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Student agency in feedback: beyond the individual

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Abstract

Student agency is often mentioned as a key feature of feedback practices. Commonly, the concept of agency is used to refer to students' active role in the process of seeking, receiving, generating and acting upon feedback information. However, the notion of what student agency means is often taken for granted and rarely elaborated. The feedback literature has also mainly focussed on agency within individualised and psychological paradigms of feedback. In this paper we argue that a more sophisticated view of students' role in feedback processes is needed. We identify four theoretical frameworks of student agency that reach beyond the individual – ecological, authorial, sociomaterial and discursive – as well as the implications of each of these frameworks for feedback. We further argue that a deeper understanding of student agency is vital in the 'new paradigm' of learner-centred feedback. The paper serves as a basis for future empirical studies on feedback practices to adopt a more nuanced understanding of student agency.

Keywords: feedback; student agency; sociomaterial; discourse; feedback literacy; learner-centred feedback

Introduction

The concept of agency is so embedded in how we understand the world that we often forget its substantial role in learning. As such, the importance of student agency has only just begun to be recognised in assessment literature in higher education (Adie et al. 2018; Charteris and Smardon 2018; Chong 2020; Gravett 2020; Nieminen and Tuohilampi 2020; Nieminen and Hilppö 2020). Human agency, one's capacity to act purposefully and autonomously (Emirbayer and Mische 1998), has been a central theme in science and philosophy from Aristotle's *poiēsis* and *praxis* to Kant's Enlightenment. Nowadays, the concept is widely utilised in educational studies and theories (Matusov, von Duyke, and Kayumova 2016). However, a theoretically robust use of the concept of agency has been scarce in assessment and feedback research. Furthermore, since students' dissatisfaction and limited engagement with feedback are major challenges for feedback design (e.g., Carless and Boud 2018; Winstone and Carless, 2019), the concept of agency offers a way to understand students' perspective of acting upon feedback. In this paper we argue that deeply understanding the substantial role of student agency in feedback processes is the key to enabling changes in research and in practice, and thus we unpack the notion of agency in relation to feedback.

Research on feedback in higher education has started to promote the 'new paradigm of feedback' that emphasises students' active engagement with making sense and acting upon feedback information (Boud and Molloy 2013; Carless 2015; Carless and Boud 2018). This is in comparison to the 'old paradigm', which frames feedback mainly as the delivery of information (e.g., Hattie and Timperley 2007). Aligned with this new paradigm, feedback is understood to be 'a process in which learners make sense of information about their performance and use it to enhance the quality of their work or learning strategies' (Henderson et al. 2019, 1402). Often, these new conceptualisations are framed as student-centred and closely tied to social constructivism (Carless and Boud 2018). As Rust and colleagues (2005) put it: 'A social constructivist approach to feedback requires that the students actively engage with the feedback' (234). Yet what exactly is meant by 'social constructivism' is not always elaborated in feedback research; in this study we address this issue by conceptualising 'agency' in feedback processes by reaching beyond psychological approaches to agency.

The recent attention paid towards students' feedback literacy cements the notion that students should have agency in feedback processes and be able to 'read, interpret, and use feedback' (Sutton 2012, 31). The concept of feedback literacy reaches beyond classrooms and university courses; Carless and Boud (2018) framed feedback literacy as 'not just a tool for doing better in university studies but a core capability for the workplace and lifelong learning' (1323).

Given this focus on the importance of student actions in feedback processes, it is indeed the notion of agency that holds the key for adopting the 'new paradigm' in higher education; yet this requires the feedback literature to intersect with earlier philosophical-sociological research on student agency. Therefore, we seek to connect feedback research with the sociocultural literature on student agency to consider the influences of agency on students' feedback behaviour in various educational contexts. Following recent attempts to understand feedback through sociocultural (Chong 2020; Pitt, Bearman, and Esterhazy 2019) and sociomaterial (Gravett 2020) lenses, we propose four conceptual frameworks which could reframe 'student agency'. First, we offer a brief literature review on how earlier studies on feedback have conceptualised 'agency'.

Feedback and student agency: Mapping the intersection

The notion of ‘agency’ has been conceptualised in a variety of ways within the feedback literature, and, as will be argued, often without an appreciation of the implications of the theories being deployed. We explore the concept of agency in the feedback literature by starting from the most prominent approach – the psychological one – while moving towards socioculturally situated viewpoints.

