Abduction in the academy: The mysteries of academic writing as a pragmatic problem for students in higher education

Paul Vincent Smith

Manchester Institute of Education, University of Manchester

Abstract

This article addresses academic writing as an occasionally "mysterious" phenomenon for students. This phenomenon has been well documented in educational and applied linguistic work, in which student talk has been understood as evidence of states of affairs in the world that the educationalist can then problematise and investigate. Using ideas from pragmatist philosophy as a heuristic, particularly Peirce's notion of *abduction*, I conduct an EM/CA alternate study. This approach allows for a series of conversational techniques for talking about mysterious writing phenomena to be identified. Two longer analyses demonstrate social aspects of the problems of learning from experience, and of the possibility of identifying general explicatory, but informal, rules for academic writing. Treating student talk as accounts providing versions of events allows for different results than a transparent or representational conception of language. I conclude by noting that the tension between a researcher emphasis on situated practice, and the participant tendency to wish to find generalities, can continue to be a productive field for research if carefully framed.

INTRODUCTION

One of the canonical problems in academic writing is that of how to successfully inculcate in students an understanding of the formal requirements and criteria that their work will be judged by. In recent times, this classical pedagogical problem has taken on a wider educational and even political relevance. Features of campus life worried at by policy-makers and discourse leaders in higher education can readily be related to questions of assessment and feedback, not least inasmuch as the very notion of "transparent" criteria for assessment can be related, often critically, to the neo-liberal notions currently pervading higher education (e.g., Mitchell 2010). But even for those who aim to retain a

pedagogical rather than policy perspective on such matters will find that there is no lack of available connections to be made: student understanding of assessment and criteria can be readily related to patterns of differential attainment; to personal identity; to expectations, engagement, and experience; to student perceptions of professional academic practices;[1] tto socialisation (or acculturation) into higher education, and thus the patterns of transition involved in moving from one stratum of education to another; to alignment of assessment, feedback, and learning outcomes; and perhaps most of all to the "sink or swim" culture in university instruction and assessment (White 2009). Related to this is the learning paradox involved in inculcation to disciplinary norms (see Collini 2012 for a recent expression) whereby the learner is placed in a position where they are "building the boat while already at sea".[2] There is moreover a case for claiming that the "threshold concepts" important for pushing forward learning in a given substantive area can also be seen in the informal curriculum of assessment requirements (see Priss 2014 for related points). Further, all of these problems can be exacerbated by the addition of cultural differences to the mix.

It therefore comes as no surprise that instances of students pointing out the difficulties in understanding writing criteria, and drawing attention to instances that turn out to be inexplicable given their prior understandings, are commonplace in the educational literature, with these being only a few examples:

> I can describe some really difficult essays. We did have a course which I thought at the time was not so difficult but when I read the assignment I thought it was very difficult because my understanding of the question was different from what the tutor wanted. But I didn't get that explanation during any of the classes and I always felt I was in the right direction… I always had this impression that it was supposed to be an explanation of what was being thought because there were like 10 schools of thought. We were supposed to implement it to the working environment. I think what… happened was to debunk each school… so I did it that way and it came out very very bad. So I still don't know what ought to have been done (in Ridley 2004, 102).

> I could get a 70, you know, a first, from one tutor and a 60 from another, when I thought I would be deserving of more … I never, you know, and this goes for some of my colleagues as well at university, that goes for them as well, we never really [laughs] understood why, you know, there was such a difference in the marking (in Read, Robson & Francis 2001, 392).

Sometimes researchers draw similar conclusions on behalf of their participants:

---

[1] The National Student Survey (NSS) and responses to it is an important source of examples.

[2] It is worth quoting this passage for reference: 'Learning what is involved in conducting enquiry in a certain discipline partly grows out of being exposed to examples of such work and then being incited, not to reproduce them, but to produce a piece of work of one's own that is informed by having come to understand what the examples are examples *of*' (2012, 9, original emphasis).

> First-year students may not be able properly to understand the question and when they do, they are unclear about the criteria they must meet in order to achieve good grades. They feel that the key to success lies not in producing a well-structured and well-written piece but in complying with some mysterious, tacit code which they cannot access (Husain & Waterfield 2006, 27).

In fact, such occurrences are sufficiently well recognised for Ridley (2004) to talk of 'puzzling' experiences in higher education assessment and discourse; for educationalists to talk of students "cracking the code" of academic writing (Ballard & Clanchy 1988, McKenna 2010, Rai 2004); and for scholars in the field of *academic literacies* to talk in terms of the 'institutional practice of mystery' (Lillis 1999, Turner 1999, Scott 1999). Other examples can be found severally (e.g., McCambridge 2015, Hounsell 1997, Hounsell et al. 2008, Lea & Street 1998, Stierer 1997, Pardoe 2000, Ivanić, Clark, & Rimmershaw 2000, Ecclestone 2001). These scholars attribute such occurrences to differentials in cultural and social capital, and thus use them as evidence to progress a critical and transformative agenda (Lillis & Scott 2007; Mann 2008).

Some of the assumptions of work in academic literacies (hereafter "AL") are directly relevant to this paper; most prominently, the idea that students are required to switch literacy practices from setting to setting (Lea & Street 1998) will be familiar to anyone working with any form of praxiological discipline. My aims, though, are somewhat different. Primarily, what I intend to do is dependent upon a different conception of language to that used in AL, as least as far as student utterances are concerned. For while these scholars are familiar with the "language as use" precept that originated most prominently in the work of Wittgenstein and Malinowski (Gellner 2004, Nerlich & Clarke 1996), when student accounts are concerned, it seems to this reader that these accounts are treated in AL (and much of the wider educational literature) as descriptions of states of affairs in the world, rather than analysed as performative spoken practices in their own right, or for the practical work that is carried out in demonstrating and achieving local cultural understanding. On AL's part, this criticism has been addressed by Lillis (2008), who herself suggests that academic writing research tends to treat talk as transparent and referential. As a solution, she posits a three-pronged approach for researchers, with talk around text to be analysed 'in at least three ways' (366): as transparent/referential, as discourse/indexical, and as performative/relational. A first point is to reiterate that this advice does not seem to have been widely taken up by educational researchers, who retain a broadly referential approach to language (Greiffenhagen & Sharrock 2007). A second is that, despite its best intentions, Lillis's injunction assumes unproblematic boundaries to these three domains; begs the question of how data can be treated such that it is amenable to analysis in these three ways; and omits to mention how these analyses can be (re-)assembled for an overall rendering of the data.[3]

[3] One of the questions begged by the AL talk around text model is why one approach to analysis could not subsume the others – for instance, here is Searle's commentary on Austin (1969, 406): 'making a statement or giving a description is just as much performing an act as making a promise or giving a warning. What

METHOD AND DATA

In this article, my approach is rather different, being an analysis of the methods students use conversationally in their talk about academic writing. This approach is very much beholden to insights from ethnomethodology and conversation analysis (EM/CA). In fact, I would say that there is scope in some of these materials for an extended CA-type investigation, as well as for investigations into the educational implications of both the talk and the approach used here. For now, though, this analysis must appear in a more introductory fashion.

