective and corporeal dimensions of human existence, we further see processes of subjectification that trouble and surpass the impactful academic. Here it's instructive to first reflect back on various encounters that are indicative of the bodies' affective relations. For example, the professor's 'informal' interactions with patients, the scientist's lab meeting, the early career researcher's PPI meeting, the doctor's activist meetings, the artist's reading group. What these rather different encounters point to are collective moments whereby the bodies that are assembled experienced feelings of pleasure and empowerment. To follow Gilbert

(2019; 2020) we can refer such moments as ‘collective joy’. The key point to draw out here is that such moments of collective joy harness and enhance our ability to form connections with other bodies and to act in the world. In this way, we might say that collective joy is what propels the bodies to engage with wider publics and to create impact.

While I have pointed to particular moments of collective joy, these should not be viewed in isolation but as part of an affective energy that traverses the university and beyond. As I discussed in the previous chapter, it’s these flows of desire and affect that constitute the key matter-energy that the impact agenda assembles. We should thus not lose sight of how the stratifying forces of impact agenda seeks to activate desires and enable the joys collective creativity while simultaneously ordering and coding these flows of energy. Moreover, we should be careful and not assert a simplistic primacy of desires and affects over the stratifying forces of the impact agenda. Desires and affects never exist in a ‘free’ state, separate from the strata. That said, I do want to suggest that moments of collective joy and the affective energy that swirls within and beyond the university point to a limit in the reach of the impact agenda’s stratifying grip.

We can find this limit - and, in turn, alternative - by dwelling on the kind of subjectivity that comes in to view. In short, we don’t see an autonomous individual who is acts in terms of their self-interest, but rather persons whose capacity to act is determined by the relations they form with other bodies. Thus we see a different kind of subjectivity to that which neoliberalism and the impact agenda constructs, one that brings forth the relational nature of human existence and eschews the idea that agency and creativity are simply the innate properties of individuals. What’s at stake here is formulating a conception of subjectivity that helps us to imagine and find ways of enabling people to connect and actualise their potential for collective creativity. In other words, what’s at stake is achieving the democratic objective of bringing into being ‘potent collectivities’ (Gilbert, 2013a).

To be clear, the conception of subjectivity I’m drawing attention to – what we can think of in terms of transindividuality (Read and Gilbert, 2019) – doesn’t deny the existence of unique persons or ‘individuals’. As Gilbert (2013a) notes:

> It is possible to acknowledge that each person is unique without adopting a properly individualist perspective, if one acknowledges that their uniqueness is not simply a function of some interior quality which is irreducible to them, or of their place in an order of differences and relations which is defined by the existence of some

> transcendent ordering principle (as prescribed by Leviathan logic), but is rather a consequence of the fact that each person constitutes (and is constituted by) a unique intersection within an infinitely complex and perpetually mobile set of relations. (Gilbert, 2013a: 97)

This conception of subjectivity thus takes us beyond the binary of the individual vs collective. It recasts subjectivity in ways that recognise how both collectives and individuals are constituted by a complex web of relations, and how both collectives and individuals mutually constitute each other. In this light, the formation of collectivity doesn't necessitate the suppression of a person's uniqueness. By the same token, the formation of an individual doesn't necessitate the refusal of collectivity.

Converting the impact agenda

What do these alternative subjectivities reveal about the potentials for converting the impact agenda and creating alternatives? I want to suggest that what is most instructive is how the alternative subjectivities point to a model of governance that is based on the cultivation of collective joy, i.e., a model of governance that seeks to enable the social and institutional conditions that 'will maximise the human capacity for collective creativity' (Gilbert, 2019: 168). Such a model of governance can be seen as antithetical to the neoliberal model that the impact agenda effectuates and which inhibits the potential for collective creativity and impedes the emergence of potent collectivities. For want of a better word, let's name this alternative to the impact agenda as the 'joy machine'.

To be clear, in naming this alternative it's not my intention to provide a blueprint for action. The joy machine is better thought of as a conceptual resource that can be used to reimagine the impact agenda and construct alternatives. That said, I do want to offer some general pointers on the kind of social and institutional arrangements that might help to actualise the joy machine. These pointers should be seen as propositions that can be explored further and experimented with, since what will work will vary depending on the context and will require continual experimentation and adaptation.