Psychological and cognitive approaches to student agency are common in feedback literature (e.g., Winstone et al. 2017a). For instance, Winstone and colleagues (2017b) conceptualise agency as a ‘psychological process’ aimed to ‘implement strategies’ (2031) in learning and studying. This study identified several barriers for students’ agentic use of feedback, such as ‘sense of disempowerment’ and ‘difficulties with translating feedback into action’. Panadero and colleagues (2019) tied the concept of agency to the notion of self-regulation in their examination of how self-assessment can be turned into active self-feedback. Their study did not define agency, but saw it as a part of self-regulation: ‘self-regulated learning conceptualizes students as both agentic, i.e., responsible for their own learning, and strategic, i.e., capable of using different strategies to reach their goals’ (12). Similarly, Vattøy and colleagues (2020) conceptualised student agency through self-regulation, but also connected the concept with Bandura’s social cognitive theory. Their view acknowledged social influences on student agency, yet agency itself was considered as an individual (yet complex) construct. To sum, the psychologically oriented perspectives conceptualise student agency in feedback as an individual construct, consisting of skills that can be operationalised, measured, and controlled.

Reaching beyond psychological approaches, Boud and Molloy (2013) tie the concept of agency with students’ identity building, claiming that:

Unless students see themselves as agents of their own change, and develop an identity as a productive learner who can drive their own learning, they may neither be receptive to useful information about their work, nor be able to use it. (ibid., 705)

This perspective connected different kinds of feedback models with different kinds of agency. Feedback models that would promote agency see students as vehicles of their own learning and agents of their own change, both requiring students not only to take an active role but to develop a new kind of a learner identity. However, Boud and Molloy (2013) do not define the concept of agency or link it to a theoretical framework. They argue that if the development of students’ feedback literacy is to be promoted, teachers’ role needs to change towards ‘establishing conditions in which students can operate with agency’ (ibid. 710).

While some studies have explicitly used the term ‘agency’, others speak more generally about the phenomenon of student agency in relation to feedback without using that term, referring more generally to the active role of learners. An apt example of this is the chapter by Sambell and Sambell (2019) on assessment and feedback, in which they draw on Ecclestone’s (2002) conceptualisation of autonomy, while also leaning on notions such as ‘control of one’s own learning’, ‘feedback processes firmly in students’ own hands’ and ‘engagement’. Indeed, such notions are often taken for granted in feedback research without further elaboration or explanation of their theoretical underpinnings.

Another example of agency in particular is that of Ajjawi and colleagues (2017) who discuss feedback literacy utilising Bronfenbrenner’s ecological system theory. They argued that feedback practices should be understood in terms of the interplay of

micro-, meso-, exo-, macro-, and chronosystems, calling for a deeper understanding of the effects of these systems in students' ability to receive feedback and act on it. In their conclusions they ask: 'How might academic staff design feedback interactions to establish conditions in which students can operate with agency?' (139).

Students' feedback literacy is emerging as a popular term which obliquely deals with student agency. Sutton's (2012) article, which is often identified as putting feedback literacy on the agenda, established a pattern for many future studies by identifying the importance of student responsibility and agency – without actually drawing on the concept of agency. Rather, Sutton ties feedback literacy to the notions of educational identity and care. However, he does conclude that dialogic understanding of feedback can be 'condescending and may act to undermine the development of learner agency and autonomy' (ibid., 39). Carless and Boud (2018) argue that even if the quality of feedback information is improved, without designing opportunities for students to be involved, feedback processes would not be successful. They discuss the active role of students in four dimensions: appreciating feedback processes, making judgements, managing affect, and taking action. Taking this further, Molloy, Boud and Henderson (2019) developed a learner-centred framework for feedback literacy, looking for empirical evidence of student actions. This work provided evidence that students could be agents of their own learning from feedback, though it was recognised that students' agency was limited by the context in which they operated. They argued that 'students need to make the most of whatever agency they possess' (p. 10), focussing on what is possible in any given situation.

The dialogue between higher education research and philosophical-sociological work on agency has been limited. For example, Francis and colleagues (2019) defined agency as 'the capacity to act with a given environment or practice, and which is situated within power relations' (469); this definition introduces concepts such as 'capacity', 'practice' and 'power relations' without further elaboration or a connection to an already existing theoretical framework. Pitt and colleagues (2019) drew on a number of different elaborations of student agency in connection with feedback, each with different epistemological premises for agency, including agentic engagement, ecological agency and self-efficacy. Yet without a clear adoption of a particular theory or epistemological stance for agency, work on feedback is under-conceptualised and impoverished when considering the role of the student in feedback.

