

Whose domain and whose ontology? Preserving human radical reflexivity over the efficiency of automatically generated feedback

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Abstract

There are some forms of feedback in daily life that, though generated and delivered via a machine, we may welcome, because they help us to function with ease. For example, being provided with explicit directional instructions from a Sat Nav can save time and embarrassment from being late. Automatic tills in supermarkets mean we can empty loose change into these to pay for things, and the amount is calculated on our behalf, with change efficiently dispensed. Feedback on our bank balances from cash machines may not always be welcome..., but there are advantages in terms of practicality. In this article we challenge however, the uncritical application of similar algorithmic processes for providing automatically generated feedback for students in Higher Education (HE). We contest this on the basis that the human side of feedback appears to be giving way to the non-human, as e-technologies and their algorithmic affordances are expected to meet the demands that emerge from within a neoliberal framing of contemporary HE. Initially we examine developments of Artificial Intelligence (AI), and the e-marking platform Turnitin to question where we might locate a student voice? We point to the way that networked learning intersects across developments in technology and radical pedagogies to support this concern. We then draw on our own relational, and lived, experience which produces feedback that emerges from within an illicit exploration of our own vulnerabilities as academics, as students, and friends, in a demonstration of performing radically reflexive feedback. Finally, we advocate for the creative potential of an autoethnographic research method and exploration of mindfulness practices aligned with teaching and learning journeys. These cannot and should not be reduced to the 'sat-nav experience' in terms of feedback. We suggest that, as technology becomes ever more intimately embedded into our everyday lives, generic (but power-laden) maps are incorporated into both student and staff 'perceived' space. A radically reflexive form of feedback may not follow a pre-defined route or map, but it does offer a vehicle to restore student voices and critical self-navigation that is absent, but very much needed, in the ongoing shaping of contemporary HE.

Keywords

Feedback, algorithms, AI, networked learning, autoethnography, human body

Introduction

Educational feedback is a complex communicational, cultural, and social phenomenon. While it might be tempting to analyse feedback using the dichotomy between human and non-human communication, it is not enough to assume that there is a straightforward distinction between something 'human' and something 'technological' or 'algorithmic' – all these things have 'human' aspects too. However, this does not imply radical equality between feedback generated by a human being, and feedback created by an algorithm (which, under multiple layers of technology, is also created by human beings). In this paper, therefore, we will define human feedback as information arriving directly from a human being, and non-human feedback as information arriving from algorithms and other 'thinking' machines created by human beings. This rough classification is defined through its extremes; in reality, forms of feedback may fall anywhere within the continuum in the between. These days, the human side of the feedback continuum increasingly gives way to the non-human side of the feedback continuum, as e-technologies and their algorithmic affordances are called upon to meet the

demands of time and space that emerge from within a neoliberal framing of contemporary Higher Education (HE) (Hayes & Jandrić, 2017).

Critically important questions await our attention, when the emphasis is only on ‘arriving’ at, or ‘producing’ something, via technology. For example, if technological forms of feedback are uncritically applied, a diverse student route to learning in HE, through mindful contemplation and autonomous decisions, may swiftly become analogous to one simply driven by a sat nav. Algorithms are designed in, and contribute to, an alteration of our sociotechnical spaces. Algorithms work within our ‘lived space’ in real time, and as they calculate routes, data and procedures (Chesher, 2012: 315). Thus their their maps are privatised and incorporated into both student and staff ‘perceived’ space. In a context where digital media increasingly mediate our everyday spatial and navigational practices (Chesher, 2012), emerges a dominant e-structure that alters our educational spaces (Jandrić et al., 2017). We question what space remains then for the human side of the feedback continuum, developed within a radically reflexive framework? Radically reflexive feedback is part of a wider transformative process that defies the notion of the ‘student as consumer’. The role of feedback that we present throughout this article challenges the logic of education as an economic transaction, calculated for us, via algorithms. It seeks, on the other hand, to enable the student to locate their own ‘voice’, and indeed their entire bodies, suggesting avenues whereby students, understood as co-producers of knowledge, can excavate their lived experience and contest increasingly negative iterations of their subjectivities within HE. We emphasise the importance of connections between developments in technology and the “radical pedagogies and humanistic educational ideas from the likes of Dewey, Freire, Giroux and Rogers” that have characterised network learning from the outset (Dirckinck-Holmfeld, Hodgson & McConnell, 2011: 4; see also Jandrić and Boras, 2015).

