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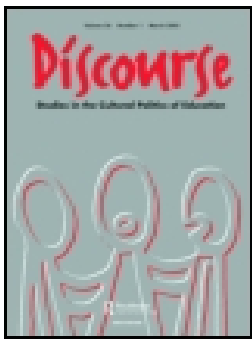
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Student feedback apparatuses in higher education: an agential realist analysis

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ABSTRACT

This paper shows how Karen Barad's *agential realism* provides a powerful analytical framework for assessing higher education accountability. It takes the example of the UK 'National Student Survey' (NSS), a questionnaire, which purports to ascertain student course satisfaction in universities. The paper demonstrates how agential realism offers the opportunity to make visible (and theorise) three suggested effects of the NSS: (i) affective dimensions of lecturer experience; (ii) boundary creations between lecturers and students; and (iii) the marginalisation of experimental conceptualisations of practice. Analysing narrative data from six university lecturers, it will be shown how agential realism has a capacity to theorise the sociological realms of classroom encounters, institutional practices and national policy in their very entanglement. That is, university lecturers' practice is analysed as 'apparatuses of bodily production' that are enfolded into larger institutional and national apparatuses.

Introduction

This paper's distinct research contribution consists of an exploration of the capacity of Barad's agential realism to theorise higher education accountability policy, more specifically the National Student Survey (NSS). It will be argued that agential realism gains its analytical strength from its ability to analyse national policy in its entanglement with institutional dynamics and university lecturers' practice. More specifically, it will be suggested that the NSS – as one accountability framework in education – produces three distinct effects at universities: (i) conformist and anxious lecturer identities; (ii) boundary creations between lecturers and students; and (iii) the marginalisation or exclusion of alternative manifestations of practice. These three postulated effects are based on and exemplified by Barad's (2007) concept of the apparatus in that apparatuses are always actively implicated in simultaneously producing (i) matter, (ii) agential cuts, and (iii) exclusions from mattering.

First, a brief summary of Barad's framework and a contextualisation of the National Student Survey will be provided. Second, the paper's methodology will be outlined with a particular focus on paradigmatic considerations, including a brief agential-realist

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reconceptualisation of the analytic process. Third, encounters with students are considered as apparatuses in which boundary creation and isolation work alongside ongoing and iterative practices. In conclusion, the paper points to a renewed understanding of the notions of solidarity as shared agency.

Agential realism: an introduction

> Agential realism is an epistemological and ontological framework that cuts across many of the well-worn oppositions that circulate in traditional realism versus constructivism, agency versus structure, idealism versus materialism, and poststructuralism versus Marxism debates. (Barad, 2007, p. 225)

> Apparatuses are boundary-making practices. (Barad, 2007, p. 148)

The novelty of Barad's (2007) framework lies in reading Niels Bohr's (1963) quantum-physical insights through Foucault's (1972, 1977) notion of discursive practices and Butler's (1993) concept of performativity. This 'diffractive' reading culminates in her theoretical framework of *agential realism*. As the name suggests, agential realism follows a realist ontology whilst eschewing representationalist understandings of realism (in the sense of an independent world outside that is then somehow represented by ideas inside human minds). According to Barad (2007), humans are not simply *in* this world whilst gazing passively at the events around them. Rather, they are *part of* this world – and to gaze at the world 'one must actively intervene' (p. 97). Similarly, Barad rejects Newtonian physics in which independent objects move through space and forward in time; rather, space, time and matter do not independently exist, but rather emerge simultaneously in the shape of 'spacetimemattering' (p. 234).

Four interconnected notions are important in order to put agential realism to work: *apparatus, agency, intra-action* and *iterativity*. Barad's (2007) notion of the *apparatus* is inspired by Niels Bohr's theorisation of the influence of the experimental setup in quantum physical experiments on the phenomena produced. Apparatuses consist of *agencies* that, importantly, do not pre-exist their encounter but rather emerge through (and as part of) what Barad calls *intra-action,* in lieu of the more common notion of interaction. While *interaction* implies that certain determinately bounded individual agencies existed before their interaction, 'intra-action' is better equipped to describe the emergent character of those agencies. Moreover, counter to received wisdoms about quantum physics, Barad suggests that intra-action is not restricted to quantum physical experiments and the microscopic realm. Rather, quantum theory 'supersedes Newtonian physics' (p. 324): humans as 'determinately bounded and propertied human subjects do not exist prior to their "involvement" in naturalcultural practices' (p. 171).