The phenomenon that I am addressing is that of *formal structures*, that is, recurring conversational practices (Garfinkel & Sacks 1970, Carlin 2009), that can be found in the talk of *any* or *all* kinds of students. Indeed, the data used in this paper was selected from contributions by eight undergraduate students, only one of which would qualify as a non-traditional learner. The remainder evidently possessed the kinds of cultural capital that would probably disqualify them from attention by AL scholars. This is not to say that I do not have sympathy with the critical, transformative, largely class-based analyses of AL; rather, that disparities between overtly-expressed rules or principles, and local contingencies concerning the application of these principles, can occur within a wide variety of power and identity relationships. Such matters can then uniformly be dealt with as instances of Garfinkel's "shop-floor problem", without necessarily originating in particular social experiences or backgrounds (cf. Berard 2005, Sharrock & Button 2007, Emirbayer & Maynard 2011). The questions I want to ask are more like: What is practically achieved by the use of abductive structures in talk around text? What mutual understandings allow these utterances to be understood? Some key influences in this endeavour include ethnomethodological work that overtly addresses formal structures of conversation, including Garfinkel & Sacks' (1970) seminal paper, but especially that of Carlin (op. cit.), who used the work of Edward Rose to focus on formal structures within research interviews as 'meaningful matters' for the participants (Carlin, personal communication), and as the ways in which they defined their situation. This approach was also used in this study, with the conversations not taking place in the midst of text-production, but allowing participants to retrospectively provide their own take on outcomes and events surrounding their written work.

The particular feature that I address here I have come to call "abductive structures", after the form of reasoning, *abduction*, most prominently set out by the American pragmatist philosopher C. S. Peirce. Abduction is a mode or stage of reasoning that for Peirce was just as necessary as the better-known deduction and induction. In Peirce's terms, deduction was the stage that 'explicates hypotheses, deducing from them the necessary consequences which may be tested' (Fann 1970, 10), while induction 'consists in the

---

was originally supposed to be a special case of utterances (performatives) swallows the general case (constatives), which now turn out be only certain kinds of speech act among others'. As we shall see, that various kinds of accounts accomplish actions is fundamental to EM/CA. For related criticisms of/with Lillis from a different perspective, see Coffin & Donohue (2012).

process of testing hypotheses' (ibid.). However, what this omits is an idea of the process of *how* the hypothesis is arrived at in the first place. This was the place of abduction for Peirce, who saw a vital role for it as 'the only logical operation which introduces any new ideas' (Peirce 5.171, 1903).[4]

Abduction therefore has several discernible features (following e.g.: Deutscher 2002, Eco 1994, Fann 1970, Hookway 2000, Misak 2005, and Semetsky 2005 *passim*):

- It is occasioned by a "strange fact" or "complex phenomenon" that requires explanation;
- Its aim is to generate or find a *rule* to explain *results*;[5]
- It occurs in the form of a *guess* or *conjecture*
- …that must have sufficient explanatory power to provide a *plausible* explanation
- …and thereby result in *adaptive behaviour*;
- Abduction has low "security" but potentially high "uberty", or explanatory power, and is therefore *defeasible*;
- It depends upon existing experience, and is therefore variously characterised as "sideways reasoning", "working from known to unknown", and includes all manner of metaphorical, analogical, speculative and allegorical reasoning (e.g., Bateson 1979, 142);
- In finding extrinsic means to bring to bear on a new problem, it is a *synthetic* mode of reasoning;
- It is "retroductive", not predictive, and looks for causes (antecedents) rather than effects (consequents);
- There is a *semiotic* aspect to abduction in that it considers consequences as *signs* of a prior cause (Carettini 1988);
- Abduction must be *generalising* and therefore at least minimally *abstract*, in the sense that the rule or *explanans* will be broadly conceived enough to potentially cover other such cases; there must be enough in both the rule and the result to allow the result to be a *case* of that *rule*;
- It is *narrative* to the extent that the semiotics involved in inspiring an abduction may suggest a set of events or causes that might have occurred (Ginzburg 1988);
- It is *world-creating* in that the reasoner must find a correspondence between the imagined world in which the abduction would work, and the "real world" (see Eco 1994).

---

[4] In another educational example (Becker, Geer & Hughes 1968, 85), students are described as constructing systems 'deductive in form' in order to ascertain what is required from them in assessment. This is despite Becker and colleagues claiming that these systems are 'not necessarily rational' and 'may be based on speculation – in other words, they exhibit abductive features. This is an instance of what we might call the "Conan Doyle error" as committed in the Holmes stories (cf. Eco 1994): using "deduction" where "abduction" might be more accurate. The value of considering the use of abduction in such cases is that it better accommodates the 'non-linearity of learning processes' (Priss 2014).

[5] '…such that, if [the rule] were true, and it the Result were considered a Case of that Rule, the Result would no longer be strange, but rather extremely reasonable' (Eco 1994, 157).

Abduction, as described here, is present both in everyday reasoning and in scientific procedure, has been overtly mined for its value to the latter (particularly in the "speculative" sciences: archaeology, geology, astrophysics, etc.), and has been tapped into for its potential as a pedagogy for various kinds of instruction (see, e.g., Meyer 2010, and Pedemonte & Reid 2010 on mathematics education).

It is also worth briefly introducing some of the contributions of Peirce's fellow pragmatist, John Dewey. Although Dewey appears not to have used the term *abduction* himself (Koschmann 2003), his development of approaches to learning and education are clearly an elaboration on Peirce's work (Emirbayer & Maynard 2011). Learning, for Dewey, can take place within existing habitual forms of action, but problematic or indeterminate situations require an experimental, reflective process that allows a creative response to change (Dewey 2008, Miettinen 2000, Elkjaer 2009). This reflective, conscious stage of *inquiry* aims at establishing a new habit that can be used trans-contextually. Dewey furthermore held more of a social perspective than Peirce. This is seen in his later emphasis on "transactionalism" in education, whereby learning 'is a process that not only transforms the learner, but also the environment within which the learning occurs' (Koschmann 2001: 16). The observer model of education is replaced by one where the learner is an active participant in the situation. Doubtful, indeterminate, or problematic situations are so because they are *inherently* doubtful, and can be seen as such by others (Dewey 2007). It is possible to see these problems as originating within the individual, but Dewey sees too consistent an emphasis on internal origins as potentially pathological.

As can be seen from the list above, the many features of abduction imply a whole series of mundane spoken practices that can be subsumed under this category, and which can cluster together in conversation but equally may appear in isolation. *Abduction* has been introduced to render as related a series of spoken practices and does not presume that the speaker has undertaken an "indigative" process (that is, a fully-worked-out line of reasoning, in Peirce's coinage). In more everyday terms, this might cover such linguistic functions as reporting on notable events, speculating, hypothesising, explaining, correcting, or challenging explanations (Wittgenstein 1953, Lynch 1993). The components of abduction, when recognised in conversational practices, have something of a family resemblance relationship whereby some or any may appear in various combinations: a close analogy would be the approach of Jefferson (2015) in her work on talk about troubles in conversation. In a similar way to a trouble emerging without all the available sequential parts of "troubles talk" necessarily being present, the marking of a strange fact will not necessarily lead to other components of reasoning emerging through conversation. Another connection is that troubles talk, abductive structures, and indeed any kind of account, are liable to have some kind of performative value other than the communication of the account in itself (Sharrock & Button 2007, Schegloff 2008).

The information used here was gathered from eight undergraduate students during my doctoral studies. They were all studying within the same social sciences programme. This programme offered various pathways and most of them would have experienced it as a multi-disciplinary course of study. The students knew me as a staff member,

someone broadly familiar with the pattern of their studies but unlikely to have any influence on their results. Conversation fragments with four of them, from research interviews held over two years, appear here. Interviews were held every semester, more frequently if initiated by the student. Participants were invited to talk about any aspect of their academic writing, with an initial focus on how they had managed the transition from pre-university to university-level writing and learning in general. Students were free to bring their own specific concerns, with the longitudinal method allowing these matters to be returned to and developed over time. The "perplexities" raised in these fragments were therefore phenomena raised by the students themselves. Extracts 2 and 3 are taken from successive interviews with the same student. After the first interview had concluded, it became clear that we would both welcome the opportunity to talk further about the specific problem she had experienced in a particular course. In later interviews, students often had their essay scripts and feedback to hand, for ease of reference.