In contrast, other studies on feedback have drawn upon agency frameworks. Harris and colleagues (2018) theorised agency through the framework of ecological agency (Emirbayer and Mische 1998), to which we return later. What they identified was maladaptive uses of agency, as students agentially chose *not* to engage with assessment and feedback processes. While their study was an important opening in understanding dysfunctional feedback behaviour through sociocultural frameworks, how exactly it utilised 'ecological agency' was left unclear. The authors drew on Emirbayer and Mische's idea of resistance rather than highlighting the sociocultural nature of agency that would reach beyond individuals. Also, the study drew on inductive thematic analysis rather than utilising the original framework of ecological agency in its analysis. Chong (2020) connects the new feedback paradigm with the same framework of ecological agency, aiming to understand various contextual factors within which students make sense and act upon feedback. Gravett (2020) reframed feedback literacies as sociomaterial practices, aiming to reach further from human-centred approaches to agency. Gravett's work aimed to reconsider the role and nature of aspects such as time, space and digital resources in how students utilise them in relation to their sociomaterial contexts. Gravett argued that such a perspective would

fundamentally reframe the concept of student agency too, defining it as ‘resulting from the interplay of individual efforts, available resources, and contextual and sociomaterial, factors’ (4), drawing on the work of Biesta and Tedder (2007). What distinguishes Harris et al.’s and Chong’s approach from Gravett’s is the epistemological difference of *where agency resides*. As Chong explains, drawing on earlier work on teacher agency and written feedback (Han 2019), which in turn leans on Bronfenbrenner's ecological theory, his approach represents a sociocognitive stance. Therefore, Harris et al.’s and Chong’s conceptualisation of agency is rather learner-focused, while Gravett understood agency as also residing in sociomaterial artefacts.

Overall, it is surprising how often the concept has been left without careful consideration, and without deeper engagement with the wider literature on agency (Gravett 2020; Nieminen and Tuohilampi, 2020; Nieminen and Hilppö 2020). Even though educational and sociological literature has introduced various theoretical frameworks for conceptualising the notion of agency (Charteris and Smardon 2018; Matusov, von Duyke, and Kayumova 2016), these frameworks are rarely utilised to reframe feedback, which raises the concern that the notion of agency has been used as a colloquial term rather than as a scholarly concept. Furthermore, it has been rare for feedback researchers to align their theoretical framework with the overall research design, from data collection to analytical tools. In the present study, we build on this important earlier work by offering four conceptual frameworks to reframe student agency in relation to feedback.

Beyond individualistic understanding of agency

The present work broadens the theoretical understanding of student agency in feedback practices, since the notion has been largely under-conceptualised (Charteris and Smardon 2018; Chong 2020; Gravett 2020; Nieminen and Hilppö 2020). In particular, we wish to reach beyond a psychological view of ‘agency’ that previous studies have largely adopted (cf. Chong 2020; Gravett 2020; Nieminen and Hilppö 2020). In what follows, we introduce and discuss four conceptual frameworks for student agency in relation to feedback practices, spanning various epistemological premises. Our purpose is to offer implications for feedback research in terms of methodology and its theoretical underpinnings. We draw on Matusov and colleagues (2016) who suggest that conceptualising agency is a situational rather than a universal task: agency can only be defined in relation to its context and purposes. Therefore, each of these frameworks is chosen specifically to widen understanding of the interplay between student agency and feedback practices. Two of these frameworks have been used in the context of feedback by earlier studies (ecological and sociomaterial agency) yet we elaborate on them further; two of them are novel in the context of feedback (authorial and discursive). Following Charteris and Smardon (2018), these conceptualisations of agency range along an epistemological continuum, from sociocultural to post-humanist (Table 1). We start by introducing frameworks that emphasise the human aspect of agency, shifting into post-humanist and, finally, post-structuralist.

Table 1. The frameworks for student agency introduced in this study.

Epistemological premises	Agency	Key authors
Socio-cultural	Ecological	Emirbayer & Mische (1998) Biesta & Tedder (2007)
Socio-cultural	Authorial	Matusov et al. (2016) Osberg and Biesta (2010)
Post-humanist	Socio-material	Gravett (2020) Fenwick (2010)
Post-structuralist	Discursive	Foucault (1977, 1982) Evans, (2011)

Ecological agency: Understanding feedback in its contexts

In an ecological conception, agency is dynamically emergent through the actions of humans who are situated within a social and relational environment (Emirbayer and Mische 1998). Within this framing, there are three constitutive elements of human agency to which a person is oriented at any moment in time. First, an iterative dimension based on previous experiences and understandings where an individual might choose to employ a particular set of actions on the basis of their recognition and interpretation of context; secondly, a projective dimension where an individual imagines potential trajectories and future possibilities on the basis of actions; and thirdly, a practical-evaluative dimension, where an individual makes judgements about what is appropriate within the present situation and context, and acts on this basis.

