'Wait, wait: Dan, your turn':
Assessment in the Design Review

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Abstract: This paper explores assessment in graduate-level industrial design education. In particular, it considers how the assessment of students' design work is delivered and who delivers it. Through using aspects of conversation analysis to look in close-up detail at a number of short segments of tutor-student interaction, we consider how a tutor performs assessment himself and also coaches other students to assess, in ways that may significantly contribute to students' understanding of what assessment is and how it is to occur. Creating opportunities for students and instructors to reflect upon evaluation, and how it is performed, may better equip participants in design education to recognize, debate, and also change some of the discourses in which design practice is embedded and performed.

Keywords: assessment, design education, social interaction, conversational analysis, turn-taking.

1. Introduction: delivering assessment in design education

This paper explores assessment in graduate-level design education. In particular, it considers how the judgment of students' design work is delivered and who delivers it in the DTRS10 corpus of 'industrial design concept reviews' (Adams & Siddiqui 2013) (in which graduate-level industrial design students discuss their ideas in a group). The effective delivery of assessment is an important professional skill for designers to acquire and so learning how to assess design work could be considered an important part of graduate level design education. Accordingly, in this paper we consider how, in part of the DTRS dataset, a tutor performs assessment himself and also coaches other students to assess, in ways that may significantly contribute to students' understanding of what assessment is and how it is to occur. Here we focus on how assessment begins in the opening moments of the reviews of the students Mylie, Sydney, Eva, and Alison. Our initial proposal for this paper aimed to cover positive and negative assessment in both undergrad and graduate reviews, however, after repeated viewing of the videos (and reading the helpful review comments on our proposal), we decided to attend to a few

instances in which assessment is distributed amongst the participants, that is, both Simon (the instructor) and the students.

This paper asks, how is criticism delivered and demonstrated in the social context of the design critique? To answer this we explore who delivers judgment and we explore some of the qualities of persons who are authorised to assess. These issues are of significance to the field of design because learning how to judge, and accordingly learning who should judge, is a central aspect of design education. Donald Schön, for example, outlines the importance of assessment in architecture education, using the performance of judgment as the structure for his theory of reflection-in-action. The studio setting in which students and professors engage in dialogue about problems and solutions forms, Schön asserts, the core aspects of reflective practice. In his influential books The Reflective Practitioner (1984), and Educating the Reflective Practitioner (1987) Schön presents a discussion (about the design of an elementary school) that occurs between Petra and Quist. Schön uses this discussion to argue that: 'The language of designing is a language for doing architecture, a language game which Quist models for Petra, displaying for her the competences he would like her to acquire' (1984, p. 81). Schön's position is that, through learning to mimic Quist's vocabulary and method of delivering expertise, Petra will explicitly learn aspects of architecture's discipline and implicitly learn how to be a reflective practitioner. But, as we demonstrate in the paper, the 'language of designing' displays greater complexity than simply revealing explicit 'competencies' for students to copy.

2. Theoretical framework and methods

The issue of how assessment is managed in the openings of the concept reviews is discussed here through a theoretical framework that draws on aspects of ethnomethodology (EM) and conversation analysis (CA), while also extending these approaches. From the perspective of EM we have adopted a focus on how the participants make sense of what is going on in particular situated practices wherein the social roles of 'teacher' and 'student' are oriented to and enacted in specific ways (Garfinkel 1984; Heritage 2005). From the associated approach and method of CA we adopt the Jeffersonian transcription system (Sacks, Schegloff & Jefferson 1974 (Appendix 1)), and an analysis that attends to the sequential ways in which interactions unfold within instances of talk that share certain characteristics (i.e. the opening sequences of the reviews). We extend a CA-oriented approach by drawing on the concept of 'face' within our analyses. 'Face' is the socially-constituted esteem that an individual is aware of and emotionally invested in maintaining and 'face-threatening acts' are those behaviours that risk damaging the esteem of oneself or others (Arundale 2010; Bargiela-Chiappini & Haugh 2009; Goffman 1955). Additionally, through undertaking a fine-grained visual analysis of some sequences of interaction we also explored selected aspects of gaze and gesture. We extend the (usually) strictly local focus of an EM stance by considering how the specific circumstances of these interactions may have consequence for wider aspects of design education and practice.

Characteristically, EM/CA-influenced research begins with an inductive perspective that favours relative disinterest in the data, and this was our method. Initially, we looked at both the undergraduate and graduate videos and approached the analysis of the DTRS data as 'an examination not prompted by pre-specified goals […] but by 'noticings' of initially unremarkable features of talk or other conduct' (Schegloff 1996, p. 172). That is, we tried as much as possible to avoid imposing onto the data a set of preconceived ideas that we would attempt to prove, and instead we watched and listened until we noticed a particular set of 'unremarkable features' and 'conduct' that caught our attention: the opening moments of the graduate-level concept reviews and a few other sequences of talk, wherein assessment is enacted by participants in interesting ways. The openings of several of the reviews were notable because, when compared to other DTRS data, something unusual was occurring: the students' work was not only being critiqued by the instructor, Simon, but also by the students themselves. Indeed, in several instances, Simon makes specific requests of students to judge other students' work, thereby requiring the students to link their role of being a student to that of being an assessor. As we will show, the students perform these critiques in ways that demonstrate their ability to do what their instructor asks of them, while also maintaining affiliation with each other.