Important to our analysis is that there are three entangled aspects to each intra-action: (i) materialisations (of agencies and objects of observations), (ii) the agential cut, and (iii) exclusions (Barad, 2007). These aspects are fundamentally contingent on one another; e.g. materialisations cannot exist without agential cuts and exclusions. More specifically, matter can (i) only emerge (or materialise) through (ii) an *agential cut*. This agential cut 'splits' – or cuts 'together and apart' (p. 389) – the apparatus into the 'agencies of observation' (or *effect*) and the 'object of observation' (or *cause*). In other words, the agential cut makes the agencies of observation and the object of observation *materialise* or '*matter*'. It is of crucial importance that Barad uses the verb 'to matter' in a sense that it simultaneously denotes that something

(a) materialises (as in "taking shape"), and (b) that something is of significance (i.e. in the sense of 'this really matters to me'). This relates to one of Barad's central assertions, namely that matter and meaning are indissociably entangled. Importantly, this entanglement cannot be understood as a simple intertwinement, but as quantum-entanglement, i.e. to 'lack an independent, self-contained existence' (p. iv).

What matters (i.e. what emerges as *effect* or as *cause*) is fundamentally contingent on the specific material arrangement of the apparatus (Barad, 2007). A small change to the experimental conditions in a quantum-physical experiment enacts a different agential cut and, hence, different agencies and objects of observation. The same logic applies to all other apparatuses (including those that are commonly described as 'social'). Moreover, in addition to the agential cut coinciding with certain materialisations, Barad suggests that the (emerging) object (i.e. the cause) always leaves *marks* on the (emerging) agencies of observation (i.e. effect). In other words, the agencies of observation are marked by the object (of observation).

In addition, intra-actions always (iii) exclude certain things 'from mattering' (p. 181). That is, utilising Bohr's principle of complementarity and indeterminacy, one particular apparatus produces one phenomenon while another produces a different one. Both phenomena are hence mutually exclusive or complementary. Crucially, a phenomenon – including its delineating boundaries between agencies of observation and object of observation – remains indeterminate; *it is excluded from mattering* 'in the absence of a specific physical arrangement of the apparatus' (p. 114).

This brings us to Barad's (2007) notion of *iterativity*. First, intra-actions (and their associated agential cuts, materialisations and exclusions) have to be understood as 'becoming' instead of 'being'. Barad achieves this conceptual shift by amalgamating Michel Foucault's notion of discursive practices and Bohr's notion of the apparatus into her neologism of *material-discursive practices* (which she progressively uses as a synonym for 'apparatus'). Second, Barad builds on Judith Butler's concept of performativity and identity formation, suggesting that for boundaries and materialising effects to emerge more permanently, intra-actions (and the associated agential cuts) need to become *iterative*. It is this iterative intra-action (i.e. intra-action in a recurring fashion) which produces the illusion of a 'bodily boundary' (p. 155). Boundaries could therefore be understood as repeated agential cuts. Hence, instead of entities existing in a state of static independent *being*, they are in a constant process of a repeated (i.e. iterative) *becoming*.

Agential realism's novelty lies in the fact that it not only engages with, but also resolutely goes beyond, poststructuralist conceptions of being and knowing that often framed ontology as mainly the effect of language or discourse (e.g. Lyotard, 1984). Similarly, Barad's (2007) framework also goes beyond Butler's (1993) poststructuralist feminist understanding of discourse which, as Barad argues, only tackles how discourse has an effect on the human body – i.e. it describes how discourse matters, whilst avoiding to show how 'matter comes to matter' (p. 152). In Barad's framework, matter is, importantly, not restricted to the realm of the '*natural*' but also comprises phenomena that are classed as *cultural*. In fact, a large proportion of Barad's project centres around the attempt to deconstruct the demarcating lines between nature and culture. This move is captured in her notion of *naturalcultural* practices, suggesting that all matter in the universe is the result of intra-actions (and this includes those matters conventionally described as human or social).