My intention here is to address all extracts briefly to identify some basic spoken practices for establishing a strange fact in academic writing settings. This will be followed by a fuller analysis of extracts 1 and 3, which reveal interesting features as accounts.

SOME EXAMPLES OF "ABDUCTION" IN ACTION

Early on in the data-gathering stages of my doctoral studies, I became aware of spoken practices in the talk of my participating students that appeared to have in common the presence of a "strange fact" occasioned by a feature of academic writing. All of them were occurrences that the participants deemed worthy of explanation. The most perspicuous examples are given below (S = student, P = Researcher).

S: The problem with Social Anthropology was that I don't think I wrote in the style that they particularly wanted me to write in, it was included in some of the comments on the sheet.

P: So what style do they want you to write in and what style did you give them?

S: I don't know, he put that I had a bit of a confused writing style, but I've never really had that before so I guess in different subjects they expect different things from you really, whether it's a subject where they want to you to be very clear and concise and I'm a bit flowery, I don't know. I've got to write an Economics essay this week, so I'll see how that goes, but I've never written one before …

[*perusal of the manuscript*]

S: … I seemed to do the same… when I read it back I can't see why it's a lower mark than the others.

P: Because you seemed to do well in Anthropology in the first year… obviously I've looked at a few of them in some depth now and you did a few that were really well received.
S: Maybe it was just the tutor or the subject, I'm not really sure. I just remember that he said you should write clearly and concisely and you should keep a clear writing style… you know, just those kind of comments. I don't know, maybe it's a personal preference, I'm not sure.

Extract 1, Student 1

S: I probably know more now what I need to put into an essay … more on the theory and the analysis. I think that was part of the problem with the French essay because there wasn't any theory as such as to why it generally happened, which is usually what you've got involved in Politics essays, it was kind of "describe and explain" those specific changes, and there's no real general theory or concept that you can discuss, or agree or disagree with.

Extract 2, Student 2

P: So can you remember what exactly made it tricky to come to terms with?
S: Well I think the thing was that we just didn't feel that there was any real argument, you know, any sort of debate, either within the title or even within the content of what we were discussing. I didn't feel as if there was any way to bring a climax towards what you're talking about, it just seemed to be, account for a period of time, and that's it.
P: Right. Because the way I would read it would be, "outline" — so that's "describe" — what the changes are.
S: Describe and explain.
P: Yeah — yeah, so then "account for", so "give reasons for".
S: But there doesn't seem to be any debate within the reasons.
P: Ah.
S: It just seemed to be — say what happened, this is why it happened. It wasn't, some people feel this and some people feel that, and *that* is more valid. When I was doing all the research, it just felt that it was a lot of consensus on why things happened.
P: This is what I thought, because if you say to someone, "account for something", by saying "these are the reasons", that's an argument.
S: I see what you mean.
P: But if there's no kind of controversy, everyone ends up writing the same stuff, I'd imagine.

S: And she even says, "it ends up sounding a bit like it tends to the narrative". I don't really think I could have done anything different, like… considering the amount of reading I did for it, I expected to finish it a lot sooner than I did, I ended up being finished a bit rushed. I was trying to find this extra dimension to talk about, and I just couldn't seem to find it… it was quite important, it was an important shift in French politics, but it's not something that's really explored in the essay title.

Extract 3, Student 2

S: … it was the same with spelling when you have a spell-check and that kind of thing… I don't know whether it was to do with the good use of paragraphs… I mean "clear", they said it was a well-written, thoughtful essay, but yet clear, that's a three… so it seems with things like that it's not always… it doesn't always work – I mean, "grammatically correct", I've been writing essays for a long time and… it would be nice to get the underlined essay and see "oh, actually this isn't grammatically correct".

Extract 4, Student 3

P: I'm just looking at this, on the tickboxes, where there are maybe 15 criteria and you've got the maximum for all of them except two…
S: And those two are the important ones!
P: Well, that's the conclusion you could make, isn't it?
S: Well, not really… well, you could say that but it just seems like… to me it doesn't seem too easy to, "oh, I'll just give four out of five for these two", the criteria for a first. And I won't give 69 because that's too close to a first, so it's 68.

Extract 5, Student 4

One of the most important features of abductive formal structures in conversation mirrors that of abductive reasoning: it starts with the recognition of a "strange fact" or complex phenomenon,[6] such that the opportunity arises to characterise writing requirements as coded or mysterious in some way. The conversational extracts above suggest that there are several interactional techniques for arriving at a strange fact. It can be seen from the examples that although many of the features of abduction listed above are present, they are not *systematically* present. In some cases, for instance, an observation concerning an anomaly is presented and then left behind without any candidate explanation being offered. Indeed, as we will see, the lack of candidate explanations can be an important component of this type of account. Given the importance of this initial stage, it

[6] In Peirce's words, 'an explanation is needed when facts contrary to what we should expect emerge' (7.202, 1901).

will be my focus here, first by outlining the ways in which the strange fact can be arrived at conversationally, and then by undertaking a closer examination of two of the examples above.

HOW TO ESTABLISH A "STRANGE FACT"

The extracts, then, comprise a variety of *methods* for rendering as strange academic writing practices and outcomes. Some of these are outlined in the list below – as it were instructions for the conversationalist wanting to bring a "strange fact" about. This is not an exhaustive list, and there will be some overlap between categories, but with the data presented we can isolate the following practices:

Point out the similarity of practice, effort, technical proficiency, etc., across cases, in contrast to differences in outcome (Extract 1)

In this first extract, Student 1 provides us with the instance that is closest to the experimental approach outlined in pragmatist writing. She can be read here as saying that she has received a lower mark than she is used to, despite not changing her practices across various writing instances. The mark is clearly a noteworthy problem. There are a few candidate explanations raised here. The problematic essay was written for a Social Anthropology course, and this has occasioned some thought on the style requirements of different disciplines; in fact, the student cites academic discipline, personal preference / tutor, or subject as candidate sources of the problem. The student opens by considering "Social Anthropology" as a discipline *in toto*, requiring a style that "they" particularly wanted her to write in; the problem with a disciplinary explanation appears in my observation that she has completed other essays in the same discipline with a good level of success. (This in particular allows the possibility that "subject" is not the same as "discipline" here.) Part of this method trades on a form of 'occasioned corpus' (cf. Zimmerman & Pollner 1970), in the sense that previous efforts can be categorised into a collection that has features such as "successful" and "not described as having a confused writing style", in contrast to the case at hand. The student cites a prospective essay, this time in Economics, as another opportunity to see how what will presumably be "the same" writing practices are received. This will presumably provide more data to help ascertain whether the Social Anthropology essay is an outlier, but there is a further problem inasmuch as this is an essay in a different discipline. This additional variable makes it more difficult to find a rule to serve as an explanation for all these cases. It is not clear whether this will, or can, take its place as part of the occasioned corpus and so serve the purposes of general rule-generating. In this extract, a lot hinges on the usage of "the same", and this is taken up in more detail below.

Contrast the case at hand to previous cases, all of which conform to the same notional rules (Extract 2)

In this example, rather than struggling towards the formulation of a rule that explains all results, Student 2 already has a clearly defined and accountable rule that appears to have worked to this point: remark more "on the theory and the analysis". In using the language of feedback to describe her practices (Lea & Street 1998), and in pointing out such practices as generally adequate to the writing of Politics essays, a normative strand to this account is introduced. A feature that should be present is not; or it has not been made sufficiently visible. It is possible to see here the disappointment of hard-won experience not having purchase in a related writing context, and for no obvious reason. The outcome becomes strange through the rendering of the existing rules as reasonable.