Once we had identified particular segments of the graduate-level ID video a detailed transcription was made of each, following the Jefferson notation system, which allowed us to create a highly accurate transcript, in which was included information such as overlapping talk, pause length, intonation, volume, and prosody. Along with this we carried out a frame-by-frame visual analysis of significant moments in the segments to further determine what was taking place in the interaction. As Edelsky notes in her paper, 'Who's Got the Floor?' (1981), a transcription does not necessarily capture the 'feel' of what is happening in a video, particularly the shifting social 'floor' of discussion, so the visual data shown in Figures 1-5 of our paper, when read together with our transcription, is intended to provide more complete information of what was occurring (Haugh 2009). The search to capture what is going on in interaction is also a search for an adequate representation of that interaction, a far from simple task (Edelsky 1981; Hammersley 2010). In total seven segments of data were transcribed in detail, six of which are discussed in this paper.

2.1 Turn-taking in social interaction

Central to our discussion is a consideration of how taking turns at talk is managed during the concept reviews. Taking turns during a conversation, while seemingly unremarkable, is actually a highly organized activity that involves determining who has the current turn and who might take the next one in any given interaction (Sacks, Schegloff and Jefferson 1974; Housley 2007). Taking turns involves their allocation, which may occur when a current speaker chooses the next speaker (e.g. by saying, as Simon does at one point: 'Dan, your turn') or when a speaker 'self-selects' and contributes to the interaction without being specifically invited. The interactional turn - i.e. sentence, word, gesture, etc. - ends when a 'transitional relevant place' occurs, after which another speaker may self-select or be assigned to respond. If a turn is taken before such a transitional relevant moment participants may interpret that turn as an interruption. Generally, in any given

interaction, a speaker's intonation, word choice, tempo, etc. signals to a potential future speaker that the current speaker's turn is ending and so it is transitionally relevant for the next speaker to begin talking. In this way a conversational 'floor', or focus for a groups' attention, can be shared and passed fluidly from speaker to speaker, with little hesitation, interruption, overlap, or other potentially confusing circumstance. Because of the structural significance of turn-taking in talk, and its usual seamless choreography, when it does not go as might be expected (for instance, by involving many long pauses) then it is interesting to look at what is going on.

While CA attends to the characteristics of talk such as turn taking, it notes how these are performed in given settings and so often distinguishes between informal talk that occurs between peers in unofficial situations, and 'institutional talk', which involves participants having certain restrictions on their talk as they speak through (and thereby accomplish) institutionally-relevant roles (e.g. teacher/student) and institutionally-relevant goals (e.g. assessment) (Heritage 2005). It is this approach that we follow here, since the graduate-level industrial design concept reviews are explicitly intended to critique student work with the goal to help students improve that work. In taking this CA-oriented approach we are building on previous discussions of design that have adopted a fine-grained consideration of the talk that occurs during practice in looking at language use (Glock 2009); ethical decision-making (Lloyd 2009), the formation of design concepts (Luck 2009, 2013); rule-following (Matthews 2009); social action (Mathews & Heinemann 2012); disagreement (McDonnell 2012); and role construction (Oak 2009, 2012, 2013).

3. Analysis

3.1 Institutional talk and a misunderstanding: opening the first concept review

In the first extract, which comes from the first concept review for the Graduate ID students and which features Mylie's work, we see how Simon first frames the interaction as institutional talk by orienting the participants to what is to happen in the reviews before he begins his critique of a Mylie's work.

Extract 1: ID-G: Concept Review - Mylie (0:07 – 1:04)[1] [2]

1.	S:	Okay so let's (.) let's just go through a few of these (.) as a class and
2		kind of (.) talk 'em out and (.) <then we'll go> I'm not gonna >we're
3		not gonna be able to take time to do everybody's < but (.) um (2.0)
4		throw one out that's problematic (1.4) okay either one of yours or
5		somebody else's (.) where it's like yeah this needs some help what can
6		we do about it? (2.0) no one needs any help? (5.6)
7	(Alexis hands sheet over towards Mylie and Simon takes it, images M1-M3)	
8	S:	That one (.) tree pack
9	An:	ºNo it was for herº
10	S:	Okay
11	D:	I think she was just giving it back to Mylie.
12	(laughter of students and instructor)	
13	S:	Oh okay <u>hey you volunteered it</u>

M1 Simon and Mylie both try to take the sheet

M2 Mylie cedes to Simon

M3 Simon grasps the sheet

Figure 1. Concept Review - Mylie, images M1-M3

Several characteristics distinguish this passage as institutional talk. First, Simon, as instructor and therefore in the role of institutionally-designated authority figure, self-selects to take an opening turn in which he outlines who will participate in the ensuing discussion (the 'class' but not 'everybody') and what will happen ('go through a few of these … talk 'em out'). He also indicates that the interaction will involve assessment and guidance since he asks the students to offer up some work ('throw one out'), particularly an example that is 'problematic' and that needs 'help' and advice ('what can we do about it?'). Through his talk Simon aims to have the students understand the activities of the review through his terms, and to move 'the event forward on that basis' (Heritage 2005; p. 104). Through his apparently informal talk, Simon's opening words define for him and the students what should happen in this graduate-level concept review: group-based discussion and critique of student work, as initiated by the instructor.