The NSS in the international context of student evaluations of teaching (SETs)

Turning our attention away from Barad's agential realism, this section seeks to contextualise the National Student Survey (NSS), a UK accountability structure which is internationally known under the umbrella of Student Evaluations of Teaching (SETs). The NSS is a questionnaire which is given to final year undergraduate students and purports to ascertain student course satisfaction (Ipsos MORI, 2006). Beyond this supposed function, the NSS has had significant implications for academics (Jones, Gaffney-Rhys, & Jones, 2014) and universities (Agnew, Cameron-Agnew, Lau, & Walker, 2016) linked to exposure in the popular press in the shape of rankings (Jobbins, Kingston, Nunes, & Polding, 2008) and potential future capacity to set tuition fees (Department for Education, 2016).

While a range of research has critically interrogated SETS (e.g. Boring, 2017), the NSS could best be understood in the context of neoliberal accountability (Brown, 2015) since it creates an artificial quasi-market by ranking universities against one another on the basis of 'customer satisfaction'. The NSS has also been described as promoting the ongoing reconfiguration of students into consumers (Naidoo & Williams, 2014, p. 1). This results in an erosion of the concept of universities as a public good as well as reconfiguring student identities – learners become 'passive and instrumental' (p. 1) – while teaching practice becomes less innovative. Moreover, Parker (2014) suggests that the NSS intensifies competitive behaviour whilst particularly putting pressures on (female) managers, such as heads of departments. These are expected to not only be obedient to NSS results, but to also demand the same compliance from their staff (despite knowing about the shortcomings of the NSS as a reliable assessment tool).

As a result of the pressures of the NSS, many universities implemented 'NSS style internal surveys to pre-empt issues which may impact in their NSS scores' (Canning, 2017, p. 522). At the universities that are described in this paper, these intra-institutional *internal surveys* allowed students to biannually appraise their courses at the level of measuring the performance of individual modules, in contrast to the NSS which only measures final-year student satisfaction at the level of courses and universities. In addition to internal surveys, senior staff at both universities also frequently met with course representatives in student representative meetings to gauge more personalised and individual student feedback which allowed senior staff to ascertain student satisfaction with individual lecturers.

Methodology

This paper utilises data in the shape of narrative accounts which had been collected in the context of a larger ongoing PhD study (2014 onwards). This data stemmed from open narrative interviews ($n = 7$) (Hollway & Jefferson, 2000), session observations ($n = 3$) (e.g. Jones & Somekh, 2004) and narrative research diaries ($n = 2$) (Altrichter & Holly, 2005). All participants worked in the field of education and at post-1992 universities. Consent was sought from all participants and acronyms have been used for names, places and other entities in order to safeguard anonymity.

It was primarily through NVivo coding of the data that the 'negative experience of student feedback' emerged as the most dominant theme. For example, student feedback

was often depicted as driving the conversations in departmental meetings, leading to staff expressing increasing anxiety to receive negative student feedback. Positive student feedback, on the other hand, often elicited an overtly elated response from some colleagues.

Importantly, Barad's (2007) onto-epistemological framework of agential realism has profound consequences for how research is understood and enacted. That is, agential realism invites us to conceptualise the research process not only as an epistemological, but as an *onto-epistemological* process in which researchers and research do not pre-exist their encounter, but rather materialise in specific ways *through* this encounter. Intra-action means that people are not simply in this world, but iteratively emerge as part of this world. For example, 'I', as the researcher for this paper was inextricably entangled with my research – in fact, this (quantum)entanglement was a pre-condition for the emergence of myself (as the researcher) and the research paper in the first place. That is to say, through engaging in the intra-active process of research, a series of iterative agential cuts were enacted which made 'me' (and my research) materialise differently at various points in the research process, a process which, importantly, was still ongoing at the time of writing these very words.

