Critical thinking: seven definitions in search of a concept

Tim Moore*

Faculty of Higher Education, Lilydale, Swinburne University of Technology, Melbourne, Australia

The article reports a study that investigated ideas about critical thinking as held by academics working in three disciplines: history, philosophy and cultural studies. At least seven definitional strands were identified in the informants' commentaries, namely critical thinking: (i) as judgement; (ii) as skepticism; (iii) as a simple originality; (iv) as sensitive readings; (v) as rationality; (vi) as an activist engagement with knowledge; and (vii) as self-reflexivity. This multiplicity of meanings is thought to have important implications for university teaching and learning. The design of the study and the conclusions drawn from it draw heavily on Wittgenstein's idea of meaning as use.

Keywords: critical thinking; disciplines; generic skills; language; teaching and learning

Introduction

In contemporary debates about the nature of higher education, a concept that looms particularly large is the idea of critical thinking. It has become, as Barnett (1997) suggests, 'one of the defining concepts of the Western University' (3).The manifest importance of critical thinking is evident in many of the educational practices of teaching academics (Chanock 2000). For example, in many of the assignments and essays academics set for students, the basic intellectual task is often framed around the idea of being critical in some way: *critically analyse X* or *provide a critical discussion of Y*. The term is often prominent in the written feedback provided to students once a task has been completed: '*This essay would have benefited from a more critical approach*' or '*You need to criticise, not just summarise*'. In the broader domain of educational policy, the idea of critical thinking has also assumed major importance in the current emphasis that is placed on the development of student's generic skills and attributes on academic programs (Barrie and Prosser 2004).

But, while there is broad agreement about the importance of critical thinking as an educational ideal, a view often expressed in the literature is that academics are not always so clear about what the concept means, and also not so certain about how the idea is best conveyed to students in their studies. Atkinson (1997) describes the situation thus:

> academics normally considered masters of precise definition seem almost unwilling or unable to define critical thinking. Rather they often appear to take the concept on faith,

---

*Email: tjmoore@swin.edu.au

perhaps as a self-evident foundation of Western thought – such as freedom of speech. (1997, 74)

For Fox (1994), the difficulties of critical thinking arise from academics typically learning these practices themselves in an intuitive way, and so as a part of their professional habitus (Bourdieu 1977) the concept becomes a largely unspoken and ineffable one:

> because it is learned intuitively, critical thinking is easy [for academics] to recognize, like a face or a personality, but it is not so easily defined and it is not at all simple to explain. (Fox 1994, 125)

Barnett (1997) sees the problem stemming from a lack of conscious reflection by practitioners about this key notion: 'Higher education', he says, 'which prides itself on critical thought, has done no adequate thinking about critical thinking' (3). The evident importance of critical thinking in higher education, as well as the seeming pedagogical uncertainty surrounding the concept, suggests there is a need to find out more about how the idea is actually understood and used by academics in their teaching in the disciplines. The present study is motivated by this interest.

Background literature: the critical thinking movement and the definition question

Although there appears to be some uncertainty surrounding the concept of critical thinking, this is not to suggest that the idea has remained an unexamined one, and that it has somehow entered the educational practices of our institutions without some effort to properly interrogate and understand it. A group of academics have devoted themselves conscientiously to these definitional questions – the 'critical thinking movement' (Davies 2006; Ennis 1992, 2001; Facione 1990; Paul 1996; van Gelder 2000). Emanating largely out of the US, these scholars, consisting mainly of educational philosophers and psychologists, have worked hard to develop 'clear and distinct' understandings of the term. Their efforts have been notable for seeking to establish a single overarching definition (Norris 1992). Ennis, for example, a key member of the movement, emphasises the rational basis of critical thinking, defining it as: 'reasonable, reflective thinking that is focused on deciding what to believe or do' (1987, 10). Siegel (1988), another important contributor, frames his account in similar terms, describing critical thinking as 'the educational cognate of rationality', and a critical thinker, 'as the individual who is appropriately moved by reasons' (25).