Simon's opening talk also serves as the first part of a summons-answer turn-taking sequence (Sawchuk 2003). That is, by saying 'throw one out that's problematic' Simon is defining the kind of work he wants to discuss and thereby constraining the students to reply by handing forward a 'problematic' design. However, no drawings are handed forward, even after what are, in the context of interaction, very long pauses of two and then over five seconds (Line 6). Eventually Alexis hands a drawing forward (Figure 1, M1). Both Mylie and Simon gesture to take the drawing (Figure 1, M2) with Mylie yielding to Simon (Figure 1, M3) who takes hold of the drawing. Clearly, Simon has interpreted Alexis's action as a reply to his request for a drawing since, in social interaction, it is reasonable to expect that a request is being followed by a response to that request (Sacks, Schegloff & Jefferson 1974; Schegloff 2007). In this case, however, a misunderstanding has occurred as Alexis's gesture is not meant to offer the drawing for critique, but instead to return the drawing to Mylie. Indeed, when watching the video, it is not clear that Alexis has understood Simon's request for students to offer forward 'problematic' work, but once she realizes that Simon has taken the drawing to critique it, she makes a small utterance of surprise (Line 9), possibly indicating that this was not her intention. Despite the unexpected situation, she does not challenge or correct Simon. It is another student, Dan, who explains the mistake by saying: 'I think she was just giving it back to Mylie' (Line 11). All the participants laugh together, indicating each member's awareness of, and their desire to mitigate, the potential embarrassment to Simon caused by his misunderstanding; a mistake that could potentially undermine his role as an authority figure (Billig 2005; Thonus 2008).

Simon admits his error (Line 13: 'Oh okay') but then immediately accounts for his part of the misunderstanding by emphatically saying: 'Hey, you volunteered it!': i.e. Alexis handed the drawing forward so it is reasonable to begin discussing it. Yet, as the group has just established and acknowledged through talk and laughter, Alexis did not actually volunteer the work. Simon's utterance, while not technically accurate, does serve to reestablish his authority by both offering a reason for his taking of the work and repairing his interpretation of the situation by noting Alexis's role in the misunderstanding (Benwell and Stokoe 2002). While it is true that Alexis did pass the work forward, and so Simon's misunderstanding is perhaps reasonable to him, as we will see, the way that Simon has performed his request for students to submit work actually strongly militates against them doing so.

3.2 Managing 'face' in the concept review

There are several features of Simon's talk that contribute to creating a scenario wherein it is unlikely that Alexis would hand Mylie's work over for critique. First, early in the opening to Mylie's review, Simon says 'let's go through a few of these' and 'we're not gonna be able to take time to do everybody's'. Such comments leave open the question of whose work should be assessed first or at all. Therefore, despite the transitionally-relevant pause after Simon's talk, it is not surprising that no students self-select to be critiqued because they would have to guess who Simon is thinking should be one of the 'few' whose work will be discussed. After no student steps forward to fill the transitionally-relevant pauses, Simon takes another turn and says 'throw one out that's problematic'. No work is submitted, so Simon self-selects to more clearly state what he wants: work that 'needs some help what can we do about it'. Again, after a long pause that is not filled by a student, Simon speaks again, asking: 'no one needs any help?'. This question is followed by another long, transitionally-relevant pause of over five seconds, yet still no students speak or submit their work.

In this talk, albeit unwittingly, Simon has put the students into something of an interactional double bind, given that he frames his request by asking only for work that is 'problematic' and that 'needs some help'. By stating these criteria for putting work forward Simon effectively asks the students to negatively assess their own work or that of their fellow classmates ('yours or somebody else's'). The interactional double bind is that students, in their role as students, can be rightly expected (by themselves and others) to reply to their instructor's requests; however, students can also be expected to show solidarity with each other as peers, in part by resisting their instructor's requests (Benwell and Stokoe 2002). The nature of Simon's invitation to offer only work that has problems constrains the students to respond with a negative judgment of a fellow student's design work. Such a judgment could be interpreted as a hostile or 'face-threatening act'.

Generally, participants in interaction demonstrate connectedness with each other and minimize threats to each other's face. Therefore, in the concept reviews, if a student was to submit another student's work as needing 'help', that student would perform a potentially face-threatening disassociation from their fellow students. Further, such an action could demonstrate a (potentially inappropriate) affiliation with the instructor, since judging another's work as problematic is an activity associated more with the role 'instructor' than the role 'student' (Benwell and Stokoe 2002). The management of role, relationship, and 'face' may seem distant from the pedagogic aspects of running a design education review, but the social context of the review impacts what participants feel they can and cannot say and so affects the participants' experience of the specific review and, over time and through the accumulation of many such experiences, their perceptions of what may appropriately happen in design education.

3.3 Description of expert performance: self-assessment

With Mylie's work now in front of him, Simon goes on to talk about what he sees, concentrating mainly on presentational aspects of the work such as colour ('so if you grayed this out I think you would let this come forward', 1:10), his misreading of what he

has seen ('So I misunderstood your concept, now I see it's a dress', 2:13), presentation technique ('throw off a perspective line there, show a corner of a room', 3:04 and 'Okay, shadow, the way that the shadow's cast on the wall tells me it's relief as opposed to full 3D', 7.02). At the end of the video segment Simon summarizes for the students his perception of what he has done in his critique of Mylie's work:

Extract 2: ID-G: Concept Review - Mylie (9:57 – 11:07)

1	S	So, okay (1.8) I've tore into you enough, sorry
2	M	No no no, that's gre[at
3	S	[Ri::g(h)ht
4	M	Should I redo the dress?
5	S	Um I didn't read it as a dress I read it as a bag

(10:06 to 10:57 excised for brevity: talk consists of Simon describing the kind of dress that he recommends Mylie draw as part of her presentation drawing).