In addition, this 'I' (as myself, the researcher) was enfolded into a myriad of other material-discursive apparatuses, such as the specific universities at which my research was conducted, the theoretical frameworks utilised, and the submission process to an academic peer-reviewed journal – just to mention a few. Hence, it is categorically impossible to claim sole ownership or an independent *a priori* existence in this process. Rather, the 'I' needs to be understood as specific material-discursive 'spacetimematterings' (Barad, 2007, p. 234); if there ever were moments in which I, in fact, emerged as the 'owner' of research, these could only be understood as temporary enfolded intra-actions (for example, neoliberal practices of intellectual property rights spring to mind), including their associated boundary creations, matterings and exclusions. In short, the research process allowed me to emerge differently at different points in time (including the present time of writing) which, in return, has consequences not only on how I act 'presently', but also on the possibilities for 'future' action (see conclusion section of this paper). Importantly,

> [This] future is not what will come to be in an unfolding of the present moment; rather the past and the future are enfolded participants in matter's iterative becoming. (Barad, 2007, p. 181)

Turning our attention to research methods, Barad's framework also has implication on how we, for example, conceptualise 'data collection' and 'data analysis'. For instance, interviews may be more aptly described as 'intra-views' where research participants and researcher emerge through and as part of their intra-action. Furthermore, the analytical method often labelled as *coding* (Cohen, Manion, & Morrison, 2011), could be best described by borrowing another term from Barad's (2007) vocabulary: that of diffraction. Diffraction describes the process of waves immersing through one another. A diffractive methodology, hence, could figure the coding process as a diffractive immersion of participants' stories through one another, including our 'specific histories within academe, and the context in which the article is to be published' (Zabrodska, Linnell, Laws, & Davies, 2011, p. 711). The same applies to 'theoretical frameworks' and 'data'. That is, data and theoretical framework could be conceptualised as agencies which intra-act, emerge as part of this intra-action and are diffracted through one another to produce certain phenomena (cf. Barad, 2007). This also means that what constitutes the 'object' of

enquiry (and how this object unfolds in the process of writing) never sits still but rather reconfigures in the process of writing and reading.

Agential realist onto-epistemological insights also prompt us to rethink the role of language in research. More specifically, new materialist methodology invites us to eschew a philosophy which takes linguistics as the sole basis of human experience, following Barad (2007, p. 133) in her rejection of 'linguistic monism' or what DeLanda (2006, 2011) calls the "linguisticality of experience". Yet, whilst critiquing the dominance of language, Barad unfortunately is not explicit as to what precise role language may play in the world's becoming. For example, Barad (2007) argues that 'language has been granted too much power' which turned 'every "thing" – even materiality – … into a matter of language or some other form of cultural representation' (p. 132). Yet, Barad fails to demonstrate how language could be theorised within an agential realist framework – that is, beyond Barad's assertion of a difference between 'language in bodily gestures' and 'sound waves propagating through the air' (p. 210).

Since this research extensively utilises linguistic data, it, hence, becomes necessary to slightly reconfigure this aspect of agential realist philosophy to make more room for the agency of language. Therefore, it will be tentatively suggested that language could be understood as one – but by no means the only – entangled intra-acting agency which influences how the world 'comes to matter' (Barad, 2007, p. 207). For example, it 'matters' (i.e.. it is simultaneously meaningful and has materialising effects) whether a sentence is presented in a passive or an active voice (cf. Gee, 2005). Moreover, the diary excerpt below about a confrontation with a student had materialising effects: whenever I read this excerpt – i.e. this story of an event – this story 'mattered' in that it is (iteratively) kept alive in my own mind. Likewise, this story will continue to matter whenever readers of this paper engage (i.e. intra-act) with it. In addition, Barad's (2007) *Meeting the Universe Halfway* (a book which contains over 400 pages filled predominantly with language) enacted a strong agency on the materialisation of this paper.

Analysis: student feedback systems as apparatuses of bodily becoming and boundary creation

The following section will now utilise the notion of Barad's (2007, p. ix) apparatus to analyse the 'entanglements' that exist between student-lecturer encounters, internal surveys and the NSS. More specifically, the formation of specific lecturer identities (figured as Barad's notion of 'materialisations') will be theorised together with the emergence of iterative boundaries between staff and students within student feedback systems. As a starting point, this analysis will entail a theorisation of encounters with students while later sections will then relate these encounters to the workings of national apparatuses, such as the NSS.