Collaboration not competition

Cultivate a culture of collaboration (within and beyond the university), not competition. In proposing this, I'm not denying the existence of 'convivial competition' (i.e., the way in which an academic may

wish to be the first person to discover a new specie in the same way they may also wish to win a bike race against their friend) (Harvie, 2004). Rather I'm suggesting that we need to move away from a neoliberal audit culture that encourages academics to see themselves as individuals who compete against one and other for material and symbolic rewards (and in effect their livelihoods). As we have seen at various points above, such a culture induces feeling of dissatisfaction and despair and entails a diminishment in academics' capacity to act. Indeed, academics' concerns about the impact agenda are less do with the notion of impacting wider society and engaging with wider publics per se, than they are to do with the extension and augmentation of an audit culture. The key upshot being is that the creation of non-academic research impacts and the engagement of wider publics needs to be decoupled from funding regimes and performance management systems that are centred on the logic of market competition.

No doubt many would argue that such a decoupling would render universities less accountable to the public. We should take heed from the point that academics are not against engaging with wider publics and creating non-academic impacts but rather the way which these activities become enmeshed in audit systems and performance measurement. This highlights the potential of developing mechanisms of public accountability that are centred on collaborative relations between academics and wider publics. Taking my cue from Stengers (2018: 151), I want to suggest that this would entail 'modes of gathering that complicate politics by introducing hesitation'. In other words, it would involve creating modes of togetherness that open up space for wider publics to voice their objections and concerns. This brings into focus a rather different conceptualisation of public engagement to that which the impact agenda expresses. In short, it points to a conceptualisation of public engagement that is less about speeding up knowledge translation than it is *slowing down*. As Stengers (2018) argues, what's at stake in slowing down is the capacity to form productive relations with others and to address fundamental questions about the worlds we inhabit and the knowledges we cultivate:

> It is here that the word 'slow', as used in the slow movements, is adequate. Speed demands and creates an insensitivity to everything that might slow things down: the frictions, the rubbing, the hesitations that make us feel we are not alone in the world. Slowing down means becoming capable of learning again, becoming acquainted with things again, reweaving the bounds of interdependency. It means thinking and imagining, and in the process creating relationships with others that are not those of capture. It means, therefore, creating among us and with others the

> kind of relation that works for sick people, people who need each other in order to learn - with others, from others, thanks to others - what a life worth living demands, and the knowledges that are worth being cultivated. (Stengers, 2018: 81)

Knowledge common not knowledge economy

Experiment with the potentials of building a knowledge 'common'. The common can be understood 'as the immanent terrain of creativity [..] - a shared capacity for social invention and collaboration that is embedded within, yet always exceeds, capital' (Means, 2013: 51). The key point to draw out here is how the common 'always exceeds'. We see this 'surplus common' in the ways which the desires and affective relations of the bodies exceed the imperatives of the impact agenda. The question we should ask is how can we build this surplus common and open up spaces for collaboration and free exchange that exist outside the disciplinary and controlling mechanisms of capital and the State. One of the key gains to be made by experimenting with such possibilities is breaking the hold of the imaginary of the knowledge economy. Free from the imperatives to boost 'economic prosperity', a knowledge common would open up more space for universities to cultivate different kinds of knowledge and 'innovation', not just those that to show direct economic returns or are deemed relevant to government agendas. This would thus enable academics – and those they think together with – to 'slow down'. Under such conditions, people would have the capacity to cultivate a multitude of impacts, including the very kinds of impact that the 5 bodies give voice to, and which are not recognised or are devalued within regimes of impact assessment.

A perplexing issue to confront when experimenting with the potentials of building a knowledge common is the role of the State. Public universities are the home of most academics and, while part of the State machinery, they are sites of surplus-common. Thus a complete disavowal of and exodus from the State currently seems unworkable. Here it's instructive to take note of Deleuze and Guattari's (1987: 161) recommendation to 'lodge yourself on a stratum':

> This is how it should be done: lodge yourself on a stratum, experiment with the opportunities it offers, find an advantageous place on it, find potential movements of deterritorialization, possible lines of flight, experience them, produce flow conjunctions here and there, try out continuums of intensities segment by segment, have a small plot of new land at all times. (Deleuze and Guattari's, 1987: 161)

To take Deleuze and Guattari's advice, we might say that our strategy should be to remain within the Public Universities we currently inhabit. In doing so, we should seek to work with and expand the surplus-common within these sites. It's from this position that we can experiment with the possibilities of transforming the Public Universities we occupy as well as creating new autonomous entities.