6	S	Okay so I I don't wanna (.) I'll just pick on one for you and then
7		I'll pick on one from (.) who who else has one that's got some
8		troubles?
9		((points to Mylie's sheet, image M4))
10		Her's had no troubles I just tore into it and found troubles

When considered closely, it is apparent that Simon's talk in the closing moments of Mylie's review sets up a level of ambiguity concerning what should happen in a design critique. That is, in Extract 2 above, on two occasions, Simon says he 'tore' into Mylie's work (Lines 1 and 8), which is a fairly aggressive term for what Mylie perceives he has done (Line 2 indicates she has not been troubled by his comments). Despite Mylie's acceptance of his critique Simon restates his role as a hostile judge through repetitively using the phrase 'pick on one' (Lines 6-7; here it appears that Simon uses 'pick on' to indicate singling someone out for criticism). Simon ends Mylie's review by saying 'Her's had no troubles I just tore into it and found troubles', thereby describing his performance as the kind of critic who is able to find problems, even where these are not self-evident.

M4 Simon says 'I just tore into it and found troubles'

Figure 2. Concept Review - Mylie, image M4

A somewhat perplexing aspect of Simon's description of his talk as 'tearing into' Mylie's work is that it does not appear to be accurate since, during the course of the concept review his comments to Mylie had not been particularly antagonistic and, as noted above, she did not seem at all upset by his comments. Why would he describe what he has said in this way? Simon's utterance can be taken as an example of an 'impression-managing self-report, where self-assessment is [part of] communicative practice' and [where] what is offered is not just a 'report on what one is doing' but also a report of 'how well one is doing' (Agne 2010, p. 307). Self-assessment in social interaction involves talking about and judging one's actions and is a delicate maneuver since it requires indicating both a level of self-effacement (i.e. it is generally not acceptable to be over-confident in talk) and also a reasonably high degree of self-esteem (i.e. that one has reached a level of achievement that supports reflection upon one's actions) (Agne 2010; Goffman 1955).

By judging his performance as a hostile critic (e.g. 'tearing into') Simon both gives an account of his actions, and also implies to the students that such actions could be followed when they perform their own acts of assessment. In this way Simon's talk helps to position the critique as a type of ritual that may involve aggressive acts of judgment, and he frames himself in relation to the students as an authority figure who can speak in ways that the students cannot (i.e. it is unlikely that a student would publically proclaim that they had 'torn' into a fellow student's work). However, given that Simon does not actually perform distinctly hostile criticism, the concept review is ambiguously modeled as an activity that may or may not involve what is commonly understood as being 'torn' into. Simon's words, when coupled with the realities of his performance, could be taken as indicative of the 'competing institutional values' (Agne 2010, p. 323) that underpin different possible performances of design education. That is, does a critic in a graduate-level concept review critique someone by picking on and 'tearing' into design work that apparently has 'no troubles', or does a critic deliver a more gentle discussion? Furthermore, does a class meeting that is titled a 'concept review' focus on the presentational qualities of drawings or on the ideas that underpin the students' work?

3.4 Critique openings: managing invitations and role-based affiliations

That assessment is somewhat problematic for the participants in the concept review sessions is evident in the openings of other reviews, which we will discuss after first outlining a few relevant details of the data. The DTRS concept reviews do not include all the students' reviews and so, while we make claims for the evidence that we consider here, we recognize that the set is incomplete. For instance there are no reviews for Lynn, Alexis, Riva, Dan or Julian, although those students are present in the group during the other students' reviews, and some of these students participate in the concept reviews by acting as critics (Dan and Julian). Additionally, although it is included in the DTRS dataset, we do not consider Walter's review because it occurred as a one-on-one meeting with Simon and we are only concerned with the group critiques. The concept reviews discussed here therefore include those of Mylie, Eva, Sydney, and Alison.

After Mylie's review (discussed above), the openings for the other students (Eva, Sydney, and Alison) took on a somewhat different character since they involved critics other than only Simon. For instance, in the next concept review, Eva's work is discussed,

and it is in the opening of this review (Extract 3) that Simon asks for someone else (Julian) to do the critiquing.

Extract 3: ID-G: Concept Review - Eva (0:06 – 1:58)