We therefore offer up the relationship between two of the co-authors, by way of example, which from the outset denied traditional forms of power and authority. Their mutual offerings of feedback paved the way for an autoethnographic methodology that facilitated a form of radical reflexivity, highlighting the centrality of ‘the body’ when generating transformative feedback. Their emerging consciousness of the role that human bodies play in teaching and learning contexts, and the excavation of their own vulnerabilities, raises awareness of the lesser role that the body is often ‘assigned’ within neoliberal higher education, and now extended via algorithmic culture. With insights from the third co-author, who stayed out of the auto-ethnographic dialogue to provide research from an outside perspective, we collectively began to wonder if, and how, students might benefit from a radically reflexive form of feedback, to facilitate their own authorial voice, within a pedagogically inspired learning journey? We turn to a critique of the algorithmic affordances of *Turnitin* software for marking and plagiarism detection, excavate the silences it creates, and suggest that the creative potential of a radically reflexive feedback relationship sustains a positive imagining of the student as co-producer of knowledge.

Our article suggests that teachers have an obligation to provide a safe space within which students can pursue their own personal transformation. We endorse this call to support students by drawing on the narratives of transformative pedagogies. We choose to focus on the individual and to provide documentation of the need to allow students to seek out their own lived experience (Hayes, 2015: 132) and voice their own particular subjectivities within higher education, most importantly, when they may otherwise remain unaware of this voice. In so doing we are attending to the call of Amsler (2011) to challenge ‘soft pedagogies’ that encourage passive students and suggest instead that radically reflexive feedback has a particular role to play within her depiction of ‘hard pedagogies’. We situate these arguments within the wider narrative of critical pedagogy, and imagine instead a learning journey whereby teacher and students are co-producers of knowledge and share authorial privilege in the unfolding journey they embark upon together. In making such claims it becomes necessary to qualify both our position and our methodology. Our methodology is necessarily provocative in order to demonstrate the inherent need for an intermingling of the body within any experience that produces, or co-produces, knowledge. We suggest an autoethnographic methodology, as discussed by Ellis, Adams & Bochner (2011). An autoethnography reflects a mode of knowledge production that focuses on the experiences and interpretation of the author as research subject. In this spirit we contend that autoethnography provides a venue to narrate the lived experience of radical reflexivity in the process of feedback and transformation. Moreover, this story demonstrates the inherent need to contest the imagined role for algorithms in contemporary HE and confront this with the research that has shaped the field of networked learning, cutting across both critical pedagogy and the socio-cultural designs of learning mediated by technology (Dirckinck-Holmfeld, Hodgson & McConnell, 2011: 16). We draw too on the ideas of Bartholomew (2015) who suggests that an inclination towards auto-ethnography can inform the professional practice of a teacher. This, he contends, deepens professional abilities, but we go further. We draw on Carillo Rowe’s work on erotic pedagogies to

acknowledge the taboo surrounding bodily knowledge (Carrillo Rowe, 2012). We suggest that auto-ethnography renders bodily knowledge more acceptable.

We likewise acknowledge some limitations of both this methodology and our professional training. While auto-ethnography may document a transformative experience, and the role of radically reflexive feedback therein, it does not cast a light on the process of coding that underpins algorithms as they emerge within feedback processes. Consequently our article is focused, not on the development of technology, but rather, on the interweaving of its algorithmic affordances and feedback within a transformative critical pedagogical process. We seek, in this distinction, to avoid what Beer (2017) identifies as the specialist trap.

Part one interrogates the algorithmic affordances within feedback generation, paying particular attention to the emerging developments of Artificial Intelligence (AI), and the e-marking platform *Turnitin*. We wonder where, within this framework, can we locate a student voice? Part two turns explicitly to the role, and experience, of performing radically reflexive feedback. It draws on our own relational, and lived, experience which produces feedback that emerges from within an illicit exploration of our own vulnerabilities as academics, as students, and friends. In the final section we return to the idea of auto-ethnography. We advocate for the creative potential of an auto-ethnographic research method, aligned with the act of teaching and learning. We reflect on what this might mean through an exploration of mindfulness practices within pedagogy and return, again to the insights generated from reflexively guided professional practice. We suggest, in closing, that a radically reflexive form of feedback of the kind we explore is consistent with the development of networked learning. It can provoke a student voice and a route towards critical self-navigation that is absent, but very much needed, in the ongoing shaping of contemporary HE and our understanding of learning through technology.