Other thinkers, however, have shunned the idea of a single unitary definition and have suggested that critical thinking, of its nature, necessarily takes in a variety of cognitive modes. Clinchy (1994), for example, sees the forms of critical thinking required in the academy falling roughly into two types: a 'separated knowing' which, she says, has the qualities of 'detachment' and 'impersonality' and a 'connected knowing' which is concerned more with an empathic understanding – trying to 'get into the heads' of those one wishes to understand. Barnett (1997) identifies at least four modes; what he describes as critical thinking as 'disciplinary competence', 'practical knowledge', 'political engagement' and a form of 'strategic thinking'. In his account, Barnett stresses the distinctiveness of these different versions of critical thinking, insisting that the concept

resists reduction to any single mode: 'Critical thought is not all of a piece. Of the four forms in the university' (or at least the ones that Barnett identifies) 'none is reducible', he says, 'to any of the others' (1997, 14).

Despite the major theoretical effort that has gone into analysing and explicating the idea of critical thinking, it is questionable whether these processes have managed ultimately to make the concept a comprehensible one in our institutions. Capossela dismissively describes the situation thus:

> It seems reasonable to suppose that a concept so frequently invoked would long ago have acquired a clear-cut definition, but in fact the opposite is true: with each new appearance, critical thinking becomes less, rather than more, clearly defined. (1998, 1)

The term, as critical theorist Raymond Williams has suggested, is a 'most difficult one' (1976, 74). Commenting on this apparent confusion, Norris (1992) has suggested the problem underlying the multiplicity of views, and the resultant blurring of the concept, is the lack of an empirical basis in the various attempts at characterizing critical thinking. Thus, there has been a tendency, Norris suggests, to treat the concept as an abstract and philosophical one, and to rely mainly on methods of introspection and intuition to develop and refine its meanings. Some critics have suggested that what is produced ultimately out of such processes are definitions of a more normative nature than ones based in any actual reality, thus casting some doubt on the validity of many of the ideas proposed (Atkinson 1997).

Such a position is very much apiece with Wittgenstein's famous critique of introspective forms of philosophical inquiry, and the 'never-ending' quest in that discipline to define concepts in some abstract way. For Wittgenstein, there are no such abstract meanings. Instead, words and expressions only take on meanings, he suggests, from the way they are used 'in the stream of life'. As he famously declared in his *Philosophical Investigations*:

> For a large class of cases in which we employ the word 'meaning' it can be defined thus: the meaning of a word is its use in the language. (1958, 20, sect. 43)

Wittgenstein believed that many philosophical problems stem from looking at words in isolation, in a static way. 'The confusions which occupy us', he declared, 'arise when language is like an engine idling, not when it is doing work' (1958, 51, sect 132). Indeed, this may be a way of understanding the definitional impasse that the critical thinking movement seems to have found itself in; that is, there has been a tendency to detach the concept from its actual uses, and then to attach to it either notions that are thought to be somehow intrinsic to it, or else notions that one desires it to have. A concept treated in this way will inevitably yield many different meanings, and lead us into what Wittgenstein called a state of 'puzzlement'. The way out of such confusion, according to Wittgenstein, is to engage in a form of linguistic empiricism – not to rely on what one *thinks* a word means, but instead to *look* at those situations in which it is being used. 'Don't think, but look', was Wittgenstein's blunt instruction to his fellow philosophers.

These ideas formed the basis for the study described in this article. Instead of relying on the literature to establish the likely meanings of critical thinking as an educational goal, it was thought useful to seek out the actual understandings of the concept as held by practicing academics, and to find out how the term is used by them in their teaching activities. The approach, a deliberately 'emic' practice-based as opposed to an 'etic'

systems-based one (Pike 1967), sought to reverse conventional research processes – not to seek to understand an idea (such as critical thinking) and then see how it is applied in educational practice, but instead to see how the idea is used as an educational practice and then to draw on these findings to form an understanding of it as a concept.

The study

The study was conducted at an Australian university, and involved interviewing academics from a range of disciplines: philosophy, history and literary/cultural studies. This choice of disciplines was a deliberate one. The intention was to cover

Table 1.   Summary of informants (discipline, research interests).