Biesta and Tedder (2007) termed this an ‘ecological’ perspective of agency where individuals act by means of their environment or ‘ecology’, rather than being able to act separately from the conditions that surround them; thus, through this notion, agency can be located not in learners but in the enablers and constraints of the context. Biesta and Tedder (2007) noted that temporal orientations within agency were helpful to understand how an individual learns and continues to achieve agency in different contexts across their life. Within this framing, instantiations of agency can vary according to the context an individual finds themselves in and the constraints present (Charteris and Smardon 2018).

The ecological perspective of agency can be applied to theorise aspects of both teacher and student feedback practices, which are starting to be understood in relation to the contexts in which feedback operates (Ajjawi et al. 2017; Chong 2020). From this perspective, feedback is part of an ecosystem of teaching and learning which is itself embedded in a broader social and relational context from which it cannot be extricated. Feedback occurs within particular contexts that enable and constrain learner actions at any particular point in time. In addition, feedback processes are located in the development of learners over time and over tasks. Adopting an ecological lens requires feedback theory to consider histories (iterative dimension) and futures (projective dimension) along with the in-the-moment contextual considerations (practical-

evaluative dimension). An obvious implication here is that in order to understand or explain the impact of a feedback input and how a learner chooses to react, we need to take into account the learners' prior experience of receiving feedback and their desires of what they want to achieve in the future.

In adopting this perspective, feedback research methods are enriched by exploring individuals' temporal, physical and sociocultural contexts, including: (a) their experiences of feedback and understanding of what works when; (b) their beliefs regarding possible actions and the resultant possible future outcomes; (c) their understanding of their immediate context including their social environment and what actions are seen as desirable or appropriate, as well as their beliefs about what possible actions are available to them; and (d) understanding and theorising the affordances that learning environments enable for students relating to their projective, future-oriented actions on feedback (cf. Nieminen and Tuohilampi 2020).

Authorial agency: Feedback for community building

Authorial agency emphasises the learner's inalienable right and responsibility to guide their own learning; any teacher-led guidance or scaffolding system, such as the curriculum, is only considered valid if its pedagogical purpose is to support students on their own personal learning journey (Matusov et al., 2016). Osberg and Biesta (2010) argued that educational contexts should actively foster students as creators of new cultures and cultural objects rather than aiming to reproduce already existing cultures. Therefore, the notion challenges educational institutions on a broader level; authorial agency is, above all, an ethical concept. It includes the idea of communal structures, co-constructed by teachers, that aim at promoting students' agency (cf. Matusov 2011). Aligning this notion with modern educational contexts might cause ruptures:

Authorial agency as applied in an educational trajectory values uniqueness, unpredictability, and caring for and interest in others while curricular standards prioritize interchangeability (i.e., one capable person can be replaced with another capable person without disrupting the activity or social relations), predictability (i.e., calculation and control of others), and structural exploitation. (Matusov et al. 2016, 442).

Authorial agency does not only promote students' unique, individual agency, but leans on the notion of community; the cultures and artefacts within them should authentically aim to foster the development of the community (Matusov et al. 2016). How could feedback research address the idea of communities as described in the excerpt above? It is no surprise that authorial agency has been connected with alternative contexts such as Montessori schools at lower levels of education. However, as Nieminen and Hilppö (2020) note, higher educational institutes and national legislation governing them often introduce goals such as 'active citizenship' or 'serving humankind' in their programmes. Surely, students graduating from higher education are expected to use their set of skills as a part of their communities. Indeed, Matusov and colleagues (2016) argue, authorial agency 'defines human nature' (436). When the purpose of a course is to promote authorial agency, students will thrive on dialogic feedback; feedback becomes a natural part of community building.