Part One: AI and *Turnitin*

We begin with a particular understanding of algorithmic cultures (Jandrić et al., 2017). Drawing on the writings of Striphas (2015), we assume that algorithmic culture is “the enfolding of human thought, conduct, organisation and expression into the logic of big data and large-scale computation, a move that alters how the category of culture has long been practiced, experienced and understood” (Stiphas, 2015: 396). For Striphas there is a fear within those that identify this particular turn towards imposing order on information – the use of algorithms to decide what can, and ought, to be disseminated, suggests a level of cultural elitism. While Striphas does not extend this argument to the realms of institutional design, it is not difficult to envision how such forms of elitism can inform both the professional practice of academics and the lived experience of students. For example, the BBC education correspondent Sean Coughlan wrote on 14 December 2016 of an AI teaching assistant used at Georgia Tech University. The article wonders if, and how, teaching will be transformed through the use of technology and automated workers in ways that mirrors other skill based industries. While the article remains highly theoretical he does offer by way of example the use of an AI teaching assistant at Georgia Tech University. This particular innovation has interesting implications for those delivering feedback. In his TedEx Talk, AI creator Ashok Goel discusses the motivation for creating his AI named Jill Watson. He suggests it was done to address the Frequently Asked Questions by students in order to help free up time for academics to attend to other tasks. Ashok is keen for teachers to embark on what he calls ‘creative tasks’ that would enable education to be accessible to all in a personal, and enjoyable, fashion. Yet he offers a cautionary tale. While the BBC article notes how students chiefly enjoyed the timeliness of the replies he was wary of this experience and describes how Jill Watson was programmed with a time delay to ensure that answers provided by AI did not arrive too soon after the original question has been posed! Already we can see, within this unfolding negotiation, how the demands of time, and the unfolding expectations of students as consumers informs not only the demands for a particular type of feedback, but also how it subtly informs the affordances of AI as well. With this in mind we return to the writings of Striphas (2015) who provides a timely reminder of the etymology of algorithm noting that in its historical unfolding, as well as contemporary usage, algorithm is both about information inclusion, but also information exclusion. He suggests that the use of algorithms to manage information is not unlike cryptology and code breaking. In the process of deciding what information to include and what information to exclude there is, at the heart, a human negotiation. It is within this negotiation that a desire to impose order on a vast amount of information emerges and a particular public image takes hold. Already, within the development of AI provisions of feedback a choice is being made to attend to timeliness to the detriment of creativity, which we suggest has implications on the student lived experience, but also that of the teacher as well. Ashok attends to the voice of the programmer, and his relationship to the AI, and her emerging agency as well as recounts what it is to pioneer an AI teaching assistant. Indeed, voice is exceptionally important if the visible stories, as well as the silences, are to remain part of the algorithmic experience. Where, within this unfolding technology, is the voice of the student? In his recounting of the participatory nature of

algorithmic affordances Striphas (2015) offers to the reader a particular challenge faced by Amazon.com when consumers noticed that gay literature was being excluded from top title rankings.

When made aware of this particular form of silencing, individuals took to Twitter to voice their unhappiness. This trend was able to prompt a change of algorithmic use on Amazon.com thereby allowing for the inclusion of gay literature in their public rankings. Striphas's example reveals how, when afforded a voice, individuals can use various forms of public negotiation as both a site of resistance and institutional change within politics. Indeed his writings align nicely with the work of Crawford (2016) who suggests a need to understand an agonistic quality within algorithmic cultures. She turns to the writings of Mouffe (2003) and distinguishes between 'the political' and 'politics' reminding readers of the agnostic quality within the political that informs a democratic practice. Crawford is invoking this agnostic ethos in order to query the focused interpretations of algorithmic technologies that might emerge if they are understood outside of their political environment. She suggests, in a series of recounted live experiences, that it is necessary to understand the affordances of algorithms if indeed we are to better understand their wider political value and influence within society. In suggesting this claim she is invoking the spirit of Striphas's (2015) Amazon.com example in which there are a multiplicity of agents who are empowered with a voice that can be heard throughout the negotiation.