Intra-actions with students

Building on Barad's three dimensions of intra-action mentioned earlier, it is possible to ask the following question: Which (i) *materialisations* (of agencies and objects of observation) were enacted by (ii) which *agential cuts* and (iii) what was simultaneously *excluded* (from mattering)? In order to explore these three entangled aspects, let us

consider my following academic diary excerpt that depicted a confrontation with a student:

> This confrontation with one of my students is still going through my mind. I remember he was talking loudly to his neighbour, showing her pictures on his mobile and attempting to tease her … After a few unsuccessful attempts to pause and wait for the student to stop talking, I raised my voice said, 'Either be QUIET or leave this seminar. This is really distracting.' I remember that I felt genuinely angry with the student and could feel that my heart was beating and that I perceived my body language as quite authoritarian, even 'macho' like. The student apologised and was, indeed, a little quieter from now on. After the session I started worrying, however, whether he might now give me negative student feedback in the future and that, as a result, my contract as an associate lecturer would not be renewed … I realised that in the following sessions I was trying to be particularly nice to the student.

Focusing on the precise moment of my 'telling off', it could be suggested that this moment cannot only *be understood as*, but actually *was* an apparatus which emerged through intra-action. As part of this intra-action, (i) the student and I materialised. More specifically, (ii) an agential cut (which, as we now know, is inherent in every intra-action) split the apparatus into the 'object of observation' – i.e. the student – and the 'agencies of observation', i.e. myself (Barad, 2007, p. 154). That is, since 'determinately bounded and propertied human subjects do not exist prior to their "involvement" in naturalcultural practices' (p. 171), the student and I did not pre-exist our encounter. Rather what we became in that moment – i.e. the short-lived identity that we assumed – was the result of our intra-action. Moreover, since I was addressing the student during my 'telling-off', it could be suggested that for that brief moment, I emerged as the 'object of observation' while the student emerged as the 'agencies of observation', in the process *marking* the student with my 'telling off'. Importantly, the agential cut functioned as a temporary *boundary* separating the student from myself, i.e. as a short-lived cutting 'together and apart' (p. 389). This 'causal intra-action' (p. 140) resulted in the (iterative) materialisation of a more compliant student for the rest of the session under (iii) the exclusion of other materialisations of behaviour (e.g. distracting behaviour). The following section will now apply Barad's notion of *iterativity* to the workings of student feedback systems.

Student feedback systems as apparatuses that promote iterative 'worrying'

Let us now consider events that unfolded after the confrontation between the student and myself, i.e. the fact that 'I started worrying' about whether the student might now give me negative feedback in one of the internal surveys or student meetings. I feared that this, in return, might result in ramifications for my then temporary employment situation. Could 'worrying', therefore, be understood as a process of 'iterative becoming' (p. 151)? Worrying, indeed, has an aura of repetition. Some psychological studies, for example, frame worrying within the field of *repetitive* negative thinking (e.g. McEvoy, Mahoney, & Moulds, 2010).

Worrying, as what DeLanda (2006, p. 37) would class as a subpersonal processes, must, however, not be understood as being sealed off from the 'outside' world. Rather, an agential realist understanding would figure worrying as being entangled with processes that are typically understood to lie outside the human body, such as encounters with students

within feedback systems. In other words, worrying, could be understood as a subpersonal material(discursive) apparatus which intra-acted with apparatuses that would traditionally be described as 'social', thereby traversing 'bodily boundaries' (Barad, 2007, p. 156). For example, returning to the data excerpt above, the process of worrying was not only what started to iteratively 'matter' as a result of my encounter with the student, but also had materialising effects on my teaching in the following sessions in that I was trying to be particularly 'nice' to the student. In other words, worrying about negative student feedback (i) contributed to my own materialisation as a 'nice', more compliant subject (i.e. agencies of observation) whilst the student materialised in a more powerful position (object of observation). As part of this intra-action (ii) an *iterative* agential cut manifested itself in a boundary between myself and (the) student(s) which (iii) excluded a range of other materialisations (that, importantly, were indeterminate in this particular intra-action, but could, for example, have included a stricter maintenance of behavioural expectations in future lessons).