Put the strangeness into relief by removing ("cutting out") any explanation that could be attached to the student writer, or any conventional site of explanation (Extract 3)

As mentioned, this is the same student as in Extract 2, and this method can be seen as a development of the previous one. It is a second conversation about the same case, so it is to be expected that the student as interlocutor will seek explanations. This is indeed what happens. However, the student does not find such an explanation. The method used here is to demonstrate that the expectation of a certain feature of the particular context – that is, the presence of an exigence allowing for analysis and theoretical debate – could reasonably be expected. When it is shown that it is not present, the method used is to cast this as an extrinsic feature of the learning context rather than as a failing of the student, or explicable in any other easily available way. Various candidate explanations are suggested and rejected. This case will also be taken up in more detail below.

Cite the indexicality of common feedback terms when it is not clear what they signify or refer to (Extract 4)

The indexical properties of language are foundational to many practice-led approaches in the social sciences. For examples of the context-bound usage of feedback terms, we will not find them in EM/CA, but rather in educational writing (e.g., Lea & Street 1998 on "analysis", Lillis 2001 on "explicit", Scott 2000 and Moore 2014 on "critical"). Student 3 is discussing her marks and feedback; this feedback was given in free text and through several marking criteria, each of which used a five-point scale where 1 was the lowest and 5 the highest. Given that there are generally five degree classification outcomes, including fail, it is tempting for students to attach such scales to the classification system; so that in this case, the indication of 3 for the criterion "clear" could be understood as clarity at the 2:2 (lower second) level. In any case, two things are evident here: first, that anything lower than the top indication shows that there is room for improvement in some way; and second, that these criterial indications are glosses on a series of unspecified textual features. Marking criteria have developed over recent years not only as aids to student

understanding of how they are being marked, but also, in ethnomethodological terms, as ostensible aids to the ad-hocing practices of markers (Emirbayer & Maynard 2011). They can be seen as ways of "fixing" the thread of feedback along certain lines in ways that are more difficult to manage through free-text feedback alone. However, as illustrated in this extract, the provision of free-text feedback *and* criterial indications can work to reduce rather than improve the clarity of feedback overall.[7] The student cites a couple of descriptions ("they said it was a well-written, thoughtful essay") that could be connected to its clarity, but the summary indication for clarity is "3". This apparent disjuncture is the source of the strange fact in this case. A further interesting feature here is the point that particular instances of criteria have not been made evident through ostensive demonstration ("it would be nice to get the underlined essay").

Find a disjuncture between the perceived features and quality of the work, and the result; or between items of information that do not seem to cohere and which require explanation (Extract 5)

This instance is similar to Extract 4, except that the issue here is the overall mark the student received (68, in other words a high upper second result but short of a first-class outcome) rather than the understanding of individual features of the essay in feedback terms. Whereas in Extract 4 the problem is better described as one of overall coherence of the various items of information made available to the student as feedback, here the problem is a scalar or metric one, reminiscent of some of Sacks' observations (1992). I suggest that many markers would both agree with the student's initial hypothesis regarding the important criteria that have made a difference in this case, and find his gloss of the imagined marker's ad-hocing practices uneasily close to the mark. In one sense it is indeed "easy" to conclude that some criteria have the status of first among equals: that if the indications of 4/5 were earned for other criteria, then a higher overall mark might have been the result. It is not easy to conclude this in the sense that if it is an accurate observation, it begs a whole other series of questions: if some criteria have higher weighting or prominence than others, why not communicate this in advance? How is it

[7] My experience of the development of marking criteria over the last twenty years or so conforms completely to a praxiological rendering of how marking practices can and should be explained to students. Very broadly, in response to student requests to know exactly *how* their mark is worked, criteria were developed from a distillation of common textual features that could be identified within a given assessment type and given discipline. These features tend to be a combination of technical (referencing, spelling) and epistemological (analysis, criticality). It did not take long for the *criteria* to need their own *descriptors* (i.e., written explications of the criteria, or alternatively, explanations of explanations). After this, though, further explanations had nowhere to go; they hit bedrock. In more recent times, a series of newer pedagogies have arrived that attempt to show, rather than tell, students how marks are or can be arrived at. These involve techniques such as provision of previously marked essays; video recordings of "real-time" marking of essays; and collaborative work with students to have them involved in the practice of essay marking. Although I have misgivings as to how these techniques are often used in conjunction with the notion of a "model answer", these demonstrative techniques have much more promise for inculcating students into a form of life than simple definitional approaches. There is a whole further conversation to be had (or cited) here regarding the possible benefits of dissolving learning paradox and shop-floor problems though these pedagogical approaches.

possible to reduce the marking to a couple of key criteria in this way? The somewhat glib style of the student is perhaps a reflection of his views of the ad-hocing behind the production of his marking and feedback. Although this is a discussion of a specific case, it observes some investigable, accountable features of the writing context that could be generally explanatory at some level.

These, then, are some of the methods open to students in writing contexts to introduce an abductive structure. It is evident that all of these cases can be considered as accounts of some form. This brings us on to the matter of what form these accounts take, and what they can be seen to be doing in practice. To reiterate, 'Descriptions in the social world, since they are within that world, simultaneously affect social relationships, execute moral evaluations, produce political, moral and social consequences, and so on. Descriptions are almost always "doing" many more things in a social situation than simply "reporting a set of facts"' (Schwartz & Jacobs 1979: 51).

IDENTITY AND HABIT

I have suggested that the sense of the first extract above hinges on the expression used by the student, "I seemed to do the same". Doing something in "the same" way but receiving a different outcome – for instance, through evaluation in an educational setting – is sufficient for this to become an abductive event that occasions reflection, and possibly explanation. What "the same" is in fact about here, and what it achieves, requires some careful unpicking.

To start with, any such judgement of "the same" must be able to have as part of its sense that it is the same *in some respect* (Schilbrack 2009; Hutchinson, Read, & Sharrock 2008) – no matter whether the discussion is about objects, events, or actions. We might ask, following Bogen (1999), under what conditions it makes sense to talk about doing the same thing on different occasions. Further, following Winch (1990), we might bring together the question of giving a sense to the idea of "the same" with the question of "In what circumstances does it make sense to say of somebody that he [*sic*] is a following a rule in what he does?" (28). Prior to Winch, Wittgenstein wrote that 'the use of the word "rule" and the use of the word "same" are interwoven' (1986, § 225). They are not, though, interchangeable; as Bogen points out, they have an asymmetrical relationship. Following a rule must mean doing the same thing in some ways; whereas doing the same thing need not involve following a rule. To employ some well-known examples, one cannot play chess or use a formula to calculate a number series without following rules; the rules are internal to carrying out these activities successfully. But to promise to visit a friend every day, or to follow a dance master successfully in carrying out "the same" moves with a similar level of proficiency (Ebersole 1979), need not reference any rules either overtly or implicitly (Bogen 1999). To put it more simply, these iterative activities are the same in some ways, and not in others. It may be important to the friend who needs reassurance that you promise day-by-day to visit them. Having the dance master confirm that you are doing "the same" as she does is an important component in learning, in

coming to *see* what is involved in a mastery of the activity and having this confirmed by those already proficient in it (see Winch 1990, 58ff.). This last example is particularly perspicuous: regularity of performance and outcome is a central pillar of what counts as learning, as are the regulative corroborations of those who provide instruction and expertise.