Inspired by this example, we ask: Where, in the experience of AI and teaching, is the voice of the student? If we attend to the online platforms which inform e-marking and feedback, there is a virtual, but real, silencing of the student. Their work is submitted online via an e-platform, for example, *Turnitin*, at which point the voice of the teacher dominates and any vestige of an agonistic framing of feedback is impossible to locate. Teachers that use *Turnitin* are offered two spaces within which to provide student feedback. There is a text box that allows up to 5000 characters whereby teachers can leave personal feedback aligned with the work they have critically reviewed. Feedback within this space is personal, tailored to the work submitted by the student, and can be in-depth and highly reflexive. Such an approach to student feedback, while valuable, does take time as it requires teachers to reflect and address particular areas of strength and weakness that can contribute to the development of the student cum researcher. It is, shall we say, closely aligned to the personal, creative, feedback that Ashok aspires to reproduce. On the other hand, *Turnitin* also provides teachers with a series of pre-fabricated tabs that can be inserted by simply dragging and pasting the tab into the submitted text document. This approach to feedback is developed with an awareness of common mistakes made by undergraduate students and provides a 'one size fits all' approach to feedback, not unlike Jill Watson. The choices on what tabs to create, and which tabs to include, on the *Turnitin* platform, reflect a series of choices. This leads us to wonder if feedback, generated in an impersonal, and impartial manner, has implications for the transformative potential of the student. We suggest that, rather than engage students in a transformative nature, conducive to reflexivity and growth, it enhances the consumerist nature of contemporary HE. Introna (2016: 31) highlights the performative nature of *Turnitin*, as an 'algorithmic actor' embedded now in HE. Such technologies are suggested to be complicit alongside governing practices such as league tables, student satisfaction surveys and institutional audits, leading to traditional staff and student subjectivities and practices becoming reconstituted (Shore and Wright, 2004).

As student identities are now increasingly expected to take the form of customers and the academic as a related service provider, so "the academic essay (with its associated credits) is enacted as the site of economic exchange" (Introna, 2016: 33). Student submissions then become commodities to be verified through feedback that is simply a rating system that values the goods produced. From the point of view of students, we are aware from our own teaching, that they express anxiety and fear about committing plagiarism. Introna adds that 'they may even pay *Turnitin* to check them in order to certify themselves the owners of their texts, "just in case"' (Introna, 2016: 39). These observations uphold points made by Zwagerman (2008) that the student teacher relationship now *begins* from a point of mistrust, as plagiarism detection takes priority over more mindful forms of exchange, where learning experiences might be co-produced. It is not until we move away from a calculative culture of systems and practices, where students are primarily occupied with not breaking the rules, that we can develop forms of self-interrogation to virtually eliminate tendencies to plagiarise. Perhaps most problematically is that this image of the student, both their ontology but also their embodied subjectivity, is unfolding without their knowledge thus displaying a key difference to the algorithmic stories provided by Striphas. While his use of trending tweets reveals a capacity to engage and effect change, students in this lived experience remain unaware of their depiction within the institutional design of HE and the use of feedback and assessments to inform their lived experiences. If the task of teachers is to facilitate a transformative environment for their students, and thus afford them a voice of equal engagement in the learning journey, this image of students is problematic. It not only reinforces the passivity of the student, thus handicapping the ability to overcome a pedagogy of lack described by Kahane (2009), but also further reifies the soft pedagogy critically evaluated by

Amsler (2011). Perhaps most problematically is that within this use of technology to augment a particular form of student, to the detriment of another, students lack a voice to challenge this particular imagining of their embodied portrayal as students.

We need to go back to Crawford (2016) to understand why we write what we are doing – in essence we use ourselves as models of resistance, to allow for educators to facilitate a classroom in which students can find that missing voice. In so doing we enable a type of agonism discussed within the works of Crawford, because it is within this tension that reflexivity is best poised to inform transformation and to enable those without an awareness of their own voice to discover it and develop it. We contend that it is within the hard pedagogy espoused by Amsler that this type of learning journey can embrace the political negotiations espoused by Mouffe and adopted by Crawford. The algorithmic ‘black box’ discussed by Crawford (2016) must be exposed and it is important that sooner, rather than later we “unpack the warm human and institutional choices that lie behind these cold mechanisms” (Gillespie 2013:169). The risk if we do not, is that invisible “winners” and “losers” take part in hidden contests and accountability for these is lost (Crawford, 2016). It is only when we bring the human body back into the feedback process that we can establish the negotiations that give context to the algorithm being used to sustain HE, but also create a space within which it is negotiated and renegotiated, as a balance is struck between what is overtly visible and the ensuing silences that are established. In order to excavate this particular challenge we are informed by the claims of critical pedagogy.

Part Two: Where do we cry in higher education?