Discipline area	Informant*	Research interests**
History	Edward (M)	European social history; Enlightenment; French Revolution
	Hannah (F)	Ptolemaic and Roman Egypt; Greek and Roman history; early Christianity
	Katherine (F)	South East Asian history; Vietnam war
	Nell (F)	Australian social, political and religious history; women's history
	Michael (M)	British nineteenth century urban and working class history; Australian regional political history
	Nigel (M)	Australian history, American history
Philosophy	Eric (M)	Ancient Greek and Roman philosophy; metaphysics; aesthetics; moral philosophy
	Henry (M)	philosophy of language, philosophy of science, philosophy of religion, aesthetics, logic, metaphysics
	Jonathon (M)	cognitive science, metaphysics, critical thinking
	Kim (M)	bioethics; ethical theory; moral psychology
	Lauren (F)	history of women's ideas; philosophy of language; continental philosophy; Sartre and de Beauvoir
Literary/cultural studies	Bruce (M)	nineteenth and twentieth century novel; Dickens
	Quentin (M)	literary stylistics; translation studies; poetry and prosody, Shakespeare
	Brian (M)	literature politics, and society; cultural studies; utopia, dystopia and science fiction; Bourdieu, Jameson, Williams
	Nora (F)	modernism, postmodernism in European literature and film; realism in Russian, French and English literary canon; Dostoyevsky
	Lois (F)	romanticism; ecophilosophy; ecocriticism
	Zoe (F)	media and communication; modernity and postmodernity, the culture of the everyday

*pseudonyms used; M= Male, F= Female

**as indicated on school websites

areas that were closely related in an educational sense; that is to say, ones that students on an undergraduate program may find themselves studying concurrently, and where any variation in conceptions of critical thinking may have a bearing on their experience of study. Seventeen academics (10 men and 7 women) took part in the study, with approximately equal numbers from each discipline. Table 1 provides details of these participants, including their disciplinary backgrounds and research interests (pseudonyms have been used in each case). All participants were tenured staff, with some occupying, or having previously occupied, senior positions in the Faculty. One, for example, was a former dean; another three at the time of the study were heads of school or centre. All participants were strongly involved in teaching on undergraduate programs.

Interviews ran from between one to two hours. The central questions asked of informants were whether they found the term 'critical thinking' relevant to their practice as a teacher; and then, if this was the case, how they understood the term, especially in relation to the qualities and attributes they were seeking to encourage in their students. An interview schedule was used in the sessions, although the nature of the exchange was typically conversational and open-ended. Interviews were recorded, transcribed, and then analysed for key themes (see Jones 2007 for a similar approach).

Findings from interviews

The first point to note from the interviews is that, without exception, all informants thought the idea of being 'critical' absolutely central to their teaching, and to their academic outlook generally. Thus, for example, one of the philosophers (Jonathon) described critical thinking as 'absolutely our discipline's bread and butter'; for one of the historians (Nigel), 'the demonstrating of a critical approach' was the quality, more than anything else, that 'distinguished the really successful students'; and for an informant from literary/cultural studies (Nora), it was teaching students to be 'critics' that 'we're basically on about in this discipline'. But, while there was broad agreement about the need for students to be 'critical' in their studies, much variation was evident in their commentaries about how the term was understood, as well as how these understandings were conveyed to students on programs. In what follows, I seek to give an account of this definitional variety. The findings have been grouped into two broad categories: (i) major themes, which were those understandings of critical thinking given some airing by most informants; and (ii) minor themes, which were understandings expressed by only some.

Critical thinking as judgment

Arguably the most prominent idea expressed in the interviews was to see critical thinking fundamentally as the making of judgements. This was true across the three discipline areas. Thus, for one of the historians, (Nell) critical thinking always meant 'judgement and the making of distinctions of some kind'. A literary/cultural studies academic (Nora) also identified judgement ('the taking of a stand') as a key element to being critical in her discipline area:

> Being critical, it's about taking a stand. You have to commit as a critic.

One of the philosophers, Eric, saw the activity in similar terms – as the 'rendering of verdicts' on the ideas students need to engage with. As he pithily put it:

I like to say to students – would it profit you to read the entirety of Aristotle's work, and form no view whether it's bullshit or not?