In short, judgements of what counts as "the same" will be determined within a form of life or practice, and the sense of this emerges from what can sensibly be said about that practice. Equivalency is something brought to the occasion by the practitioner and not by the researcher (Baccus 1986). The work of the researcher then becomes 'to give an account of just *how* members conduct the investigations into the regularities that Winch described. What is needed, ultimately, is an investigation into their investigations' (Koschmann 2012), their practical social theorising. Furthermore, for Baccus, 'the investigator must first have some idea of the internal workings of a social phenomenon (in its naturally available way) before he [*sic*] can go on to make statements about the phenomenon from his point of view as an investigator' (1986, 2). In this case, we do not have much to work on. We do not see a demonstration of what makes these different occurrences the same, nor do we see any extended experimental response to this event. But we do have a form of talk within a specific "organised environment" that is coherent enough for it to be understood, and sufficient for a perplexity to be communicated. We also have a hint at a "craving for generality" on the part of the student.

There is also the problem of what it means to act in a rule-following or rule-seeking manner in higher education assessment. The notion of a "rule" is employed in an underdetermined way in much educational writing. In a DiSA briefing paper[8] (Oldham & Dhillon 2012), for instance, the authors suggest that "knowing the rules" – glossed as holding "contextual knowledge" – allows for better student progression, identity, and transition as learners. A similar sense of not knowing the rules was relevant when students were asked to undertake new activities, including new genres of assessment. This seemed to be dissolved somewhat with experience. A similar picture is found in AL writing (e.g., Lea & Street 1998; Read, Robson & Francis 2001) where "rules" are described as something like 'unwritten conventions' that can differ even from assignment to assignment, or tutor to tutor. The AL perspective, which stresses the potential differences in writing requirements – or "rules" – in each iteration of writing, makes a particularly interesting question out of what "doing the same" could possibly denote. However, even reading only from what has appeared above, there are several candidate ways of defining what the "rules" of academic writing *could* involve:

1. Marking criteria, grading boundaries, and descriptors of these;
2. The informal or tacit knowledge involved in the application of these criteria;

[8] Disparities in Student Attainment.

3. Unwritten, unspoken, uncommunicated, or uncommunicable principles of preferred content or style at a higher level of abstraction than even the application of criteria ("what they're really looking for");
4. Knowledge of generic form;
5. Conventions specific to local conditions, disciplinary or tutor preferences, etc.;
6. Peircean rules invoked to explain strange cases, and bring all cases into a space where they are explicable.

For these reasons, great care in dealing with the concept of *rule* in discussion of academic writing requirements is recommended.

Returning to the example, some of the ideas above can readily be put to work in accounting for the coherence of this exchange. The initial temptation is to conclude that this is an account of a disrupted habit in simple terms. Doing the same thing – whatever this is – is something that has served the student well in cases up to this point. This becomes an accountable episode because of the difference in outcome given what appears to the participant as similar practices going into her work. However, a rule, or any practice that involves doing the same thing, is nothing if not generally applicable. We can surmise that this initial habit came about thanks to corroboration in various other learning settings that have a perceived coherence (see Ogien 2018, and Winch 1990, 57-62 for discussions). It worked for the student not only because she employed comparable practices on her own part, but also because of the corroboration she will have received trans-contextually and the support this gives for the understanding of general principles governing those cases. The same kind of action is suited to the same kind of occurrence.

Furthermore, following Dewey, Wittgenstein, and Winch, this cannot be said to be a purely individualised affair. With shades of the private language argument, the meaning of this discussion 'can only be conferred on it from the vantage point of shared knowledge about regularities people can reasonably anticipate on the basis of common experience' (Ogien 2018, 44). So here, the student has been led to the perception of a commonality through experience in various teaching settings that themselves can be understood, to this point, as having common requirements. To paraphrase Winch, it makes sense to speak of a rule not in the sense of whether it can be formulated, but in related to whether an action can be said to have been carried out in a right or wrong way. The student observation hints at conditions or criteria that need to be known in common. She knew how to go on, until a new case problematised this sense of knowing. Even though we cannot see an immediate answer to this perplexity, the form of the problem is evident, and is irrevocably social.

REMOVING EXPLANATIONS AND TYPES OF ACCOUNT

In analysing Extract 3, it may be useful to think about this as picking up where the previous analysis left off. In Extract 2, where the same student talks about the same case, she not only describes her attempts to replicate previous practice in the setting described,

but is also able to formulate what this practice is, or should be. Without using the same terms as Student 1, and as demonstrated in the *How to establish a "strange fact"* section above, Student 2 is clearly working in a similar kind of way. The difference that the data gives us is that Student 2 has a clearly formulated rule which we can infer has worked to this point. The second conversation with Student 2, yielding Extract 3, provides more detail as to the circumstances around the non-applicability of the rule in this case. This detail helps to bring about a particular form of account, which it is more productive to describe than to attempt to categorise *a priori*. The context tells us the kind of account it is (Heritage 1984).

One starting point for this is to consider where the student seeks explanations for her strange fact. As noted, Dewey suggested that too concerted a focus on internal explanation could be a sign of pathology. This is not to say, of course, that personal considerations cannot be relevant where improved outcomes are sought. In all the cases outlined here, there is a discernible tension between the aspect of clarity and consistency in external criteria, and the fact that there is an element of personal performance and therefore responsibility which is the site of, if not the reason for, the perplexity. Certainly, in the longer accounts, there is a preference for providing "environmental justifications" rather than "personal excuses" (Merrison et al. 2012). However, to cite Austin's (1956: 27) programmatic work on this topic, "it is very evident that the problem of excuses and those of the different descriptions of actions are throughout bound up with each other". Given that there is a family of accounts connected to problematic situations – excuses, justification, explanation, or assigning blame, among others (Matarese & Caswell 2014) – we should expect any or all of these to be attached to *versions* of events that are in principle contestable (Coulter 1979, Cuff 1993). Accounts are generally involved in other activities than simply setting out events.

With this in mind, let us return to the discussion with Student 2 to see how she renders her account as a version. In Extract 2 she sets out her rule/s for dealing with Politics essays; to address theory and provide an analysis. These are set up as standards from which her current paper diverges (Lynch 2007). Furthermore, this rule is generally adequate because it addresses features that are "usually" present. Thus described, it becomes a normative matter. In Extract 3 she outlines the search for an *argument*, a term cognate with *analysis*. The lack of success of this search results in a descriptive or "narrative" outcome, in other words a dispreferred outcome when considered in the common opposing pair of *analysis/description*. The account works to show how a narrative outcome came about despite an analytical one being sought.

Extract 3 is from a second conversation that was conducted a few days after the first. In this, the student sets up the situation as one where she could not do otherwise. There is a series of implicit 'despite' or 'even though' clauses that work to establish the inevitability of the puzzle, and which support the presentation of the student as competent. Thus, she says, "I just couldn't seem to find" the "extra dimension":

- despite this being a normally available feature in the genre and discipline;
- despite the formulation of a rule that fits all other cases;
- despite "all the research" yielding only consensus;
- despite "the amount of reading I did for it", supporting the idea of no lack of effort;
- despite the time spent on looking for a solution and the subsequent rush;
- despite the result "tending to the narrative", playing on a contrast with her usual "analysis";
- despite the importance of the events not being reflected in the essay title.