Crawford (2016) acknowledges that we cannot begin to understand algorithmic calculations in isolation. We must, she suggests, understand the broader context within which they operate. Whilst algorithms are frequently discussed as ‘powerful’ they are influenced by complex values, ideologies, and practices of neoliberal pedagogy (Giroux, 2004). Neyland and Mollers argue for a move away from considering algorithms as having social power in the form of technological agents able to cause an effect on society. Instead, it is important to recognise the situated character of algorithmic systems in relation to individual narratives. Distinct components are designed and reworked as “they come together with rules, people, processes and specific kinds of relationships” (Neyland and Mollers, 2017: 59). Treated as a commodity, feedback is a part of a package we deliver to students who are already paying for their education. In the UK, it is represented through data to provide evidence for a Teaching Excellence Framework (TEF) (BIS, 2016), and discussed as an element that contributes to student ‘learning gain’. This is one example of the public dimension of feedback, but this may overlook and diminish the private human spheres involved – and this is where we seek to respond. Feedback takes place in a set of circumstances, some more formal than others, but always influenced by factors beyond the humans involved and yet also linked to emotions. Whether the phone rings during the writing of student feedback, or a student reads or hears feedback in a physical class, or through a technological system, human and affective links are ever-present in that student’s life and all factors have bearing on how feedback messages are experienced by all parties. Whilst Willis seeks to transcend a pedagogy prefaced on narratives alone, we wonder what value there is in a narrative of the body, to inform a radically reflexive engagement with feedback in HE. Indeed, as Crawford (2014) suggests, we need narratives to give meaning to the algorithmic affordances within society. She writes: “If we broaden our scope to include the array of human and algorithmic actors developing a space-sometimes in collaboration, sometimes seeking to counter and outwit each other, we find a different narrative and a more diverse cast of political actors.” (81) In seeking out this diversity we suggest turning inwards, to otherwise illicit stories, that inform our lived experience and in so doing re-invigorating an awareness in sensation, emotion, and practice emerging from within a relational imagining of bodies.

Intuitively we know that feedback is a human process. Yet this intuition only emerged from within a series of informal, and unplanned, discussions. Feedback involves more than a simple detail of what, within the course of knowledge production, is problematic and what is evidence of creative potential. We offer up, as a sign of our particular claims, our own lived, and relational, experiences within higher education. We suggest, in the spirit of Rowe (2012), that lived experience expressed as autoethnographical brings theory and ideas to life. It enriches that natural encounter that must count for something in the ambition of an idea and a dedication to its cultivation and eventual realization. It is within Rowe’s critique of neoliberalism and articulation of an erotic pedagogy that we find the courage to both shock and awe those that would recoil from an assumed illicit conversation and suggest that feedback, in an algorithmic culture, is assailed by the same sense of recoil. With that awareness we present our own lived experience of both recoil, but also release, suggesting that within feedback there is a vulnerable power that can awaken a wider sense of self and creation within the production of knowledge. Feedback between two co-authors was both formal and conversational. If narrative informs an agonistic algorithmic culture as suggested by Crawford (2014) there is a story to tell. It is within our conversational

feedback that a compelling story emerges that suggests that feedback is both human and emotional and draws upon illicit forms of experience that are traditionally denied in neoliberal iterations of accepted knowledge production.

For example, recent developments suggest that soon robots could be marking and providing feedback on our behalf (Coughlan, 2016). The immediate advantages of speed of response and lack of distraction will of course be attractive propositions in a competitive, free market serving culture, that nurtures efficiency at the expense of human reflexivity. Yet each new advancement in automation can never be separated from the society into which it is introduced (Winner, 1980). If the political culture around education does not value social justice and diversity, but instead seeks economy alone, then transformative opportunities are likely to be diminished. Our conversations highlight what Jaggar (1989) reveals in her telling work on emotions; that we can only start from where we begin. But beginnings are so important, as they carry with them human experience that has gone before. Could any automated process really be programmed to be aware of a human life story and the emotions therein? But, what is more, our emotional promptings, if allowed the potential to surface, can reveal a deeper sense of meaning in the topics that academics choose to study. In essence, there is more than a simple desire to explain or understand. This drive to create, and produce new forms of knowledge, might just be more personal, and more human, than perhaps a neoliberal framing of knowledge creation might allow to be acknowledged. We wondered how we might begin to access those deeper, nay illicit, promptings that provoke discussions within which ideas emerge. We embraced an overt need for emotions, as discussed in the reflexive notions espoused by Jaggar. With uncertainty, but faith in a wider sense of transformation within pedagogy, we repeatedly returned to the writings of hooks (2014) to find comfort in a role for both tears and joy in the classroom. Much like Rowe's critique of neoliberal eroticism, tears and emotions exist outside a defined iteration of the classroom leading us to wonder, where do we cry in higher education? Perhaps more broadly, where do we attend to the human in our iterations as both teachers and researchers in higher education? Emotions, like eroticism, are an illicit conversation to be had within neoliberalism. It renders individuals insecure. It suggests a vulnerability that, as Shildrick suggests, can not be controlled for. While she documents within the history of ideas how various institutional approaches to vulnerability have sought to deny overt forms of vulnerability we suggest, instead in the spirit of Beattie and Schick (2013) that this treats vulnerability as an agonistic experience. Vulnerability is not a rational state, but when acknowledged, it does allow individuals and groups to negotiate their very ontology which can, from within this experience, prompt new forms of understanding of the self and other.