In elaborating on this idea of judgement, informants also gave a sense of the types of judgements they expected students to be making. As suggested in Eric's blunt account, the most basic type of judgement is perhaps one between 'good' and 'bad'. A number of informants discussed the judgements students are required to make in these broad terms. Henry (philosophy) talked about how in one of his subject areas, philosophy of religion, the main task for students was to engage with the 'primary question of whether there are *good* arguments for or against the existence of God' (all italics in quotes indicate my emphases). Similarly, Hannah, an historian, spoke of the importance in her field of students being able to make judgements about the types of sources they might rely on in their work – to decide between '*good* historical and archaeological sources' and ones that 'they should really steer well away from'.

A number of other, perhaps more precise, evaluative terms were mentioned in discussion. The more prominent of these were notions of 'validity', and 'truthfulness'. For Edward (history), the idea of validity was central in his particular account of critical thinking:

> Critical thinking would be thinking about an historical account in an evaluative sort of way and thinking particularly about the ways in which it might be *valid* or *invalid*.

In literary/cultural studies, Brian likewise spoke of the need for students to understand what a '*valid* . . . interpretation of a text' might entail. For the philosophers, the concept was particularly salient. Eric (philosophy), for example, discussed 'validity' as one of a number of key evaluative concepts that students needed to learn as part of the procedures in that discipline for assessing the quality of arguments ('We explain validity as structural goodness – that is if the premises lead to the conclusion').

'Truthfulness' was also mentioned as an evaluative criterion, though accompanied in most cases, by a degree of qualification along the way. Nigel, an historian, for example, said he sought to impress upon students the need to maintain 'their capacity for judgements about what is more likely to be a *true*, or correct interpretation [of an historical event]', while at the same time seeing the need to warn students off 'the idea of big T truths' in the discipline. Judgements of 'truthfulness' were also discussed by the philosophers, especially in relation to the protocols typically used in the discipline to critically evaluate arguments. Thus, as Eric explained, within the traditions of analytical philosophy, 'students need to assess the validity of arguments, and a part of this is to make a judgement about whether [such argments] are founded on premises that are in fact *true*'. A number of the philosophers however, alluded to the difficulties of relying too heavily on notions of truthfulness in one's judgements:

> The word that I would prefer to use [with students] is *acceptability*. Are the premises acceptable, which is not necessarily asking them to judge whether they are *true*. But whether in your judgement someone else who believed them or failed to believe them would thereby show themselves to be irrational. (Henry)

Other key criteria to emerge from the interviews, and which it was thought should inform students' critical judgements, were notions of reliability, usefulness and persuasiveness.

Critical thinking as a skeptical and provisional view of knowledge

Another major theme that emerged in discussions – one very much related to the idea of judgment – was the idea of critical thinking as a skeptical thinking. Skepticism might be viewed as a particular form of judgment; that is, as a propensity to judge in a negative way, or at least to be permanently cautious about accepting the judgments and ideas of others. This version of critical thinking was discussed very much in these terms by informants:

> Well. I suppose that . . . critical thinking is not just *accepting* what somebody tells you. (Lauren, philosophy)

> In general terms, I would say [critical thinking is] the capacity to cut through *accepted* ideas . . . to recognize and examine them. (Katherine, history)

> The best essays begin by *taking issue* either with the question, or with certain critics and. . . to argue against them and produce some kind of interesting response. (Quentin, literary/cultural studies)

The philosophers had a good deal to say on this issue – perhaps not surprisingly, seeing a skeptical outlook as fundamental to that particular discipline's spirit of inquiry. Eric, for example, chose to invoke one of philosophy's more iconic images to convey the centrality of this notion – that of Socrates famously challenging the assumptions of his hapless interlocutors.

> What's Socrates' characteristic activity? It's to buttonhole somebody who has pretensions about knowing something and show that his beliefs are inconsistent. And there is I think this important emphasis in philosophy in not acquiescing and believing things for inadequate reasons.

A similar view was expressed from within literary/cultural studies. For Lois, a skeptical outlook was particularly called for in the type of literature she taught, because of the tendency, for students (and scholars as well) to 'accept certain theories as dogma' – attributable, she thought, to the sense of 'charisma attaching to the originators of these theories'. A good example of this for Lois was Freudian theory.