1	S:	Somebody else throw one out (3.2: Eva hands drawing to Simon) ((E1))
2		Alright I've done the critiquing ((E2)) it's (0.5) whose turn?
3		(4.5) ((Simon looks around the group; E3-E5)
4		Julian? (1.0) ((Simon looks at Julian and points to sheet, E6-E7))
5		You ready to critique this one? (3.7) ((Simon makes way for Julian))
6		Right there
7	J:	Hehh (smiles) I think the (.) figure is really cool
8		((laughter))
9	S:	Okay (.) it is a really cool figure.
10	J:	It is a problem (0.5) because it is too cool
11		((laughter from students, continues over Simon's next turn))
12	S:	Okay (2.0) what do you think the figure's (0.5) there for?
13	J:	Erm (.) to show how cool (the body) is who is gonna use it
14	S:	Okay (.) it's really cool guys that have their shirt undone halfway?
15	J:	Ye(h)ah (4.4) erm (1.5) that looks like (.) it looks more like a (.) (kind of
16		like it's) a poster
17	S:	A what?
18	J:	A poster (.) of a movie or something
19	S:	Okay
20	J:	The product may be (.) may need to be (.) er (.) amplified (2.0) made er
21		bigger so (.) so my instruction ah (.) its seems is taken away by the
22		others (.) things (inaudible)
23	S:	She spent (.) ((points)) <u>hours</u> drawing that
24	E:	No I didn't ((shakes head))
25	S:	I knew that ((smiles, general laughter))
26	E:	(inaudible) ((smiles))
27	S:	Sorry (2.5) yeah that's (.) the the danger (.) of (.) when you bring
28		somebody else's drawing in (1.5) and it's better than your drawing (1.8)
29		it (.) ((image E8)) brings an instant comparison (1.5) um and that's why
30		(.) the sort of the (.) neutralized here (.) ((points)) >I don't I don't care
31		about that drawing I care about this drawing<

Up to this point Simon has reviewed three examples of student work and thereby demonstrated how he critiques (Simon acted as critic on the reviews of Mylie, Lynn and Alexis. We do not have videos for Lynn and Alexis but that Simon acted as sole critic was confirmed in a private communication). Simon also has self-assessed his performance of Mylie's review (i.e. 'tore' into her). At the opening of Eva's critique,

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Simon asks for another piece of work to discuss (Line 1: 'throw one out', image E1), but this time he deselects himself as a speaker by saying 'Alright, I've done the critiquing it's – whose turn?' (Line 2). With this comment Simon steps down from his role as critic and offers an invitation ('whose turn?', image E2) for a student to take the 'floor'. However, since no formal order of critiquing has been established, no student self-selects to claim a turn. In the following long pause Simon looks first to Mylie (image E3), who avoids his gaze, then to Alison (image E4), who continues to look at the drawing that is to be critiqued, then to Sydney (image E5), who also avoids his gaze, and finally to Julian (image E6).

After no one takes up his invitation to speak Simon, as authority figure, selects the next speaker by directly appealing to Julian (Lines 4-5: 'Julian - you ready to critique this one?', image E7). Julian accepts Simon's request and looks at the work before making a positive comment about what he sees ('it is a really cool figure'). Simon takes back the interactional floor, by agreeing with Julian's assessment but questioning him ('what do you think the figure is there for?'), which is something of a leading question, in that Simon seems to be prompting a particular answer (Chin 2007). Julian and Simon continue in this vein (Lines 12 to 19), which is oriented to describing presentational aspects of the drawing, in a manner that Simon demonstrated earlier in his critique of Mylie. Eventually Julian offers a judgment in which he outlines how the drawing could be improved (Lines 20-22: 'the product may need to be amplified').

Here Simon interjects to suggest that Julian's advice (to make the figure less prominent) will mean that Eva will have spent much time in vain ('But she spent hours doing that'). However, this is produced as an ironic statement (Bryant 2010), which Eva does not recognize initially, since she refutes Simon's comment by saying: 'No I didn't'. Julian glances at Eva and laughs, and Simon confirms that he was being ironic by saying: 'I knew that' (i.e. he knew that she had not spent hours doing

E1 Simon asks for a project to Critique

E2 Simon gives an open invitation for the floor

E3 Simon looks at Mylie

E4 Simon looks at Alison

E5 Simon looks at Sydney

E6 Simon looks at Julian

E7 Simon enlists Julian to critique Eva's work

E8 Simon re-takes the floor following Julian's critique

Figure 3. Concept Review - Eva, images E1-E8

the drawing). It appears that Simon, Eva and Julian (as is suggested by his glance at Eva at 1.33) all knew that Eva had adopted the image of the figure from someone else's work or, as Julian has noted earlier, from a 'poster for a movie or something' (Line 18). Simon draws attention to the problems of adding third-party material to design work and resumes his role as critic: first, with an apology that mitigates his face-threatening-act of

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drawing attention to Eva's act of borrowing; then, with a warning that includes a negative assessment of Eva's work as he says: 'That's the danger of when you bring somebody else's drawing in and it's *better* than *your* drawing it brings an instant comparison' (emphasis added here to specify negative assessment; image E8).

In this excerpt then we have Simon inviting others to critique, offering instruction to Julian on how to critique, and then demonstrating elements of how to critique as he resumes his own role as critic. In this way Simon carries out aspects of his institutional role as authority figure, effectively maintaining the interactional floor throughout despite initially offering it to someone else. Julian manages his roles as student and designated critic by acceding to Simon's request to speak and by offering assessment and even some 'instruction' (Line 21). However, it is interesting that the element of Eva's drawing that Julian selects to talk about was not actually created by Eva. That is, Julian critiques an aspect of her work that he may find problematic (i.e. borrowing work from another source) but Julian also avoids making an explicit judgment of Eva's own work, and so sidesteps the delivery of what could be taken as a face-threatening act to Eva.