Positive student feedback, interestingly, also had iterative materialising effects on my teaching practice, similar to worrying about potential negative student feedback. For instance, one of my journal entries described that –

> After one of my taught English sessions, [a colleague] informed me that he had just had a meeting with student representatives and that they were 'really happy' with my teaching … [As a result of this feedback,] I … asked myself the question, 'What can I do in the future to attain the same good student feedback?'. I believe this was the moment when I also started feeling a little trapped in my practice. That is, I wanted to continue teaching in a similar fashion so that my students would continue to give me positive student feedback …

In other words, positive feedback 'mattered' (in Barad's understanding of the word) in that I tried to iteratively recreate the status quo. This iterative intra-action also excluded other things from mattering, such as decreasing my motivation to be more experimental.

Let us now consider another example of the entanglement between subpersonal apparatuses and student/lecturer encounters. In an interview, Melissa, a 39 year old senior lecturer in education, reported on an outright traumatic experience with student feedback when a student 'complained on behalf of the entire course':

> … the lowest moment, now I think of it, was in my first term when a student complained about me on behalf of the entire group. [Even though it turned out that] the rest of the group didn't share [this student's opinion] … it was very, very hard. I think you can feel very isolated at university per se, that kind of thing, you're left, there is more thinking time, but there's also more time to kind of become self-critical I think.

This encounter – that is, when Melissa learned about the negative student feedback – can be understood as yet another apparatus in which Melissa emerged as the 'agencies of observation' whilst the complaining student emerged as the object (of observation). Similar to my experience above, Melissa also went through a phase in which there was 'more time to kind of become self-critical' (i.e. the experience had a lasting materialising effect). Interestingly, this emerging self-criticality could be understood as yet another form of subpersonal iterative intra-action: i.e. an agential cut splitting the self into one part (agencies of observation) being critical of another (object of observation). This, in return, exacerbated Melissa's feeling of 'isolation' at her institution.

Enfolded student feedback apparatuses of bodily production

Building on this, we now need to ask the question how we could theorise together (i) the iterative processes of worrying; (ii) encounters between students and lecturers; (iii) institutional student feedback systems; and (iv) the National Student Survey? For this purpose, we will utilise Barad's (2007) notion of *enfolding* which suggests that apparatuses are enfolded into other apparatuses. This enfolding must not be understood within a geometrical conception of scale – in the sense that one apparatus is nested in another – but rather as the 'agential enfolding of different scales through one another' (p. 245). The notion of agential enfolding allows us to analyse how the change of one enfolded apparatus has the agency to reconfigure the workings of the apparatus into which it is enfolded. Hence, it could, for example, be suggested that my 'worrying' (as one apparatus) may be understood as being agentially enfolded into another apparatus (e.g. encounters with students). These, in return, are agentially enfolded into institutional apparatuses (such as student representative meetings and internal surveys) which, yet again, are agentially enfolded into national apparatuses (e.g. national policy implementations such as the NSS). What happens nationally contributes agentially (*but not deterministically*) to what '*matters*' within the other apparatuses and vice versa.

It could now be suggested that it is precisely through the enfolding of these apparatuses that the materialising effects of SETs attain their full-blown force. For example, let us consider the following excerpt in which Lisa, a 36 year old senior lecturer in education, reflects on a conversation with a colleague. Both had received mildly negative student feedback in a student representative meeting, and now discussed that –

> … the meetings with student representatives [are] really useful because they allow for change. It is only through the combination of the meetings and [internal surveys] … that the meetings become much more devious. It almost feels a little bit that through having [internal surveys …] that whatever the students say in student rep meetings mutates into something much more powerful and absolute. I feel a little anxious now that my senior colleagues might make this into a bigger deal which will add to my already extensive workload.