> I mean, for example, Freudian psychoanalysis. There is a certain amount of evidential basis for it. However, there is also a high degree of imagination and sort of creative modelling involved in Freud's theory. Yet, students, indeed not only students, will often be tempted to adopt it . . . [as some kind of] truth. [And] you then get this phenomenon of the theory being accepted without question.

Along with adopting a skeptical attitude towards the ideas one is presented with on a course, several informants thought it equally important for students to apply the same critical view towards their own ideas, beliefs and assumptions.

> Interviewer: So in the context of your teaching, which qualities or capacities do you most associate with critical thinking?
>
> Michael (history): Well challenging attitudes. I want to challenge students' assumptions, [as much as] challenge the ideas that [we] put to them in what they read.

Michael went on to explain the importance in the study of history of being aware of the constructed nature of many of the precepts one relies on in their understanding of historical processes. He cited here the example of the idea of the 'nation state':

> I try to get [students] to the idea … that the nation state is not the only way of organizing and seeing the world, which is so central to [our understandings of] twentieth century history … [Some] students just can't get past the idea that things are just natural, that they're permanent and that's how things will continue.

A similar view was expressed by informants from the other disciplines. In literary/cultural studies, it was explained that students often come to the course with their own preconceptions about what 'literature' is, and what kinds of literary works might be the legitimate objects of study in the discipline. Some of the first work set for students on the course, it was explained, was to have students interrogate their understandings of the nature of literature – what one lecturer described as their 'taken-for granteds':

> What we're really asking [students] to do is to critique their own commonsense understandings of things … such as what literature is, and we want to challenge their 'taken-for-granteds'. (Lois)

In philosophy, this habit of mind was described as the need to 'wonder about and question' one's acquired beliefs about things:

> These [students] are still very young, and they have just left high school, so we say to them, 'Look you know there are lots of things in life that we all acquire when we are young, all sorts of beliefs and views and so on. And you can wonder about them, and question them'. And I think that is something that everybody, not just in philosophy, does around the university. (Jonathon)

Critical thinking as a simple originality

While many informants were sure that a key to being critical was adopting a skeptical and questioning view of knowledge – whether the extant knowledge students bring to the academy, or that to which they are exposed once they arrive – there was an interesting dissenting view that emerged in the interviews, one that took issue, or indeed was 'critical' of, a routinely skeptical outlook. For these informants, to be 'critical' involved not only the challenging of ideas, but also an effort to actually 'produce' them:

> A critical thinker has to argue on the basis of the critical thought. [But] it is not enough just to have critically negative thoughts. You actually have to … put them into something, to produce something. (Nigel, history)

Henry, also picking up on this theme, was bothered that his discipline, philosophy, was inclined towards an excessive negativity (the overvalued practice of 'poking holes in arguments', as he described it), though thought this a tendency across the faculty as a whole:

> Because of the nature of philosophy, it's much easier to publish a paper in which you take an argument and *poke some holes in it*. So I think we can systematically overvalue critique. But I don't think it's just … philosophers who do that, I think it's true of large parts of the faculty that we place too high a value on critique.

The alternative account was to see critical thinking more in terms of students coming to conclusions about issues, and making their own modest contributions to knowledge. This view was characterized in a variety of ways. One was to see it in terms related to the idea of 'construction' or 'manufacture'. Henry (philosophy), for example, talked about students needing 'to *make* a case', and 'to take some reasonably interesting proposition or theory and *make something of it*'; Edward (history) spoke of the need for students to '*build* on [their historical] sources, or *organize* them in a particular way to *construct* a particular . . . picture of the past'.