Having thus accounted for most if not all of the things that a serious student should be doing when confronted with such a challenge, Student 2 downplays the possibility that the criticism of her essay "tending to the narrative" is only attributable to any of her own practices. These clauses support the idea that argumentative exigence *should* be available to the student: the normative tone of these comments is not difficult to see and is supported by the comment in Extract 2. Two other features of the conversation support the same version of events: first, in Extract 3 the student initially describes the lack of argument or debate as something that "we" could not see; this refers back to an earlier point in the conversation where she posits course mates as having the same problem as herself in this task. Second, my main contribution as an interlocutor here is to suggest ways in which the instruction words in the essay title could be interpreted as allowing for an argument to be provided. Student 2, though, succinctly removes this as the site of the problem.[9]

What Student 2 is carrying out, then, is redolent of Dorothy Smith's (1990; Berard 2005) "cutting out" procedure, whereby all alternative accounts are removed in favour of the preferred one. There is a difference in this case when compared to Smith's *K is Mentally Ill* essay. Those dealing with K provide explanations or extenuations for K in every disparate example of her conduct, but the master explanation, the single rule that brings all instances together as a collection, is that she is mentally ill. Once heard as such, all other instances can be brought together as results, cases explicable by this rule. In my example, Student 2 attempts to establish that her regularly applied rule is and should be applicable; that it is not makes for the strange case. Furthermore, this cutting out process takes into account the rejection of explanations of different types. Speakers can use a suite of different mitigation types where they are implicated in something that has gone wrong or badly (Coulter 1979, Beach 1991). For instance, in a conversation between two managers where one is explaining the performance of his team to the other (Sharrock & Button 2007), conversational techniques include excuses (personal circumstances related to the workers), justifications (explaining a light-touch management style), and questioning the premise (the very idea that performance is unacceptable).[10] In the case of Student

[9] List construction and contrast structures, both present in this example, are well established as techniques in anticipating sceptical responses from the listener (Acuña-Ferreira 2003).
[10] I provide here a conflation of Sharrock & Button's own types.

2, we can point out at least intrinsic and extrinsic components in her account. The intrinsic components work to demonstrate herself as "morally adequate" (Cuff 1993), as operating with the kinds of predicates we would want attached to a student, and, by extension, as a trustworthy teller of the narrative. These also help with establishing the extrinsic components as normative expectations that have not been met (Matarese & Caswell 2014). *If* she should be doing something different, then she *should* be given the requisite guidance. The result is the achievement of an incongruity perspective (Watson 2009). That the incongruity does not receive a solution here only helps to distance the student from any reasonable action she could have taken to provide the solution.

Accounts are furthermore category-based (Dupret, Lynch & Berard 2015). Each participant providing an account will be part of a unit with its own membership categories and predicates (Cuff 1993) informing the kinds of actions that can be attributed to them. We can expect of higher education students that they will make excuses;[11] that they may complain (Garfinkel 2002); that they will certainly want to attain and justify as high a mark as possible. However, they will also reflect on and perhaps problematise their performance; and to bring things full circle, they will often hang explanations on their experience. An account does not need to have a "for-once-and-all" identity (Atkinson & Drew 1979).

CONCLUSION

In this article, I have carried out an analysis of examples of student talk that address circumstances relating to "strange facts" in academic writing contexts. It has been possible to identify a not exhaustive list of spoken methods for establishing academic literacy events or features as strange. A common set of practices occurs when prior experience is seen to be inadequate to account for a new case or 'result' that is otherwise similar enough in type that the lessons of experience could apply. In bringing these cases about, students make generous use of incongruity perspectives and contrast structures. To help describe these examples, I have used various learning-related ideas from pragmatism, not least that of Peirce's concept of abduction. Pragmatism has several points of relevance to this investigation. One is the evident relevance of reflecting on experience to the possibility of learning and, more to the point here, for conversationally framing accounts of strange facts. A second is the potential of the concept of abduction itself for bringing together mundane practices such as hypothesising, comparing, describing, suggesting and testing solutions. A third is that these problems are pragmatic ones in a very real sense, requiring reflection and adaptation for the most fruitful outcomes to be possible. I largely agree with Emirbayer & Maynard's treatment of pragmatism in that it has little to offer EM/CA in terms of conducting sociological studies; but pragmatism is still

[11] I would echo Heritage (1984) in saying that this is a type of account specific to the context. There are no evident adjacency pairs in the conversations that suggest that they are clearly, for instance, excuses; nor do I recall them sounding like this at the time. This is not to say that I could not have been, as a university staff member, an excuse recipient rather than a troubles recipient (Jefferson 2015).

under-employed as a theory of learning and it can help identify useful loci for EM/CA studies in the field of education.

Much of my analysis has been dedicated to show that student talk on strange facts should not be considered as unproblematic descriptions of states of affairs. They are also accounts that provide versions of events necessitated by the aspect of student performance in assessment. This, allied to the observation that the student participants in these examples would not be candidates for studies where the focus is any form of underprivileged or protected status, opens up the field to a much broader array of potential studies.

The pragmatist perspective also interacts in an interesting way with that of academic literacies. A pragmatist view – as supported by the data presented here – would see participants as wanting to generate general rules for conduct that can be used habitually. When this is frustrated and explanations are needed to generate new, adaptive habits, AL would see the situated practice of the individual literacy event – the basic unit of understanding – as the reason. I have cited EM/CA authors in this article (not least Dorothy Smith and David Bogen) who have also argued in their own ways that we should think more about situated explanations than master rules. But how do we construct pedagogical intercessions out of this insight, not least when the generalisations can be enabling for learners? I see a paradox between an apprehension of the threshold concepts of the key terms of academic description and feedback, and their instantiation in specific local practice. In Deweyan terms, we would want to avoid a regression from a participant model of education to an observer model, where the shop-floor problem pertains. Educational responses designed to fit this brief would be a useful next stage in this line of enquiry.

ACKNOWLEDGEMENTS

The ideas in this paper have benefitted over an extended period from discussions with Andrew Carlin, Wil Coleman, and Wes Sharrock. Remaining faults are the responsibility of the author.

REFERENCES

Acuña-Ferreira, Virginia. 2003. 'Gendered Emotive Displays in Complaint Discourse'. *Sociolinguistic Studies* vol. 3, no. 2, 139-172.

Atkinson, J. Maxwell, and Paul Drew. 1979. *Order in Court: The Organisation of Verbal Interaction in Judicial Settings*. London: The Macmillan Press Ltd.

Austin, J. L. 1956. 'A Plea for Excuses: The Presidential Address'. *Proceedings of the Aristotelian Society*, New Series, vol. 57 (1956-1957), 1-30.

Baccus, Melinda. D. 1986. 'Sociological Indication and the Visibility Criterion of Real World Social Theorising'. In *Ethnomethodological Studies of Work*, edited by Harold Garfinkel, 1-20. London: Routledge.

Ballard, Brigid, and John Clanchy. 1988. 'Literacy in the University: An "Anthropological" Approach'. In *Literacy by Degrees*, edited by Gordon Taylor, Brigid Ballard, Vic Beasley, Hanne Bock, John Clanchy,

and Peggy Nightingale, 7-23. Milton Keynes: The Society for Research into Higher Education & Open University Press.

Bateson, Gregory. 1979. *Mind and Nature: A Necessary Unity*. New York: E. P. Dutton.

Beach, Wayne A. 1991. 'Avoiding Ownership for Alleged Wrongdoings'. *Research on Language and Social Interaction*, vol. 24, 1-36.

Becker, Howard S., Blanche Geer, and Everett C. Hughes. 1968. *Making the Grade: The Academic Side of College Life*. New York: Wiley

Berard, Tim. 2005. 'On Multiple Identities and Educational Contexts: Remarks on the Study of Inequalities and Discrimination'. *Journal of Language, Identity & Education*, vol. 4, issue 1, 67-76.

Bogen, David. 1999. *Order without Rules: Critical Theory and the Logic of Conversation*. New York: State University of New York Press.

Carettini, Gian Paolo. 1988. 'Peirce, Holmes, Popper'. In *The Sign of Three: Dupin, Holmes, Peirce*, edited by Umberto Eco and Thomas A. Sebeok, 135-153. Indianapolis: Indiana University Press.