An authorial conception of agency is a challenge to course design and conventional standards-based views of the purpose of feedback. There is a need to be critical of approaches to feedback that take for granted that inputs to students must be framed by the criteria associated with the assessment assigned and how it is aligned with the intended learning outcomes of the activity. An authorial view of agency stresses the intentions and objectives of the students as most important, pointing to

students' right to be seen as co-creators of cultures within their communities. Furthermore, the notion challenges task design in higher education, as often the tasks on which feedback information is provided (be it essays or exams) do not aim at 'co-creating cultures' but to teach an accustomed set of skills as decided by someone other than the students. What kind of products could be created for the use of the community? In contexts where this question seems alien, feedback does probably not allow students to wield authorial agency. In some respects there are potential contradictions between authorial agency and getting inputs from others (in authority) who may have other views of what the course requires. These contradictions go deep into the structures of higher education, as programmes are largely not built to promote authorial agency. Thus, in promoting students' authorial agency in feedback processes, we might need to engage with active redesigning of the *contexts* of feedback rather than the feedback practices themselves.

Students' authorial agency can be promoted in feedback research too. One such approach may be including students as co-researchers, not merely the objects of the research. Framing feedback research as a process of culture co-creation may lead to new insights about the tensions of academics having authorial agency over the narrative of student experience. When engaging in feedback research, data collection needs to tap into students' desires and intentions; the learning outcomes of the course and aspirations of the lecturers cannot be assumed to be aligned with learners' own narrative of experience or goals. Analysis needs to deeply respect learners' own goals and their active construction of experience as they interact with others, including institution, educator, peers and external parties. A further, and perhaps more methodologically complex implication is that the collection and analysis of data needs to be done in a way that ensures researcher interpretation of student 'voice' is appropriate.

Sociomaterial agency: Feedback, humans and non-humans

A sociomaterial perspective of the world considers learning as being situated in the complex relationships between, and assemblages of, humans and their contexts including objects, places, systems, space and time. Importantly, the individual is not the primary object of research when the focus is on sociomaterial agency. Instead, agency emerges through the interaction of the constitutive components within a particular context, both human and non-human (Gravett 2020). Importantly, the social and the material are entangled within this interpretation: an analysis of one but not the other is incomplete. Objects and structures also initiate, facilitate, participate in, or oppose interactions. The significance of these non-human actors can vary across the spectrum, from ways of thinking which ascribe symmetrical abilities to humans and non-humans, such as Actor Network Theory (Latour 2013), to more human-focussed theories, such as the theory of practice architectures (Kemmis et al. 2017). Shifting the focus to the non-human may be particularly relevant for 'new generation learning environments' where technology abounds in the promotion of student agency (Charteris and Smardon 2018). Agency emerges dynamically and can be seen within interactions, similar to an ecological perspective (Matusov et al. 2016). However, the consideration of a system or environment as a whole implies that agency is not possessed by any one individual, but can be brought about through the interaction of conditions and actors in a particular situation (Fenwick 2010). Leonardi (2013) also points out that humans with social agency can provoke material agency (i.e. the object does something) when a human acts on a material. This is distinct to materiality, the inherent properties of objects which remain constant across contexts.

The sociomaterial offers new perspectives for feedback theory. It surfaces the significance of the situated and emergent nature of human and non-human interactions. Feedback in this view is a situated process in time and place, within which agency ascribed to the student is constructed by a number of actors. These include humans (teacher, peer, colleague, family, the student themselves) and their role in relation to the student; and material and intangible objects which participate in the feedback process, such as learning management systems, rubrics, feedback templates, the rooms and chairs in which the feedback occurs, the webcam and video software that allow online face-to-face feedback consultations. Thus, agency in feedback is constructed through the interplay of these actors and does not solely 'belong' to a student. There is a need to reconsider the way in which materialities are positioned, especially where they have previously been silenced. For example, the model of feedback literacy (Carless and Boud 2018) does not explicitly consider the role of non-humans in acting upon the feedback process.

The way in which the learner and learning is positioned in feedback theory must also be questioned. As Gravett (2020) contends: 'adopting a sociomaterial perspective necessitates that there is also a need to problematise humanist and binary conceptions of the feedback interaction as purely a dialogic, or communicative, event' (9). From a sociomaterial perspective, the assumption that learners' agency is a function of their skills and capabilities, that is, their individual ability to seek, make sense of and act upon the feedback information needs to be treated with caution (Gourlay 2017). The notion that such agency is a capability that transfers across contexts also needs to be treated with suspicion, since a sociomaterial lens highlights the significance of agency as an emergence of the situated entanglements of the social and material.