Another type of characterization was one that evoked less a sense of 'the building up' of knowledge, and more a kind of 'moving across', or having a lateral engagement with it. For a number of informants, this type of engagement was suggestive of some originality of thought. Michael (history), for example, spoke about a group of students he had taught that year who had impressed him by offering their own particular interpretations of an historical period: 'They were quite creative', he said, for 'taking things *outside* the accepted . . . historical interpretations'. For Lois (literary/cultural studies), the type of thinking to be encouraged was one where students 'headed in a different direction'. In elaborating on her concerns about students being too readily dismissive of certain ideas – the 'doing of hatchet jobs', discussed earlier – Lois thought that a genuinely 'critical' approach was one where students did not see a text primarily as an object to be evaluated, but rather as something that might stimulate them to pursue a different course:

> What I've been trying to impress upon students – [is that to be critical you] don't just go in and do a hatchet job, you have a look and see if there is . . . a redeeming element here that you could pick up and run with, *to head in a different direction*.

Brian, from the same discipline, saw the contribution students can make in the same lateral terms – as a 'sideways' movement, involving the drawing of 'connections' between different sources.

> Well, the most exciting thing is when in a sense students *move sideways* – where they make a connection between the text that you've given and something else that you haven't given at all . . . It's the *lateral thinking* that counts.

Critical thinking as a careful and sensitive reading of text

A final major theme was to see critical thinking as a 'careful and sensitive reading' of material. For some informants, the idea of being able to grasp the basic meaning of texts was seen as fundamental to the activity of critical thinking. This notion was particularly emphasized by the philosophers – perhaps as a consequence of the generally difficult types of reading required in that discipline. Jonathon, for example, suggested that the ability to make basic sense of texts lay at the heart of all critical practices:

> Put rather bluntly, just trying to figure out what somebody is on about is what underlies everything that we are looking at. I think the connection [of critical thinking between all disciplines] would be a connection of careful reading.

There was some emphasizing of this notion by informants from the other disciplines. Bruce (literary studies), for example, stressed its overwhelming importance in literary criticism:

> First of all [being critical] is something that's really dependent on students having demon-
> strated a working understanding of the text that is being used.

Other dimensions of critical reading were also identified. One of these was the ability to read beyond a text's literal meanings, and to be able to engage with its broader rhetorical purposes. For those who spoke about this aspect, it was important, they said, for students to develop a sensitivity to the circumstances in which a text might be written, and to be able to give some account of its underlying 'motives', 'intentions' and 'agendas'. This character-ization of reading was especially strong among the historians, who saw such an approach to text as a crucial part of a student's training in the discipline, particularly in their engage-ment with primary source material. Nell, for example, spoke of the need for students to 'go further into a [historical] document', and to have 'a go at working out its intentions'. Michael also emphasized the importance of going beyond a literal understanding:

> [So in being critical] we want [students] to understand the assumptions within … these
> documents … why are they being produced, the agendas, that sort of thing.

This type of contextual reading was not the sole province of the historians. Lauren, for example, mentioned that, although the more conventional approach in Philosophy was to lay out the content of arguments 'as they appeared on the page', there were occasions when students needed to see these ideas within some broader domain.

> [In the philosophical arguments that they read] sometimes students are asked to fill … in
> the historical background … to consider what the philosopher is saying, what are their
> arguments, and why in the context of the time are they saying these things.

Another type of 'critically interpretive' reading was one focused not so much on identifying the underlying intentions and purposes of individual authors and texts, as on understanding a text in relation to broader paradigms of writing and thinking that existed at the time of its production. Thus, Nell (history) thought that a 'really critical reading' was one that showed awareness of 'the kind of code that an author writes in because of the particular form that they were using … and the particular discourse they had to write in'. This type of discursive approach, one that seeks to understand a text in relation to its own conventions, was elaborated on by a number of the literary/cultural studies informants:

> [Another] aspect of critical thinking I bring to bear is an appreciation of the historical
> context in which these people [theorists] are writing and thinking … that you can't necess-
> arily expect people to have the same kinds of assumptions that you're making. (Lois)

For Lois, this type of reading involved an 'empathic' kind of engagement with a text, and, for her, needed to be understood as critical, but at the same time as fundamentally non-judgemental:

> The point about this [critical approach to reading] is not to try to condemn, but rather to
> understand the legacy of a certain way of thinking which became predominant under a
> particular circumstance, and at a certain time.

The preceding themes discussed are what I have termed major themes. The remaining discussion is focused on the minor themes, which were those given coverage by a more limited number of informants.