Neither vertical nor horizontal

Develop organisational forms that go beyond the vertical vs horizontal binary. The feelings of frustration and dismay induced by the requirements to demonstrate impact and perform public engagement underscore how top-down mandates generate sad affects and inhibit collective creativity. At the same time, we shouldn't lose sight of how a degree of structure and order is necessary to ward of the dangers of falling into a state of unproductive chaos. It's useful to again remind ourselves of how social formations are composed of processes that move in directions of both the plane of organisation and the plane of consistency and can thus exhibit dynamics of being both hierarchical and horizontal, both homogeneous and heterogeneous, both stable and unstable. Moreover, we should take note that neither the plane of organisation and nor the plane of consistency constitutes a 'state of being desirable for itself; both are a kind of death' (Buchanan, 2021: 52). 'Life occurs in the middle', as Buchanan (2021: 52) suggests. The task then is to find a balance between the order and structure of the plane organisation and openness and differentiation of the plane of consistency. To put this in more concrete terms, we might say, for example, that there is a need for management but the function of this is not to police and dictate what academics do but rather to put in place the support and resources that is needed to enable academics to collaborate and 'slow down'.

Academic professionalism

Enable academics to become professionals. Some might argue that a move towards mechanisms of public accountability that are centred on collaborative relations with wider publics displaces and undermines academic professionalism. Such a view fails to recognise how power relations are not a zero-sum game. Connecting with others and experiencing collective joy doesn't mean 'sharing power' in the sense that you give up and hand over a slice of power. As the interactions and affective relations of the bodies discussed above show, it entails the mutual enhancement of capacities. Moreover, such empowerment requires the enablement of the unique properties and

capacities of different bodies. The suppression of such multiplicity risks impeding the potential for creativity that is inherent in such collective moments.

The key up shot here being is that collaborations between academics and non-academics should open up a space where different kinds of knowledge are recognised and cultivated. Thus, academics shouldn't surrender their professional and disciplinary expertise. Rather they should use it and share it, bringing it into dialogue with other kinds of knowledge and allowing others to introduce 'hesitation' (Stengers, 2018: 151).

To be clear, in recognising the place for professionalism, I'm not suggesting we should revert back to the traditional configuration of professionalism that sees 'professions as closed and largely inward-looking entities' (Biesta, 2017: 318). Clearly the kind of professionalism I'm pointing to is very different to this. To further bring this alternative sense of professionalism into focus, it's helpful to reflect back on how the bodies constructed their subjectivities (or existential territories) through refrains that pertain to academia and its disciplines and fields. The key point to draw out here is how the territories that the bodies construct provided them with a sense of coherency and order while simultaneously enabling them to make new connections. Thus, rather than being fixed and closed, the territories are open to differentiation and transformation.

I want to suggest this process of (de/re)territorialisation offers a useful way to conceptualise professionalism. It enables a way to recognise and furnish the role of professional knowledge and expertise, without falling back on closed and inward-looking conceptions of professions. At the same time, it enables a way to recognise and furnish the role of lay knowledge and 'expertise', without positioning that lay involvement as somehow disempowering for academics (indeed, it recasts such relations as empowering). Moreover, understanding professionalism in terms of the refrain and (de/re)territorialisation opens up a radically different way to think about the ethical conduct of academics. We should remind ourselves that for Deleuze and Guattari ethical action is not grounded in transcendent laws, but is a question of making new connections with bodies and mapping out the encounters that produce joy. In this way, the ethical conduct of academics is less about following regulatory system of rules and codes than it is experimenting with refrains and evaluating the collective joy they produce.

Putting the tracing back on the map

In this chapter I have focused on mapping vectors of destratification and opening up the impact agenda to differentiation and transformation. In doing so, I have mapped academic subjectivities that take us beyond the figure of the impactful academic. Moreover, I have I mapped the potentials for converting the impact agenda that these alternative subjectivities present. More specifically, in what I name as the joy machine, I discern an alternative that is centred on the cultivation of collective joy.

While the focus has been mapping alternatives, in this chapter we have seen how the stratifying forces of the impact agenda are never too far away. This serves as an important reminder that we shouldn't underestimate the likelihood of the potentials of the joy machine remaining inhibited and unactualised. Indeed, we shouldn't lose sight of neoliberalism's tendency to construct person's as competitive individuals and inhibit their potential for collective creativity. Likewise, we shouldn't lose sight of how mechanism of control and discipline work by animating people's desires to experience collective joy while simultaneously ordering and coding these flows of desire and affect. However, recognising these dominant tendencies doesn't mean falling into a state of hapless pessimism. We should take hope from the fact the alternatives I draw attention to are grounded in an analysis of the potentials that lie latent and emergent in the present.

Chapter 7 Conclusion

In this thesis I have sought to address two overarching aims: 1) understand how the impact agenda is implicated in the (re)production of dominant power formations and (2) uncover the potentials for converting the impact agenda and creating alternatives. To do so I have focused on the question of subjectivity and have asked the following questions:

- What role does the impact agenda play in producing academic subjectivities, and what do these processes of subjectification reveal about formations and mechanisms of power?
- What alternative academic subjectivities are there to those ascribed by the impact agenda, and what do these subjectivities reveal about the potentials for converting the impact agenda?