Building on Foucault, Barad (2007) understands 'power' as 'materialising potential' (p. 210). Therefore, regarding the previous data excerpt we could postulate that it is through the agential enfolding of (i) lecturer-student encounters and (ii) institutional feedback systems that student voice developed its 'power'. In other words, it could be suggested that the intra-action between Lisa and her student feedback attained more power to promote a subpersonal iterative materialisation of anxiety precisely because Lisa's intra-action with the student feedback was agentially enfolded into internal survey apparatuses. These internal surveys attained even more power through various other 'material-discursive practices' (p. 146) such as a team meeting in which anxiety regarding student feedback appeared to be cultivated:

> This all is a little worrying. Recently in one of my staff meetings, the course leader suggested that if the course was unable to gain better feedback in internal surveys that the course might be shut down. (Lisa's journal)

It could now be suggested that these internal surveys, in return, are agentially enfolded into national apparatuses, such as the NSS. That is, NSS results are used to enact a quasi-market (Naidoo & Williams, 2014) that creates competitive pressures for universities

which now start to pay close attention to feedback attained by individual courses. This pressure also makes universities focus their attention on internal student feedback systems (Canning, 2017). In other words, the NSS has the power to 'matter' in that more importance is allocated to the NSS and internal survey results. Both the NSS and internal surveys, in return, exacerbated Lisa's anxiety and agentially reconfigured her intra-actions with students. Importantly, it could be hypothesised that it is precisely this anxiety which functions as an intra-active and enfolded 'building block' of the NSS. Without anxiety, the NSS may lose its cutting edge.

Apparatuses as structures and collective agency

This brings us to being able to explore the question of potential university lecturer agency in the context of an agential realist understanding of the relationship between structure and agency. First, it is important to note that Barad claims that 'structures are apparatuses' (p. 237), thereby conflating the two notions. We could, hence, argue that one set of structures (e.g. the NSS and internal surveys) comprise enfolded intra-acting structures (e.g. lecturer-student confrontations and anxiety), the latter functioning as the formers' intra-acting agencies. Moreover, Barad figures intra-acting agencies as *differential gears* within structures. Thus, structures could be understood as 'differential gear assemblages' (p. 239).

A crucial feature of differential gears is that one malfunctioning cog does not result in a breaking down of the machine (in contrast to a conventional gear). In analogy, if one university lecturer decided to enact her agency – which Barad (p. 235) figures as 'the enactment of iterative changes of particular practices' – by, for example, refusing to act upon student feedback, this would not significantly affect the functionality of internal surveys and the NSS. Put differently, the refusal of one lecturer would lack the agency to reconfigure the structure (i.e. internal surveys and the NSS). Rather, this differential gear (i.e. the lecturer) could easily be replaced by another differential gear (i.e. another lecturer). A significant reconfiguration of the NSS could only be effected by non-participation of a range of its intra-acting agencies, foremost by students. That is, whilst lecturer non-participation would leave the market pressures of the NSS intact, students possess the power to prevent the NSS from 'mattering' since universities are compelled to have a 50% response rate in order to be included into the NSS rankings (Ipsos MORI, 2017). That is, collective non-participation of lecturers and students, would be the precondition for the NSS to lose its materialising potential.

It is now somewhat poignant that the NSS may turn out to be precisely the technology which prevents lecturers and students to develop this capacity for joint agency to undermine the functionality of the NSS. For example, further data indicated that, as a result of the perceived pressures of student feedback systems, lecturers at Lisa's university increasingly developed a (somewhat covert) negative attitude towards students. Lisa, for example, notes the following:

> One of my colleagues continuously complains about students along the lines of 'they're never satisfied regardless of what you do' and 'they simply can't think for themselves'. Then one of these students knocked on the door and this very colleague suddenly turned into the friendliest person imaginable.

That is, since Barad suggests that materialisations, boundary creations and exclusions always emerge simultaneously as part of their intra-action, we could postulate that the

NSS functions as an apparatus which – in addition to the materialising effects above – draws iterative boundaries between students and lecturers thereby preventing potential student-lecturer alliances.