Extract 4: ID-G: Concept Review – Sydney (0:07 – 2:12)

1	S:	Next? (5.2)
2		((Sydney lays down her sheet for critique, S1))
3		Okay whose turn? (7.6)
4		((Simon looks from person to person, S2-S8))
5		Walter
6	W:	Huh?
7	S:	You're talking (.)
8		((points at sheet, S9)) it's your turn ((taps table))
9	W:	It's my turn?
10	S:	You critique it (.) what's working [(.) explain the concepts
11	W:	[Yeah
12	W:	Then I'll take a look ((10.7 looks at drawing))
13		Uhh (1.0) so it's uh (0.5) it's a coat it's a coat hanger (3.4) and the way
14		you use it (2.3) I think here is a (.) here is a pull up here (1.0)
15		((points, image S10)) and then ah use it you can a just uh (.)
16		squeeze this (3.2) and then put it in through the clothes (2.2) and then (1.2)
17		and then kind of open the (1.5) this part and then you got the (2.0) the
18		whole shape
19	S:	Okay
20	W:	Okay (.) make sense?
21	S:	Made (.) it made (.) it it [made sense
22	W:	[Makes sense
23	S:	Okay what's good about the drawing (.) or the board (.) and what needs to
24		be fixed?

25	W:	I think the storyboard is (.) making very good sense
26	S:	Okay
27	S:	Yeah I I I I like the [storyboard (.) are the numbers necessary or not?
28	W:	[Yes
29	W:	U::h (4.0) I think it's (not that easy)
30	S:	To me they are a little bit bold (.) they I (.) I think they help to know that
31		you start here and go [this way because it could be the other=
32	W:	[Yeah
33	S:	=way even though we usually read left to right (.) it it's (.) it helps to see
34		this (.) the spacing is just (.) this is just a pet peeve (.) <the spacing isn't
35		quite consistent> (.) it's matching with the drawings but (.) this is tighter
36		and this is bigger so (.) even the the spacing up and (.) make it a little bit
37		(.) I think smaller so that they're not so bold (.) but they are beautiful
38		drawings (.) really nicely done

The opening of the third concept review, of Sydney's work (Extract 4), shares characteristics with the previous opening, in that the critiquing student meets Simon's request to assess while also limiting the delivery of a negative judgment.

Again, Simon, as authority in the review, speaks first to select the next speaker. As in Eva's review a drawing is handed forward (S1) and Simon asks for a volunteer to critique it ('Okay whose turn?'). Again, with no formal order of turn-taking established, Simon's request is followed by a very long, transitionally-relevant pause of over seven seconds. Eventually Simon selects the next speaker, but this time he does not ask if the student is ready to critique (as he did with Julian), instead, once he has settled on Walter, Simon instructs him to speak by saying: 'Walter – you're talking' (S9). Walter utters a surprised 'Huh?' then a question ('It's my turn?') but, after Simon outlines what he expects him to talk about ('What's working - explain the concepts'), Walter accepts Simon's directive. It is notable that Simon's description of the critique he expects from Walter is framed around the design ideas that are presented ('the concepts'), rather than – as he himself has demonstrated in previous reviews – the presentational aspects of the design drawings.

Walter moves forward to look at the drawing, gesturing to it (S10) as he offers a verbal narrative of the drawing's images. After he describes how the item (a collapsible clothes hanger) works, he judges that the drawing 'makes sense'. Simon pursues Walter as the critic and asks him for a further contribution by saying: 'what's good about the drawing … and what needs to be fixed?' This explicitly

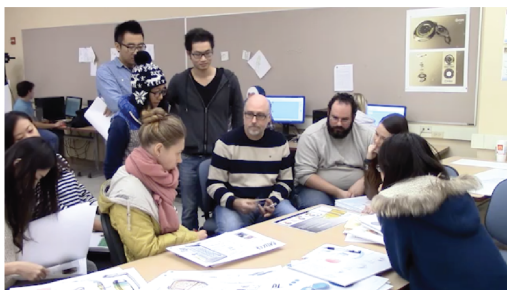S1 Sydney lays down her sheet for critique

S2 Simon looks at Mylie

S3 Simon looks at Lynn

S4 Simon looks at Alison

S5 Simon looks back at Mylie

S6 Simon looks at Eva

S7 Simon looks at Sydney

S8 Simon looks at Walter

S9 Simon enlists Walter

S10 Walter starts his critique

Figure 4. Concept Review - Sydney, images S1-S10

focuses attention on the drawing and thereby sidesteps questions concerning the validity or relevance of the design ideas - even though 'the concepts' were what Simon initially asked to have Walter explain. Walter avoids making a directly face-threatening, negative assessment towards a fellow student by not responding to Simon's request to state 'what needs to be fixed' about the drawing. Instead, Walter offers an upgrade of his earlier positive assessment (Heritage and Raymond 2005) by saying that the drawing/storyboard is 'making very good sense'. Simon agrees ('I like the storyboard') and then asks for Walter's opinion about the numbers on the drawing - again drawing attention to presentational rather than conceptual issues.

Walter's response is hedged as first he offers an extended 'Uhhhh', followed by a long pause, both of which indicate uncertainty and the planning of next utterances (Fox Tree 2002; Tottie 2011). Eventually Walter says 'I think it is not that easy' which implies that how the collapsible hanger would actually work is more complex than the drawing indicates. Walter thereby suggests that the drawing is not quite accurate, while avoiding a strongly negative critique of it. In this way, Walter meets Simon's request to critique while also maintaining affiliation with his classmate. After Walter's comment, Simon takes over the review (Line 30, with a discussion of how bold the drawings are), and soon offers a very positive assessment of them ('they are beautiful drawings - really nicely done'). In the context of talk within an educational institution, such unconstrained positive assessment is generally the preserve of an authority figure (Benwell and Stokoe 2002), since stating what is 'really' nice about something requires the knowledge to recognize what is good and also the confidence to publicly express this recognition in a manner that suggests others would not disagree.