For example, if the learning management system is locked down and the student can only choose to listen to an audio feedback message, but not copy it into her feedback portfolio, she is unlikely to be able to effect agency in this situation to use that feedback in a later assignment, since the system precludes the student from acting. On the other hand, if a feedback form prompts a student to collect multiple peers' opinions on their work, make a self-assessment, and then ask the lecturer for specific pointers on their work, then in these particular moments, ascribing agency to the student is possible. Agency is co-created through the actions of the feedback form, students and lecturers together, and in comparison to a traditional student-lecturer situation, there is increased work for the student, and indeed the form, whilst the lecturer may do less. If students experience poor internet connections and are unable to provide peer feedback, or students feel socially pressured to only comment positively on others' work, then the agency arising from this network of actors is reduced.

Adopting this new materialist perspective has implications for the conduct of feedback research. First, research needs to account, or allow, for the agency of humans and non-humans. It must understand the relationships between a multiplicity of actors, and explore the entanglements of the social and material through which agency emerges, rather than simply focus on analysis of the constituent parts. Feedback researchers need to ask not only who are the human actors but also how they interact with key material artefacts (e.g., rubrics, handwritten notes, oral performances, laptops) and, further, how those non-human agents do not simply moderate student agency but are agentic actors themselves. In addition, researchers need to come to understand the interaction with virtual and physical spaces of such emergence as well as the temporalities at play, including how agency may emerge over time as well as the experience of time and its impact on agency, such as perceived time constraints. This leads to a further consideration for research design, that within feedback, agency is

something that is emergent, dynamic and cannot be understood as a unit of analysis separate from the broader entanglements of the individual, and education as a whole.

Discursive agency: Or, how feedback constructs reality

Finally, through the discursive conceptualisation of agency we seek to move beyond agency that resides in human and non-human actors and examine how agency is constructed through *discourse*. Foucault (1977) connected discourses with knowledge, as discourses ‘are not about objects, they constitute them, and in the practice of doing so conceal their own invention’ (49). Discourses reach beyond language as the concept refers to social practices that construct knowledge; this is referred to by the notion of discursive practice (Bacchi and Bonham 2014). Discursive practices construct knowledge about ourselves as certain types of people, students and researchers – as subjects. Thus, feedback could be understood as discursive practices, since feedback does not only reflect reality but *constructs* it.

Analysing agency from a discursive standpoint does not mean determining who has agency and how much (be it a human or non-human actor), but analysing how discursive practices produce agency within certain positions. Agency from a discursive perspective addresses students’ access to those discursive practices that could be utilised to renegotiate their own positioning. Subjects occupy positions through which they can wield their agency, but only under power structures (Foucault 1982). To elaborate, discourses produce information about the what and how of what can be said, thought and done through certain positions within a given sociocultural context (Arribas-Ayllon and Walkerdine 2008). For instance, the imbalance between agency as constructed in the positions of ‘a teacher’ and ‘a student’ defines how feedback can be produced and utilised. Often, these positions are naturalised to seem incontestable. The old paradigm of feedback that constructs it as an act of teachers is an example of how discourse naturalises a particular positioning of feedback – feedback is what teachers do. It is also important to note who positions whom – Foucault was famously interested in self-positioning (1982). Whether students can agentially negotiate their own position as ‘a student’ is at the heart of understanding discursive power and agency.

The discursive conceptualisation of agency in relation to feedback practices offers not a neutral but a *political* tool to deconstruct what is taken as natural and self-evident. As positions and agency within them are socially constructed, their nature can change through resistance; this change can be promoted both in research and practice. As an example, Evans (2011) identified the position of *a performer* as enabled for students in higher education. Students’ actions were assimilated with performing: sitting in examinations, completing units and graduating from their degrees, rather than learning and acting as a member of a discipline. One could extend Evans’ study and analyse agency as constructed for university students who *need* to act through the position of a performer. Research might look for ways to offer students opportunities for agentic renegotiation of their positioning. Yet students’ prevalent, non-agentic positioning might not be easily disrupted. Nieminen (2020) reported that even those assessment and feedback practices that aimed to promote agency were shown to *limit* agency through students’ self-positioning as non-agentic performers. Through this position, feedback on self-assessment (as offered by teachers, tutors and computers) represented ‘real’ knowledge compared to students’ own understanding of their skills and abilities. Similarly, future research could actively disrupt these kinds of non-agentic positions, and identify the pitfalls in such attempts.