In feedback sessions between the two co-authors a relationship emerged that now informs a collegial friendship. This friendship embraces a form of vulnerability that encourages possibility. It probes the illicit and wonders at the creative potential when knowledge is informed by the personal and the emotional. There was, within their roles, a surrendering to a process that defied traditional higher educational roles. There was, within their relationship, a stepping back and forth between teacher and student, so that it became difficult to understand where one started and the other ended. Yet within an exploration of the challenges of neoliberal expectations of a professional practice that denies the emotionality of being human, there was a shared recognition that within formal feedback procedures there was a reality of denial and silence. In short, some things could not be discussed. This, we suggest, is akin to the silencing witnessed by Striphas (2015) in his interrogation of knowledge silencing within algorithmic cultures and yet, relationship between the co-authors was pushed to discover those silences, to excavate the human and respond to it. Vulnerability can reflect possibility, and co-authors surrendered to the possibilities of vulnerability via an acknowledged role for mindfulness within the classroom. They were searching for an authenticity – not a version of themselves that was sanitised or systemised to meet the expectations of our neoliberal culture, but one that reflected honestly on the impact dominant forms of HE had on their ontological presence in HE institutions. It excavated their emotions, it pushed them to the limits. Yet it was only in their further conversations that engaged and responded to free writing that they could acknowledge, with honesty, that only when their bodies limited their experiences did they know when they had reached the boundaries of the elicited. They learnt through conversations that there is a physical presence to feedback – sensations of heat and cool – love and sadness – knowing when you have gone far enough, or perhaps not far enough – the prickle of tears, the running of sweat, the racing of hearts. They are all actions and reactions and they are not captured if the feedback is enacted is *only* via technological experiences. Within these encounters there is a rush of exploration, of the possibilities of discovery, of the potential for ontology to push the boundaries of the illicit and open up the boundaries of vulnerability. Feedback, in the process of creation is not unlike the practice of yoga. The exhale is the relaxation. The inhale is the working process. In the sweat of exercising the body, astonishing revelations may enter the mind. Within the inhalation you ease into the process and you feel your way back into comfort. But in the spirit of transformation you know you can't stay there – that within the comfort there is a drive or desire to keep pushing to explore the

boundaries that provide the security to negotiate anew the product that is emerging and becoming. So this is why the space that you create needs to be a particular type of structure.

Mindfulness needs to be a part of feedback – the breathing technique provides a route to a more permanent change where contemplative techniques can remain with us and not fade, as they might, if they are only thought and not ‘lived’. Thinking through these experiences, we conclude that to breathe in this way challenges the instrumentality of neoliberalism and renews our interest in connections between our bodily functions and our minds (Shahjahan, 2015; Peters and Jandrić, 2018). The demand for constant activity and learned habits of electronic stimulation in modern society need not be negative, if these are tempered with contemplation. Hart (2004) suggests contemplative techniques provide a portal to our inner world. It is a world that co-authors have just begun to explore and compare, where daily learning and living have intermingled. They have dared to allow intimacy to develop in their feedback, that has now become friendship. The wonder and excitement in what lies ahead has been born from our authentic and intimate lived experience of human feedback.