Conclusion

This paper sought to exemplify how Barad's (2007) framework of agential realism has the capacity to theorise the workings of the NSS and its effects on university lecturer practice. It was suggested that by participating in the NSS, lecturers materialised as being increasingly anxious which, in return, reworked the ways how they enacted their practice. It, furthermore, was argued that the NSS simultaneously enacted iterative boundaries between students and lecturers as part of their ongoing intra-action. The intra-actions specific to the NSS also excluded other potential 'matterings', such as more experimental approaches to teaching. In summary, the NSS could, hence, most fittingly be described as a boundary-drawing, 'material-discursive apparatus of bodily production' (p. 218).

Importantly, as already implied in the methodology section of this paper, the research and writing process which led to the materialisation of this paper had profound implications on how I, as the author, emerged from the research process. One central aspect of intra-action is that intra-actions do not only reconfigure intra-acting 'components' (i.e. myself, as the author, as well as the writing); intra-actions also enact their agency by reconfiguring what is *possible*. For example, this research may have made it possible to intra-act differently with my students or managers which, in return, enacted different matterings and associated boundaries. Not all of these matterings, however, were positive. For example, in one of my journal entries, I realised that it was precisely my more profound *understanding* of the pernicious workings of student feedback systems which exacerbated my anxiety of student feedback (rather than alleviating it).

This brings us to the crux of this paper. Rather than perpetuating the ongoing boundary creation between lecturers and students – including its iterative enactments of anxiety – further research must now investigate how connectivity between students and lecturers could be created. This is particularly important because it could be suggested that students often face worse economic pressures than lecturers, necessitating the juggling of part-time jobs whilst facing an uncertain and increasingly precarious employment future (cf. Neilson & Rossiter, 2008). In other words, we must find ways to theorise the NSS in its entanglement with other concurrent policy apparatuses (such as assessment practices and the UK Research Excellence Framework) which promote increasing workload, competitisation (Brown, 2015; Steger, 2010), and precariatisation (Lopes & Dewan, 2014). It is perhaps important to explore how these apparatuses work in their entanglement that could explain the atomisation and isolation (Bourdieu, 1998) of lecturers and students, in particular, and of people, more generally. Moreover, the NSS could be understood as being *agentially enfolded* into larger-scale international apparatuses, such as international neoliberal policy practices, international HEI ranking industries (cf. Jöns & Hoyler, 2013; Ordorika & Lloyd, 2015) and bottom up streams of capital distribution (cf. Piketty, 2014) and resultant plutocratisation (Gates, 2000).

Hence, Barad's notion of a differential gear assemblage perhaps might not only give us a better understanding of how the (post)human subject is thoroughly implicated in – and an agentic part of – the (iterative) maintenance of (neoliberal) structures, but might also provide

us with an analytical tool so as to theorise potential ways of subverting and reshaping the naturalcultural becoming at university and beyond. In other words, the aim should centre on arriving at potential strategies to counteract the negative effects of (neoliberal) apparatuses, such as the NSS. That is, instead of students, lecturers, colleagues, and senior-colleagues to be played against one another in a reciprocal process that enacts (iterative) boundaries, we need to find ways how to create connectivity. While a thorough explication of concrete methods of resistance would go beyond the scope of this paper, the nature of this renewed 'shared agency' (cf. Smith, 2015) may contain a re-evaluation or reassertion of notions of solidarity. That is, the traditional workers' song of "Und erkenne deine Macht/ Alle Raeder stehen still wenn dein starker Arm es will" ("And recognise your power. All gears stand still if your strong arm commands it") might attain a reconfigured meaning when read diffractively with Barad's metaphor of the differential gear assemblage. How this solidarity could be promoted and how it could potentially transgress the confines of the university must, however, be explored in work elsewhere. This may also comprise an exploration of different creative embodied (i.e. material-discursive) practices, such as street protests and other types of public activism, in addition to the (also embodied) practices of writing and reading journal articles. Put differently, we may ask whether the thoughts expressed in the academic literature have a materialising effect on other intra-actions. In conclusion, it can only be hoped that this paper makes its (however minute) contribution towards making instances of future collective agency more likely to 'matter'.

Disclosure statement

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