Carlin, Andrew P. 2009. 'Edward Rose and Linguistic Ethnography: An Ethno-Inquiries Approach to Interviewing'. *Qualitative Research*, vol. 9, no. 3, 331-354.

Coffin, Caroline, and James P. Donohue. 2012. 'Academic Literacies and Systemic Functional Linguistics: How do They Relate?' *Journal of English for Academic Purposes*, vol. 11, 64-75.

Collini, Stefan. 2012. *What are Universities For?* London: Penguin Books.

Coulter, Jeff. 1979. *The Social Construction of Mind: Studies in Ethnomethodology and Linguistic Philosophy*. Totowa, New Jersey: Rowman and Littlefield.

Cuff, Edward C. 1993. *Problems of Versions in Everyday Situations*. Washington, DC: International Institution for Ethnomethodology and Conversation Analysis & University Press of America.

Deutscher, Guy. 2002. 'On the Misuse of the Notion of "Abduction" in Linguistics'. *Journal of Linguistics*, vol. 38, 469-485.

Dewey, John. 2007. *Logic: The Theory of Inquiry*. New York: Henry Holt and Company.

Dewey, John. 2008. *Democracy and Education*. At gutenberg.org/files/852/852-h/852-h.htm, accessed January 2021.

Dupret, Baudouin, Michael Lynch, and Tim Berard. 2015. *Law at Work: Studies in Legal Ethnomethods*. Oxford: Oxford University Press.

Ebersole, Frank B. 1979. *Meaning and Saying: Essays in the Philosophy of Language*. Bloomington, IN: Xlibris Corporation.

Ecclestone, Kathryn. 2001. '"I Know a 2:1 When I See It": Understanding Criteria for Degree Classifications in Franchised University Programmes'. *Journal of Further and Higher Education*, vol. 25, no. 3, 301-313.

Eco, Umberto. 1994. *The Limits of Interpretation*. Bloomington: Indiana University Press.

Elkjaer, Bente. 2009. 'Pragmatism: A Learning Theory for the Future'. In *Contemporary Theories of Learning: Learning theorists… in their own words*, edited by Knud Illeris, 74-89. London: Routledge

Emirbayer, Mustafa, and Douglas W. Maynard. 2011. 'Pragmatism and Ethnomethodology'. *Qualitative Sociology* 34, 221-261.

Fann, K. T. 1970. *Peirce's Theory of Abduction*. The Hague: Martinus Nijhoff.

Garfinkel, Harold. 2002. *Ethnomethodology's Program: Working out Durkheim's Aphorism*. Edited and introduced by Anne Warfield Rawls. Lanham, MA: Rowman & Littlefield Publishers, Inc.

Garfinkel, Harold, and Harvey Sacks. 1970. 'On Formal Structures of Practical Action'. In *Theoretical Sociology: Perspectives and Developments*, edited by John C. McKinney and Edward A. Tiryakian, 338-366. New York: Appleton-Century-Crofts.

Gellner, Ernest. 2004. *Language and Solitude: Wittgenstein, Malinowki and the Habsburg Dilemma*. Cambridge: Cambridge University Press.

Ginzburg, Carlo. 1988. 'Morelli, Freud, and Sherlock Holmes: Clues and Scientific Method'. In *The Sign of Three: Dupin, Holmes, Peirce*, edited by Umberto Eco and Thomas A. Sebeok, 81-118. Indianapolis: Indiana University Press.

Greiffenhagen, Christian and Wes Sharrock. 2007. 'Linguistic Relativism: Logic, Grammar, and Arithmetic in Cultural Comparison. *Language & Communication* 27, 81-107.

Heritage, John. 1984. *Garfinkel and Ethnomethodology*. Cambridge: Polity Press.

Hookway, Christopher. 2000. *Truth, Rationality, and Pragmatism: Themes from Peirce*. Oxford: Oxford University Press.

Hounsell, Dai. 1997. 'Contrasting Conceptions of Essay-writing'. In *The Experience of Learning: Implications for Teaching and Studying in Higher Education*, 3rd (Internet) edition, edited by Marton, F., D. Hounsell, & N. Entwistle. Edinburgh: University of Edinburgh, Centre for Teaching, Learning and Assessment, at https://www.ed.ac.uk/institute-academic-development/learning-teaching/research/experience-of-learning.

Hounsell, Dai, Velda McCune, Jenny Hounsell, and Judith Litjens. 2008. 'The Quality of Guidance and Feedback to Students'. *Higher Education Research & Development*, vol. 27, no. 1, 55-67.

Husain, Shahrukh, and Robin Waterfield. 2006. 'The First Year of Higher Education'. In *Writing Matters: The Royal Literary Fund Report on Student Writing in Higher Education*, edited by Stevie Davies, David Swinburne, and Gweno Williams, 27-33. London: The Royal Literary Fund.

Hutchinson, Phil, Rupert Read, and Wes Sharrock. 2008. *There is No Such Thing as a Social Science: In defence of Peter Winch*. Aldershot, UK: Ashgate.

Ivanić, Roz, Romy Clark, and Rachel Rimmershaw. 2000. 'What Am I Supposed to Make of This? The Messages Conveyed to Students by Tutors' Written Comments'. In *Student Writing in Higher Education: New Contexts*, edited by Mary R. Lea and Barry Stierer, 47-65. Buckingham: Open University Press.

Jefferson, Gail. 2015. *Talking about Troubles in Conversation*. Edited by Paul Drew, John Heritage, Gene Lerner, and Anita Pomerantz. Oxford: Oxford University Press

Koschmann, Timothy. 2001. 'A Third Metaphor for Learning: Toward a Deweyan Form of Transactional inquiry'. *Book Chapters*, Paper 3, http://opensiuc.lib.siu.edu/meded_books/3.

Koschmann, Timothy. 2003. 'Peirce's Notion of Abduction and Deweyan Inquiry'. *Conference Proceedings*, Paper 2, http://opensiuc.lib.siu.edu/meded_confs/2.

Koschmann, Timothy. 2012. 'Conversation Analysis and Learning in Interaction'. In *The Encyclopedia of Applied Linguistics*, https://doi.org/10.1002/9781405198431.wbeal0208.

Lea, Mary. R., and Brian V. Street. 1998. 'Student Writing in Higher Education: An Academic Literacies Approach'. *Studies in Higher Education*, vol. 23, no. 2, 157-172.

Lillis, Theresa M. 1999. 'Whose "Common Sense"? Essayist Literacy and the Institutional Practice of Mystery'. In *Students Writing in the University*, edited by Carys Jones, Joan Turner, and Brian Street, 127-148. Amsterdam: John Benjamins Publishing Co.

Lillis, Theresa M. 2001. *Student Writing: Access, Regulation, Desire*. London: Routledge.

Lillis, Theresa M. 2008. 'Ethnography as Method, Methodology, and 'Deep Theorising': Closing the Gap between Text and Context in Academic Writing Research'. *Written Communication*, vol. 25, no. 3, 353-388.

Lillis, Theresa. M., and Mary Scott. 2007. 'Defining Academic Literacies Research: Issues of Epistemology, Ideology and Strategy'. *Journal of Applied Linguistics*, vol. 4, 5-32.

Lynch, Michael. 1993. *Scientific Practice and Ordinary Action: Ethnomethodology and Social Studies of Science*. Cambridge: Cambridge University Press

Lynch, Michael. 2007. 'Law Courts as Perspicuous Sites for Ethnomethodological Investigations'. In *Orders of Ordinary Action: Respecifying Sociological Knowledge*, edited by Stephen Hester and David Francis, 107-120. Aldershot, UK: Ashgate.

Mann, Sarah J. 2008. *Study, Power and the University*. New York: McGraw Hill for the Society for Research into Higher Education & Open University Press.