Part Three: Towards radical reflexive feedback

We contend that only humans can take this need for reflexive thinking and transformation further still, to re-apply what they have learned through such experience, and in so doing, to influence the learning of others. However, we also acknowledge the hybrid existence we all inhabit, whereby we are dialectically intertwined as both human and machine. Our learning experiences are always augmented to some degree by technology and we are politically implicated in its design (Winner, 1980) but transformation occurs in a relational context, with critical reflexivity and relational dialogue acknowledged as key concepts within networked learning (Dirckinck-Holmfeld, Hodgson & McConnell, 2011: 291; Jandrić, 2017). Following on from this we suggest that transformations require a form of radical reflexivity that can be enhanced in both formal and informal feedback procedures; namely the relational component of being human that is reproduced in a classroom situation. This classroom situation must, by its very nature, defy traditional iterations of power and authority and imagine students not as vessels but rather, as co-producers of knowledge and a key party to the iterative processes that algorithmic cultures remove. Consequently, we embrace a form of radical reflexivity that navigates the possibilities that emerge when twined with an account of mindfulness, as it informs a variety of pedagogical approaches to negotiate, and contest, power and authority in the HE classroom. We draw on this narrative to enhance our previous claims to develop a particular type of student that can challenge the neoliberal iterations of institutional design and demonstrate, along the way that e-marking does not allow for such experiences to unfold. Reflexive thinking has emerged within the social sciences prompting scholars to reflect not only the knowledge they produce but also on their positioning within the production of knowledge itself. In a 2008 publication Ackerly and True suggest the need for academics to actively engage in a form of self-reflexive thinking when evaluating their research in order to excavate the underlying relationships of power and authority that inform the relationships of research subject and researcher. They suggest that such excavations not only help to determine the nature of the research outcome but they also suggest that such thinking can inform challenges along the way as well and help scholars understand previously unexpected or unanticipated results. This type of thinking is well documented in the writings of Mauthner (2000) who reflects on the ability, or inability of scholars, to engage on an emotional level within the production of knowledge being able to portray the emotional qualities of the lived experiences they are documenting.

Situating ourselves within the arguments proposed, and engaging with a mixed methodology that embraces autoethnographic disclosures, has allowed us the means to bypass the self-same ethical challenges noted by Mauthner. Yet such disclosures come at a cost. Many eschew autoethnographic reflects as mere navel gazing, a point not lost on Brigg and Bleiker (2010). However, as Inayatullah (2011) reflects on his encounters with such a methodology, it was only in sharing his own embodied experiences that he felt a deeper pull, or sense of connection, to those with whom he was relationally intertwined in his lived experiences. Autoethnographic reflexivity, in his encounters, deepened his sense of the worlds in which he was a part. It is this sense of connectivity that was embraced in our development of a radical feedback experience. This experience emerges from within an abandoning of traditional forms of pedagogy that reify technical rationality and embrace what we have begun to acknowledge as an intuitive experience that emerges from within an experience of free writing in the classroom. We drew strength in the claims of Kahane whose (2008) experiences of free writing in the classroom generated a sense of honesty and authenticity in his classrooms. This was an experience of mutual beneficence. Not only were students to be compelled to take on the role of community building in the classroom, they moved away from the hard pedagogy discussed by Amsler (2011). Kahane suggests a pedagogy of plenty whereby students and teachers co-produce the classroom experience and build relationships. He attributes

this learning journey to the bonds that emerge from within the practices of mindfulness. It might perhaps seem odd that we turn to mindfulness as a means of closing this particular narrative.

Intuitively it would seem an individual experience that emerges from within the intersection of pen and paper thus foreclosing the bodily experience of radical forms of feedback. We suggest otherwise. In opening up the quiet to reflect on lived experience, and to establish a role for the intuitive voice, paired with academic narratives there is not only the space to recall the emotionality of silence – of the space to wonder, experience, laugh and cry, but also to recognise an active form of engagement within the writing journey. Reflecting inward, we have discovered, renders a form of vulnerability that prompts sharing, and within that transformation as individuals experience what Inayatullah (2011) describes as a form of necessary indulgence. He writes: “The deeper secret we hid from ourselves is that, in the end, there is little to our claim of uniqueness or our presumed self-indulgence. Excavate the self and what do we find? Not ontologist and essentialised indulgence, but the differentiated dynamism of the world worlds” (Inayatullah 2011: 8). Such dynamism is available to teachers and students alike. We suggest a radical form of feedback, accompanied by an autoethnographic interpretation of pedagogy can generate a community within the classroom that encourage engagement and not recipience. In itself it is both site and form of resistance to the iterations of the negative student image that informs contemporary HE.