Indeed, scientific knowledge itself is not free from power relations that enable and restrict agency. Examining student positioning in feedback practices calls for feedback researchers' own agentic positioning. Researchers wishing to take a discursive approach can utilise a 'discursive toolkit' to reflect on their own agency and positioning as feedback researchers (see Bagger, Björklund Boistrup, and Norén 2018 for such self-reflexive endeavour by assessment researchers). Just as teachers contribute in either maintaining or disrupting the 'natural' positions enabled for students through feedback practices, so do researchers. Furthermore, a discursive perspective encourages researchers to be critical of feedback theory, offering a way to understand how and why it positions the agency of students, educators and systems. Conceptions of feedback as an input model might position the learner as having little in the way of agency (Boud and Molloy 2013): a relatively powerless object of information. Such positioning could be understood to be as much about the politics of educational labour and identity, as that of students and learning. In other words, the scholars construct themselves as the main protagonists in a narrative of educational process. More recent moves to describe feedback as a student-centred process are often framed by their authors as a rejection of the input model and a revelation of a reality or necessity of student agency.

The most obvious implication for research is that feedback theory itself needs to be understood as a discursive shift, in which agency – students' discursive repertoires – may be silenced or obfuscated. Importantly, from this perspective, theoretical attempts to highlight the role of agency in feedback need to be understood as discursive shifts that are likely to delimit roles and reflect complex power relations. Feedback research needs to discursively interrogate the theoretical framing of agency, whether it is explicit or implied. In addition, it needs to build into its methodology a sensitivity to the mechanisms through which research itself constructs students in relation to feedback processes. For example, positioning students as non-agentic 'participants' by simply treating them as the sources of data for measurement and analysis should be disrupted if 'student perspective' is truly something we wish to understand (cf. authorial agency). A further implication for research from this perspective is in relation to the collection and analysis of the 'texts' that position feedback and its actors. These may include the content of the first lecture in which assessment and feedback may be mentioned, the subject/unit guide, the assessment and feedback regime, the selection of exemplars, and the institutional policy documents relating to assessment and feedback.

Discussion and conclusion

We have explored four conceptual frameworks for student agency to further theorise the agentic role of students that the current literature on the 'new paradigm of feedback' has emphasised (Boud and Molloy 2013; Carless 2015; Winstone and Carless 2019). While there are surely others, each of these four frameworks (ecological, authorial, sociomaterial, discursive) offer novel ways to understand student agency in feedback processes and the key variables that need to be considered in practice and research. Overall, we note that acknowledging student agency is a fundamental – yet complex – starting point while unpacking feedback processes, as feedback is always received, made sense of and used through this very agency. Returning to the definition by Henderson and colleagues (2019) of feedback that we adopted earlier, which emphasises learners making sense of information about their performance and using it to enhance the quality of their work or learning strategies, we can now elaborate on how the four frameworks reframe these actions of the students.

Ecological agency (Emirbayer and Mische 1998) highlights the ecosystems through which students make sense and act upon feedback, while also considering the temporal aspects of such systems. This conceptualisation shifts the view from students' individual agency to the affordances that feedback practices offer for agentic feedback behaviour (Biesta and Tedder 2007; Nieminen and Tuohilampi 2020). *Authorial agency* (Matusov et al. 2016; Matusov 2011) frames students as co-creators of cultures, underlining the ethical aspect of feedback practices to promote agency. This framework reminds us to ethically reconsider students' sense-making and the use of feedback that does not aim to promote students' unique authorial agency. *Sociomaterial agency* (Fenwick 2010; Gravett 2020) reaches beyond human agency to consider the human-non-human interaction and material objects and circumstances as students make sense and use feedback information. Finally, understanding feedback practices as *discursive practices* (Bacchi and Bonham 2014; Foucault 1977) reminds us that discourses construct what can be thought and said in feedback processes. Students make sense and act upon feedback information through their socially constructed position of 'the student'; opportunities for students to agentially renegotiate this position are often few.

The four frameworks demonstrate the problematic nature of the seemingly simple term, 'student agency' and traditional perspectives that take the term at face value. While earlier studies have emphasised the role of design in providing affordances for students to act on feedback (e.g., Boud and Molloy 2013; Carless and Boud 2018; Winstone and Carless 2019), theorising the notion of agency further offers tools to understand the complexity of such acts. How can we expect students to have agency in terms of feedback without limiting their agency through the way educators, or indeed researchers, operate? Indeed, 'promoting someone's agency' is arguably an oxymoron. Also, promoting student agency in feedback processes is often an oversimplified goal; students might use their agency in undesirable ways such as cheating (Harris et al. 2018; Nieminen and Tuohilampi 2020). Furthermore, students' non-agentic responses to feedback inputs might be indicative of limited 'feedback literacies', however it is likely these behaviours also reflect deeper structural issues. Bringing forth this complexity is already an important contribution of our work.