In Chapter 5 I focused on addressing the first overarching aim and first set of questions. Here we saw how the general function of the impact agenda is the production of the 'impactful academic' (i.e., an enterprising subject who demonstrates their value through the effective and efficient pursuit of research impact). It is this function that that defines the impact agenda abstract machine and which constitutes the unity of composition of the impact agenda stratum. I demonstrated how this function is effectuated by a concrete assemblage that has a content side and an expressive side. More specifically, I demonstrated how the impact agenda's expression constitutes a semiotic system that ascribes a particular understanding of what it means to do academic research and what is means to be an academic (i.e., the impactful academic), while its content concerns an arrangement of material bodies that mobilises affects and incites certain kinds of conduct that are conducive to the production of impactful academic. In stepping back and considering the broader abstract machines at work, I showed how the impact agenda effectuates neoliberalism's tendency to construct persons as individuals while simultaneously inhibiting the potential for collective agency and creativity. Moreover, I showed how the impact agenda entails both disciplinary mechanisms that are centred on 'social subjection' and control mechanisms that are centred on 'machinic enslavement'. In this way, the impact agenda can be seen to effectuate two complimentary abstract machines: discipline and control.

In Chapter 6 I concentrated on addressing the second overarching aim and second set of questions. To do so I focused on 5 bodies and brought the complexities of their subjectification to the fore. While the stratifying forces of the impact agenda were never far way, we saw how the bodies

formed their subjectivities in relation to knowledges that are displaced by and subordinate to the dominant ways of thinking that the impact agenda expresses. The connections that the bodies make with these different knowledges can be seen as an attempt to loosen the grip of subjection and forge a sense of self that is different to impactful academic. By bringing to light the affective and corporeal dimensions of human existence, I further probed elements and processes which trouble and exceed the stratifying grip of the impact agenda. In particular, I drew attention to moments of collective joy which point to a conception of subjectivity that is centred on collective agency and creativity rather than the autonomous and self-interested individual, and it's here where I located the potentials for converting the impact agenda. In what I call the joy machine, I set out an alternative that is centred on the cultivation of collective joy.

In offering this account of the impact agenda and its alternatives, this thesis makes a significant contribution to literature relating to the impact agenda. In particular, it represents an advancement on the wealth of commentaries and essays that posit the effects of the impact agenda and debate the merits of working 'with and/or against' (e.g., Holmwood, 2016; Back 2015; Pain et al. 2011; MacDonald, 2018). I offer a theoretically-informed empirical study that is attentive to how the impact agenda is unfolding in the daily lives of academics. In doing so, I go beyond merely positing the effects of the impact agenda as I examine how the impact agenda is reconfiguring the organisation of universities and reshaping what academics do and how they think. At the same time, I avert the pitfall of over reading the disciplinary and controlling effects of the impact agenda. The account I offer is one that is sensitive to the ways in which the workings of power are both reinscribed and circumvented. Moreover, I avert the shortcomings of texts that postulate about the possibilities of rearticulating the impact agenda without critically analysing how their proposed alternatives exist in relation to dominant formations of power. One of the key insights of this thesis is how public engagement opens up new measures of performance and thus augments rather the loosens the grip of a neoliberal audit culture. Such insights serve as a cautionary note for those who seek to transform the impact agenda by developing an impact assessment framework centred on the co-production of knowledge (Pain et al., 2011).

This thesis also represents an advancement on previous empirical studies relating to the impact agenda. It goes beyond the large number of empirical studies that bear the traits of 'orthodox' policy studies and work within the technocratic and instrumental confines of policy formulation and implementation (e.g., Grant et al 2010; Penfield et al. 2013; Greenhalgh et al. 2016; Milat et al., 2015; Hinrichs-Krapels and Grant, 2016). At the same time, it goes beyond studies that bear the

traits of 'interpretive policy analysis' and tend to lack the 'critical edge' of critical scholarship (e.g., Chubb and Reed, 2017; Oancea, 2013b; Leathwood and Read, 2012; O'Connell, 2018; Smith et al., 2020). The empirical account I provide is one that connects the two political poles of critical scholarship, that is articulating 'a negative critique of the dominant in the present' with a 'positive opening up of the present to other possible futures' (Grossberg, 2010: 94). In doing so, I bring to the fore the ways in which the impact agenda is implicated in the reproduction of dominant power formations, while simultaneously shedding light on the potentials for converting the impact agenda and creating alternatives. Crucially such an approach has resulted in a proposed alternative (the joy machine) that points to a true alternative and not merely a diversification of the dominant. A key point to draw out here is how this alternative necessitates the decoupling of impact from regimes of audit and performance measurement. This crucial point to understanding the creation of alternatives is lost on previous studies working within the interpretive tradition that seek to transform the impact agenda but remain wedded to a culture of performativity and academic competition (Smith et al., 2020).