Conclusion

Our conclusion to these arguments begins with two acknowledgements. Our methods, and arguments, situated within an autoethnographic account of teaching and learning, are for some, controversial but they are linked to some key values of networked learning, such as cooperation and collaboration in the learning process, self-determination, trust and investment of self in the networked learning process (Dirckinck-Holmfeld, Hodgson & McConnell, 2011). Both qualitative and quantitative methodologies can yield challenges and discussions surrounding the validity of the body and its ability, not only to observe and record raw data, but also to produce the data itself. Indeed it is within this very controversy that Carillo Rowe (2012) situates her account of erotic pedagogies. Hers is a direct challenge to rigid methodological arguments as she seeks to recover the body, more specifically, the female body, from the explicit sexualisation of its ongoing neoliberal framing. While our allegiance is firmly aligned with Carillo Rowe (2012), in our representation as of bodily feedback, we can acknowledge the value of rigorous standards of knowledge production within any methodological approach, thus in justifying the claims of this piece we turn to the works of Naumes (2015). Naumes’s writing is explicitly located in the discipline of International Relations (IR). She writes (2015) of the emerging interest this discipline has with narrative approaches and suggests, rightly so, that narrative is multidisciplinary in its approach and framing which can make it hard to determine a rigorous framework to judge both its validity and its value in its contribution to ongoing discourses, regardless of the discipline it engage with. That being said, she acknowledges a debt on the part of IR scholars engaged in narrative approaches noting that the discipline has much to learn from the ongoing discussions that frame those social sciences that have long published in ethnographic and autoethnographic methods, thereby challenging the distinction of macro and micro political approaches. For this reason, we acknowledge above the sociological discussions that value and critique our adopting of a radically reflexive form of feedback. Yet Noames does offer some interesting insight into the challenges of rigour that permeate narrative methodologies suggesting that its value, and rigour, lies in its ability to both contest status quo ideas and furthermore, provoke meaningful debates when attending to such contestations. As we conclude this article, we suggest that we take this need for contestation seriously, but go further. We suggest that contestation might be the starting point of discussion, but not its conclusion. We envision, in the transformative aspirations of radically reflexive feedback, an emerging site of resistance as well.

Thus it is left to conclude, and reiterate, a challenge to the embodied portrayal of the HE student. Their depiction, within the technological, e-marking narrative and online platforms more generally suggests a sneaky character willing to take short cuts in the production of their work. This framing is unwittingly produced in an technological forum that shuts down conversations leaving students largely in the dark and unaware of these assumptions. Yet in view of the introduction of a Teaching Excellence Framework (BIS, 2016) and emphasis on measuring the learning gain of students, we suggest it is timely for the points we have raised to be a part of new institutional and management commitments to critically reflexive feedback processes. We hope, that in adopting a radically reflexive form of feedback we can contest this particular framing of students, as if they were of one universal identity, thereby championing the notion of the student as a diverse co-producer of knowledge.

A radically reflexive interpretation of feedback welcomes students into the process and demands that they reflect not only on their embodied experiences but also on the journey they wish to navigate as co-pilots within and beyond the classroom. We suggest that as lecturers and students develop their feedback relationship the

opportunity to co-author the emerging story is mutually beneficial. It provokes a series of conversations that contest not only how to learn, but what is learnt as well thereby providing a timely rejoinder to the calls of Amsler and Kahance, for a soft pedagogy of plenty that reifies the positive embodiments of the student and lecturer alike. We finish with an analogy of student journeys, in relation to the the sat nav, 'which is not always a reliable guide to the road' (Chesher, 2012: 325). As Chesher points out:

Drivers on the road with sat navs also become 'users', as their information space is populated by databases and live information. Manufacturers promise this will give them greater command over the road: if there is traffic ahead, live traffic information will suggest changes to the route....Find the cheapest petrol nearby, great food and shopping. Watch the estimated distance and time to destination, and live information. In each way that users open themselves to more information, they can open themselves to influences of advertising, tracking and other forces. Personal information spaces are overlaid by a growing array of information nodes, informing subjects about surrounding spaces. As these technosocial phenomena become more intimately embedded in everyday life, the hermeneutics of the technical, social and political forces, both 'trivial' and power-laden, must be taken seriously. (Chesher, 2012: 326-327).

We hope that our work provides, alongside such interventions, a vehicle for a student voice to challenge the negative assumptions surrounding their learning journey and their particular portrayal as consumers in the algorithmic framing of contemporary feedback experiences. A radically reflexive form of feedback is closely linked with the values of networked learning. It can provoke a student voice and a route towards critical self-navigation that is absent, but very much needed, in the ongoing shaping of contemporary HE. \

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