The last opening that we consider is from Alison's review, Extract 5, below. Again, we have a student enrolled by Simon to assess a fellow student's work, and again we have that student managing their talk so that their affiliation with a fellow student is maintained. The first part of this concept review, Lines 1 to 21, features talk directed to some problems that Alison has with the size of presentation drawings. The participants bracket this talk off from the rest of the concept review and so this talk not analyzed in detail here, however the words have not been deleted from the transcript because they further indicate Simon's orientation to discussing the technicalities of presentation. Simon begins the review on Line 22 where he says 'Okay' ('okay', in an educational setting, indicates that a shift in conversational focus is about to occur and that others should attend to it (Schleef 2008)).

Extract 5: ID-G: Concept Review – Alison (0:06 – 1:49)

1   S: Are you sure you're up to this?
2   A: No
3   ((Alison hands over her board, image A1)
4   S: ha ha
5   A: I may cry
6   S: You (h) may (h) cry (.) I already made you throw away beautiful prints
7   and mounting >you know what they screwed up here ( ) cut<

8	A:	they did on alot of 'em
9	S:	did you tell them that means a grade down?
10	A:	I should have got a discount anyway
11	S:	You <u>should</u> have got a discount out of that (.) take em back, say my
12		professor said (h) these were (h)=
13	A:	ha ha
14	S:	=unacceptable (h) and made me=
15	A:	ha ha
16	S:	=redo them
17	D:	I want a rain check for another day
18	S:	Cause I would normally (.) yeah, for a sophomore I would have put that a
19		grade down
20	A:	Really?
21	S:	Yeah (.) but you're not a sophomore (.) <u>I expect more</u> (.)
22		Okay (1.8) okay I've got a scale reference (.) so I know how big it is (.) all
23		right wait wait
24		((taps Dan on the arm, image A2))
25		(.) Dan (.) your turn.
26	D:	And as ((A3)) Simon so eloquently said we have a scale reference so we know
27		how big it is (.) erm (.) as we pointed out we've (.) you have the spelling
28		mistakes to fix
29	A:	Yeah
30	D:	So that's (inaudible) erm
31	A:	((looking at sheet)) Should that be on the bottom? (4.5)
32		Do you need the GE smaller (.) maybe it came out too big?
33	D:	(2.0) Erm
34	S:	Ask her why the wind is blowing ((whispered to Dan, but audible to the
35		group))
36	D:	Ha heeh heh why is the wind blowing? (4.2) you trying to say
37	A:	The arrow
38	D:	the arrow is plus (.) er ((Crosstalk/whispering/inaudible)) (5.5)
39		The lines they're coming through the up and down or is that supposed to
40		more represent spring (2.6) the spring itself?
41	A:	Yes that's (inaudible)

After Simon's 'okay' (Line 22) to indicate that the review 'proper' is about to begin (Schleef 2008) he self-selects and launches into a description of some elements of Alison's drawing (i.e. scale references). But then Simon says 'all right wait, wait': an instance of self-initiated repair to his own talk (Kitzinger 2013). Simon then turns to the student on his left and explicitly instructs him to speak by tapping him on his arm (A2) and saying: 'Dan your turn'. Unlike Julian and Walter, who indicate some

A1 Alison lays down her board for critique

A2 Simon taps Dan on the arm ("your turn")

A3 Dan takes the floor (rolls up sleeve)

Figure 5. Concept Review - Alison, images A1-A3

hesitancy to critique, Dave launches immediately into his assigned turn, with the gesture of pushing up his sleeves that suggests focusing on the business to hand (A3). However, Dave does not reply to Steve's instruction to speak by offering his own judgment of Amie's work, instead his talk includes a repetition of Steve's prior turn ('And as Steve so eloquently said we have a scale reference so we know how big it is'). Dave's subsequent talk then becomes hesitant, as he uses discourse markers such as 'erm' and pauses that indicate a disinclination to talk and that provide potential openings for others to speak (Fox Tree 2002). Eventually, this is what happens as Steve self selects and makes an audibly whispered aside to Dave, explicitly coaching him on what to say (Line 34: 'Ask her why the wind is blowing'). Dave laughs, indicating that he recognizes and shares Steve's perception that Amie's drawing depicts imagery that is unexpected and possibly questionable. Dave then repeats Steve's question ('Why is the wind blowing?') but, since the others have heard Steve's sotto voce question, the group recognize that the source of Dave's words is actually Steve. Although Dave questions Amie's drawing (and thereby implies a negative assessment), through doing so by speaking Steve's words Dave both meets the demands of Steve (an institutionally-defined authority figure) while also avoiding the delivery of his own explicitly face-threatening criticism. By mentioning the technical and presentational aspects of the drawing (i.e. how Amie's drawing depicts the movement of the wind) rather than the ideas that underpin the design, Dave has sidestepped overt criticism of the student's conceptual acuity. Here again, and consistent with the critiques offered by Jin and Wilson (though

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performed in a different manner), we have a student carefully managing assessment in relation to their own, and others', institutional roles.