In carving out this critical approach, this thesis adds to the small number of empirical studies relating to the impact agenda that bring politics to the fore and offer alternatives to the dominant (Watermeyer, 2019; Evans, 2016; Jerome, 2020). And it's here we see a further way in which this thesis marks an advancement on previous literature. While the other studies remain confined to a focus on language and sense making, I deploy a theoretical and methodological approach that is attentive to the various elements and processes involved in the production of subjectivity, including those that precede and exceed the linguistic and cognitive registers of life. In doing so, I offer a more nuanced account of the different ways in which the impact agenda works to discipline and control academics. At the same time, I bring to light the complex and dynamic web of relations that shape what academics do and think, including relations that surpass the imperatives of the impact agenda. Crucially, this heightened attentiveness to the various elements and processes at play in the production of subjectivity enables me to discern an alternative to the impact agenda (the joy machine) that falls outside of the other studies' analytical scope. This analytical advantage brings us onto the other key body of literature that this study contributes to: policy assemblage.

In addition to contributing to debates relating to the impact agenda, this thesis also makes a significant contribution to debates relating to critical policy studies' recent turn to assemblage theory - what's been coined policy assemblage (Savage, 2020). Following others in social sciences and humanities more widely who have argued for the need to return to Deleuze and Guattari

(Buchanan, 2021), I have developed a conceptual approach that finds its footing in the work of Deleuze and Guattari. In doing so, I have utilised the concept of assemblage in light of Deleuze and Guattari's philosophy and have put to work the allied concepts of strata and abstract machine. What's at stake in developing such an approach is overcoming the shortcomings and missed opportunities that hinder policy assemblage literature which I identified in Chapter 3. In particular, the concepts of strata and abstract machine enable an approach that accounts for broader social forces and probes tendencies that exist across different settings. Some policy scholars, particularly those who have turned to ANT and place an emphasis on empirically grounded and locally situated descriptions of socio-material assemblage, may be uncomfortable with such abstractions and may make accusations of reductiveness. They should take note that the abstract machine has two states – one that faces the strata and another that faces the plane of consistency – and assemblages are vectors of both stratification and destratification. Recognising such complexities entails a sensitivity to relations and processes that can't be reduced to the roll out of a 'usual suspect' such as neoliberalism.

Moreover, Deleuze and Guattari's assemblage theory enables an approach that places subjectivity as a key site in which relations of dominance and subordination are produced and new and different modes of existence can be created. It's worth reminding ourselves here that, for Deleuze and Guattari, assemblages have an expressive side and a content side. This is a point that many policy scholars who are interested in taking an 'affective turn' or 'material turn' are at risk of ignoring. While a move beyond a preoccupation with discourse and meaning-making is welcome, a focus on the material and affective should not come at the expense of grasping the expressive side of assemblages. As I have shown in this thesis, analysing an assemblage's expression is crucial to understanding how semiotic systems determine the pathways in which people are able to think and understand themselves. To be clear, I'm not wishing to downplay the gains to be made by turning to matter and affects. Indeed, this thesis attests to the value of developing a heightened attentiveness to the affective and corporeal dimensions of human existence. What I'm arguing for is an approach that is sensitive to the multiple registers of subjectivity, one that encompasses the conscious and non-conscious and the discursive and affective.

Such an approach offers important analytical gains when it comes to understanding mechanisms and formations of power. In particular it opens us up to the ways in which the production of subjectivity in contemporary capitalism works by freeing up and activating flows of desire and affects while simultaneously ordering and coding these flows of energy. By the same token, it opens us up to ways

in which mechanisms of control and discipline can be at play simultaneously. There are also gains to be made when it comes to exploring and creating alternatives to the dominant order. The key point to grasp here is how fostering an attentiveness to the multiple processes and elements at play in the production of subjectivity helps to bring in to focus the complex and dynamic web of relations that shape what people do and think. The kind of subjectivity that comes into view is one that brings to the fore the relational nature of human existence and which troubles the idea that agency and creativity are simply the innate properties of individuals. Thus what emerges is a conception of subjectivity that is conceived in terms of collective agency and creativity and which breaks with the neoliberal notion of the competitive individual.

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