This paper has reached beyond conventional, psychological conceptualisations of student agency to build bridges between the feedback literature and a range of educational theory on agency, the intersection between which is scarce (cf. Nieminen and Hilppö 2020). Building off the work of Chong (2020) and Gravett (2020), we argue that sociocultural understanding of feedback processes is crucial while considering student agency. Feedback interventions that aim to measure, promote and control learning, evaluative judgment or feedback literacy are consistent with psychological views of student agency, where it is possible and desirable for agency to be developed as a characteristic of an individual. However, psychological approaches are likely to neglect the structural sociopolitical issues of agency. It can be questioned whether feedback interventions on agency or self-regulation truly 'promote agency' from the viewpoint of the sociocultural frameworks of agency. It might even be that such psychological approaches further reflect the 'neoliberal academia', turning the critical focus away from structural issues of assessment and feedback in massified higher education (Evans 2011; Nieminen 2020). Reaching beyond individual conceptualisations of student agency offers a way to refocus attention on the social, cultural, historical and political structures of assessment and feedback that either hinder or promote and construct 'agency'. Such approaches see 'limited student agency' as a feature of learning environments rather than as students' psychological states; thus, interventions on promoting agency in feedback processes would be aimed not only

towards the students but towards the environments as well. Importantly, attempts to promote student agency might need to disrupt, rather than complement, the prevalent structures of assessment and feedback (Nieminen 2020).

We strongly call for interdisciplinary research to theorise those relational aspects of feedback that individual conceptualisations might overlook and to build bridges between these fields of research. Understanding psychological interventions through sociocultural approaches might widen the interpretations of such research initiatives. We have also argued for the need for conceptual clarity and scientific rigour and demonstrated ways in which these facilitate the exploration of approaches to agency. Here, individual and psychological research might supplement sociocultural approaches. Earlier literature on the new paradigm of feedback has referred to students' role in feedback processes with words such as 'responsible', 'active', 'in charge of their learning' and 'ownership of learning'; going beyond the individual is necessary when uncovering seemingly simple terms like these, and this quest should be done in accordance with psychological research. Connectedness, voice, materialities, and discourse, for example, must also be explored in future research on agency and feedback, together with rigorous research designs and careful conceptualisation of agency.

This paper has focused on theoretical and research implications. However, in doing so, several implications for practice have also emerged. Overall, we hope our endeavour has highlighted the intertwinement of what we call 'theory' and 'practice', as how we conceptualise feedback always has its consequences for practical solutions – and vice versa. All of the four frameworks offer unique perspectives for practitioners, and which of them offer opportunities in any given context is dependent on the goals of the curriculum, the values of teachers and students, and the contingencies under which they operate. For example, not all disciplinary contexts align with 'authorial agency', since many higher education institutes aim at producing professionals with certain predetermined skills. However, a sociomaterial perspective on feedback may be helpful in courses where students are expected to learn to work with people, tools and technologies, and thus agency in feedback can be co-produced. Attempts to foster agency in feedback will need to move beyond the individual to address the structures of education. Thus, the practical goal of promoting agency in feedback might mean that teachers must engage with redesigning their sociopolitical contexts rather than simply the feedback practices themselves (e.g., promoting possibilities for student-centred design in degrees and programmes, advocating for student partnership in determining the formats of feedback, or taking part in discussions and actions on assessment policies).

While our focus has been on student agency, our study offers important implications for feedback researchers. How can we investigate feedback that assumes a high level of student agency if the study itself inhibits students' agency through the unilateral decisions of the researcher? We call for reflective renegotiation of the position of 'the feedback researcher' that would contest what is taken as natural in this field of research (cf. Bagger et al. 2018; Nieminen and Hilppö 2020). Addressing student agency in feedback research goes beyond picking a definition of agency and utilising it in research articles. Rather, the frameworks as introduced in this study *disrupt* the prevalent non-agentic positioning of students in feedback processes, both in research and practice. In order to truly promote student agency, future studies might need to engage with sociopolitical (rather than neutral and apolitical) approaches as called for in assessment research (Nieminen 2020). We cannot naively assume the student – or indeed the teacher – is the only key to effective feedback processes. These

lenses on agency re-affirm the need to carefully consider how the student is or is not 'centred' within feedback. There is a need for research initiatives that operate *with* the communities of higher education, involving students, thus contributing to co-creating new cultures of feedback.

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