We have seen that, consistently, students hesitate to step forward to critique and we have argued that this is at least partly because each student is disinclined to step out of their affiliative role as a classmate and into a more critical role as reviewer. However, as well as this relational double bind, their hesitancy may be exacerbated by a sort of pedagogical double bind as well (as noted earlier in section 3.3). That is, Simon performs a relatively mild critical style but has described what he does as 'tearing into someone', thereby implying that students should critique in a rather aggressive way. Such an ambiguous representation of what constitutes critiquing could contribute some uncertainty to the students' perceptions of how they should proceed. Such hesitancy of the students to critique a fellow student sees Simon stepping in to suggest specific questions to ask of the student (e.g. in the case of Simon's sotto voce comments to Dan) or indicating more generally to the critiquing student how he should proceed (e.g. in the case of Julian and Walter). In all cases, despite Simon's initial handing over of the interactional floor to specific students, Simon retakes it and thereby asserts his authority. Despite these demonstrations of interactional authority, and despite describing his critiquing style as aggressive, Simon's talk does not seem to be interpreted by the students as threatening, perhaps in part because he focuses on the technical aspects of the drawings (incorrect colour or scale, which are problems that can be changed) rather than on the conceptual ideas that underpin the students' projects.

4. Conclusions: Implications and contributions

In summary, we have studied the openings of the four group-based concept reviews in the DTRS data set and some of other instances of talk that are significant with regard to the issue of judgment (e.g. Simon's self-assessment). Central to our analysis is the consideration of how the institutional roles of instructor and student are oriented to by all participants in ways that have consequence for the turn-taking structure of the reviews, the manner in which relationships are performed, and the nature of assessment and how it is delivered. As we have discussed here, the management of the social aspects of practice (i.e. the management of participant 'face' and awareness of participant relationship) is a significant aspect of these design reviews.

Learning to judge design work is an important part of design education, particularly of graduate-level design education. For instance, the significance of learning how to critique is noted by the UK's Quality Assurance Agency for Higher Education whose benchmarks for graduate level architectural education include the "ability to evaluate evidence, arguments, and assumptions in order to make and present sound judgments within a structured discourse relating to architectural culture, theory and design" (QAA 2010, p. 9). Achieving such a benchmark could reasonably also apply to graduate level education in product design, therefore reflecting upon how critical acuity is developed and performed may contribute to understanding, and perhaps also questioning, aspects of design education and design practice more broadly. That is, as this paper demonstrates, during a critique, the institutional context, the associated roles of participants (e.g. student

and instructor), and the management of face, all contribute to shaping what can be said and how it is said.

By considering in detail the way in which assessment occurs in relation to the authority of the instructor and the relationships between students, our work suggests recognizing the power of the institutional context and the impact it can have on the ways in which students are likely to assess each other and their own work. In this way, our paper is associated with other contributors in DTRS10 who consider aspects of value and professional knowledge (e.g. Gray & Howard; Sonalkar, Mabogunje & Liefer; McDonnell; and Wolmorans). Furthermore, other articles that are associated with our approach, given their attention to how language and social interaction are performed in the specific contexts of design reviews include those papers by Cardoso, Eris & Badke-Schaub, and by Tenenberg, Socha, and Rot. An awareness of the nuances of interaction can provide deeper understanding of the complexity of practice, whether that practice occurs in the context of education or the design professions.

Accordingly, a recommendation that has emerged from our work and that has some significance for design education is that, if an instructor wants students to learn to critique it might be effective to have those students start off by judging work other than that of their fellow students. Additionally, it would be helpful if instructors and students discuss what should take place in critiques: when is it appropriate to discuss concepts and ideas, and when is it more suitable to discuss type size and the colour of a logo? We are not suggesting that critiques follow a rigid topic order and procedural formality, we are, however suggesting that instructors and students define what they mean by work that is 'problematic' or that has 'troubles', and thereby open up a dialogue concerning the terms by which work is evaluated. By creating opportunities for students and instructors to reflect upon evaluation and how it is performed, participants in design education may be better equipped to recognize and debate the social norms, implicit values and taken-for-granted performances that underpin design pedagogy and professional practice.

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Appendix 1 – Jefferson Transcription Notation

(.)	A full stop inside brackets denotes a micro pause, a notable pause but of no significant length.
(0.2)	A number inside brackets denotes a timed pause. This is a pause long enough to time and subsequently show in transcription.
[	A square bracket denotes a point where overlapping speech occurs.
> <	Arrows surrounding talk like these show that the pace of the speech has quickened.
< >	Arrows in this direction show that the pace of the speech has slowed down.
( )	Where there is space between brackets denotes that the words spoken here were too unclear to transcribe.
(( ))	Where double brackets appear with a description inserted denotes some contextual information where no symbol of representation was available.
Under	When a word or part of a word is underlines it denotes a raise in volume or emphasis.
↑	When an upward arrow appears it means there is a rise in intonation.
↓	When a downward arrow appears it means there is a drop in intonation.
→	An arrow like this denotes a particular sentence of interest to the analyst.
CAPITALS	Where capital letters appear it denotes that something was said loudly or even shouted.
Hum(h)our	When a bracketed 'h' appears it means that there was laughter within the talk.
=	The equal sign represents latched speech, a continuation of talk.
::	Colons appear to represent elongated speech, a stretched sound.

Biographies

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