Matarese, Maureen, and Dorte Caswell. 2014. 'Accountability'. In *Analysing Social Work Communication: Discourse in Practice*, edited by Christopher Hall, Kirsi Juhila, Maureen Matarese, and Carolus van Nijnatten, 44-60. London: Routledge.

McCambridge, L. (2015) 'Academic Writing in an ELF Environment: Standardisation, Accommodation – or Transformation?' In *Working with Academic Literacies: Case studies towards Transformative Practice*, edited by Theresa Lillis, Kathy Harrington, Mary R. Lea, and Sally Mitchell, 185-194. Fort Collins, CO: The WAC Clearinghouse with Parlor Press.

McKenna, S. (2010) 'Cracking the Code of Academic Literacy: An Ideological Task'. In *Beyond the University Gates: Provision of Extended Curriculum Programmes in South Africa*, edited by Catherine Hutchings and James Garraway, 8-15. Proceedings of the January 2009 Rhodes University Foundation Seminar.

Merrison, Andrew John, Jack J. Wilson, Bethan L. Davies, and Michael Haugh. 2012. 'Getting Stuff Done: Comparing E-mail Requests from Students in Higher Education in Britain and Australia' *Journal of Pragmatics*, vol. 44, issue 9, 1077-1098.

Meyer, Michael. 2010. 'Abduction – A Logical View for Investigating and Initiating Processes of Discovering Mathematical Coherences'. *Educational Studies in Mathematics*, vol. 74, 185-205.

Miettinen, Reijo. 2000. 'The Concept of Experiential Learning and John Dewey's Theory of Reflective Thought and Action'. *International Journal of Lifelong Education*, vol. 19, no. 1, 54-72.

Misak, Cheryl. 2005. 'Pragmatism and Pluralism'. *Transactions of the Charles S. Peirce Society*, vol. 41, no. 1, 129-135.

Mitchell, Sally. 2010. 'Now You Don't See it; Now You Do: Writing made Visible in the University'. *Arts & Humanities in Higher Education*, vol. 9, no. 2, 133-148.

Moore, Tim. 2014. 'Wittgenstein, Williams and the Terminologies of Higher Education: A Case Study of the Term "Critical"'. *Journal of Academic Language and Learning*, vol. 8, no. 1, 95-108.

Nerlich, Brigitte, and David D. Clarke. 1996. *Language, Action, and Context: The Early History of Pragmatics in Europe and America, 1780-1930*. Amsterdam: John Benjamins Publishing Co.

Ogien, Albert. 2018. *Practical Action: Wittgenstein, Pragmatism and Sociology*. Newcastle upon Tyne, UK: Cambridge Scholars Publishing.

Oldham, Sue, and Jaswinder Dhillon. 2012. 'DiSA Briefing Paper 12: Student Voices: Perceptions of learning, assignments and achievement'. Accessed in 2018 from the Higher Education Academy web site, but at time of writing available at eprints.worc.ac.uk/10233, and restricted to repository staff.

Pardoe, Simon. 2000. 'A Question of Attribution: The indeterminacy of "Learning from Experience"'. In *Student Writing in Higher Education: New Contexts*, edited by Mary R. Lea and Barry Stierer, 125-146. Buckingham: Open University Press.

Pedemonte, Bettina and David Reid. 2010. 'The Role of Abduction in Proving Process. *Educational Studies in Mathematics*, vol. 76, 281-303.

Peirce, Charles Sanders. 1901. In Collected Papers of Charles Sanders Peirce, at https://colorysemiotica.files.wordpress.com/2014/08/peirce-collectedpapers.pdf.

Peirce, Charles Sanders. 1903. In Collected Papers of Charles Sanders Peirce, at https://colorysemiotica.files.wordpress.com/2014/08/peirce-collectedpapers.pdf.

Priss, Uta. .2014. "A Pragmatist Theory of Learning" at https://www.upriss.org.uk/papers/peirce14.pdf.

Rai, Lucy. 2004. 'Exploring Literacy in Social Work Education: A Social Practices Approach to Student Writing' *Social Work Education*, vol. 23, no. 2, 149-162.

Read, Barbara, Becky Francis, and Jocelyn Robson. 2001. '"Playing Safe": Undergraduate Essay Writing and the Presentation of the Student "Voice"'. *British Journal of Sociology of Education*, vol. 22, no. 3, 387-399.

Ridley, Diana. 2004. 'Puzzling Experiences in Higher Education: Critical Moments for Conversation'. *Studies in Higher Education*, vol. 29, no. 1, 91-107.

Sacks, Harvey. 1992. 'Lectures on Conversation'. 2 vols. Edited by Gail Jefferson with introductions by Emanuel A. Schegloff. Oxford: Basil Blackwell.

Schegloff, Emanuel A. 2008. '"Narrative Analysis" Thirty Years Later'. In *Life Story Research*, vol. 1, edited by Barbara Harrison. London: Sage.

Schilbrack, Kevin. 2009. 'Rationality, Relativism, and Religion: A Reinterpretation of Peter Winch'. *SOPHIA*, 48: 399-412.

Schwartz, Howard D., and Jerry Jacobs. 1979. *Qualitative Sociology: A Method to the Madness*. New York: Free Press.

Scott, Mary. 1999. 'Agency and Subjectivity in Student Writing'. In *Students Writing in the University*, edited by Carys Jones, Joan Turner, and Brian Street, 171-1492. Amsterdam: John Benjamins Publishing Co.

Scott, Mary. 2000. 'Student, Critic and Literary Text: A Discussion of "Critical Thinking" in a Student Essay'. *Teaching in Higher Education*, vol. 5, no. 3, 277-288.

Searle, John. R. 1969. *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Semetsky, Inna. 2005. 'Peirce's Semiotics, Subdoxastic Aboutness, and the Paradox of Inquiry'. *Educational Philosophy and Theory*, vol. 37, no. 2, 227-238.

Sharrock, Wes, and Graham Button. 2007. 'The Technical Operations of the Levers of Power'. In *Orders of Ordinary Action: Respecifying Sociological Knowledge*, edited by Stephen Hester and David Francis, 33-50. Aldershot, UK: Ashgate.

Smith, Dorothy. 1990. *Texts, Facts and Femininity: Exploring the Relations of Ruling*. London: Routledge.

Stierer, Barry. 1997. 'Mastering Education: A Preliminary Analysis of Academic Literacy Practices within Masters-level Courses in Education. Centre for Language and Communication (The Open University UK) Occasional Papers in Communication, No. 59.

Turner, Joan. 1999. "Academic Literacy and the Discourse of Transparency" In *Students Writing in the University*, edited by Carys Jones, Joan Turner, and Brian Street, 140-160. Amsterdam: John Benjamins Publishing Co.

Watson, Rod. 2009. *Analysing Practical and Professional Texts: A Naturalistic Approach*. Farnham: Ashgate.

White, Naomi Rosh. 2009. 'Tertiary Education in the Noughties: The Student Perspective'. In *The Routledge International Handbook of Higher Education*, edited by Malcolm Tight, Ka Ho Mok, Jeroen Huisman, and Christopher C. Morphew, 137-151. London: Routledge.

Winch, Peter. 1990. *The Idea of a Social Science and its Relation to Philosophy*, 2nd edition. London: Routledge.

Wittgenstein, Ludwig. 1986. *Philosophical Investigations*. Translated by. G. E. M. Anscombe. Oxford: Basil Blackwell.

Zimmerman, Don H., and & Melvin Pollner. 1970. 'The Everyday World as a Phenomenon'. In *Everyday Life: Toward the Reconstruction of Sociological Knowledge*, edited by Jack D. Douglas, 80-103. Chicago: Aldine Publishing Company.