Critical thinking as rationality

One of the less prominent themes was the conceiving of critical thinking as a form of rationality. As we saw in the earlier review of literature, this conception figures substantially within the critical thinking movement (Ennis 1987; Siegel 1988). In the interviews, it was the philosophers who most emphasized this dimension of critical thinking. Jonathon, for example, was sure it was this spirit of rationality that lies at the heart of all critical activities:

> There is a sense that to some extent all intellectual work is engagement with a rational project.

Eric also saw rationality as a universal method, suggesting that central to this method was a propensity to believe in things for certain explicit and specifiable reasons:

> We [in philosophy] think of the teaching of critical thinking as passing on certain sorts of skills which we think are more or less universal . . . One thing we want . . . students to do is develop a fondness for believing things in accordance with the best reasons.

While the philosophers gave particular weight to students having a reason-based approach to their thinking, several informants from other disciplines also touched on this notion, though discussing it in not quite the same explicit terms. Bruce (literary studies), for example, spoke of the common problem of his students arguing by assertion, without providing a 'rational basis' for the assessments they made of a work of literature. For Bruce, it was this mode of thinking that needed to be particularly emphasized:

> For me that's one of the main things that I assess an essay on . . . whether it supports [an] argument not just by assertion, but by demonstration with reference to the texts that's being discussed.

Whilst informants generally agreed about the need to instill principles of reason and logic, some were uneasy about just how much these should be stressed. Nell (history), for example, felt it was necessary for students to understand not only the potential of a certain logical habit of mind, but also the limitations that such an approach could impose upon one's thinking:

> I do believe there are processes of logic that are appropriate and inappropriate. But where I have problems with logic is that it's just a tool. . . and it's a tool that within its own rules can actually stop you doing things, as well as allow you to do things.

Critical thinking as the adopting of an ethical and activist stance

Those who saw an ethical and activist dimension to critical thinking were informants who emphasized the broad social mission of universities – that is, to see a university education being concerned as much with 'life in the world' (as one informant described it), as with training in specific discipline areas. Thus, for these informants, the definitions of critical thinking needed to be extended beyond acts of cognition, and to incorporate some notion of critical action.

> It's important for students to confront issues in a fairly personal way and to try and figure out for themselves where they stand on [these issues] and to be able to defend them. (Kim, philosophy)

Some informants were specific about the nature of the 'stand' they thought the term implied. For some, being 'critical' meant being broadly critical of the political, social and also academic 'establishment'. Bruce (literary/cultural studies), for example, spoke of a commonly held view that saw the 'the duty of the university as in some sense [being] opposed to the establishment in society'. Such a role he likened to a 'corrupting of youth':

> We like to say to students – that's the monolith over there and the university's job [and your job] is to be in a sense subversive of it.

Nell (history) also spoke about for this form of socially engaged critique:

> There is a sense of 'critical' being critical of the established order . . . So it's critical in the sense of having – not exactly a radical – but at least kind of a reformist kind of agenda, in other words not being satisfied with the status quo.

Other informants were more specific about the kinds of values and ideals they thought should inform this socially critical view, including such notions as 'emancipation', 'liberation', 'freedom from oppression' and 'a general egalitarianism'. Brian (literary/cultural studies) mentioned how the approach he sought to develop in students was strongly rooted in the critical traditions of the Frankfurt school:

> For the Frankfurt school . . . knowledge is not neutral. They argue that it's often implicated in man's oppression . . . And the point of this kind of critique is to liberate human beings . . . it's the idea of emancipation, which is to do with the idea of enlightenment critique.

This 'transformational' form of critique was also elaborated on by Nigel (history). Whilst less explicit about the theoretical basis for such an outlook, Nigel was sure of the need to have this activist ethic included as one of the goals of higher education. For him, the key attribute to develop in students was a sense of 'critical responsibility':

> So there is [a sense of] being critically responsible . . . one of the burdens of being [a] capable [person] is the burden of feeling responsible for the state of the world.

This is not to suggest, however, that this version of critical thinking was embraced by all. One notably dissident voice was Nora's (literary/cultural studies). Far from encouraging students into some form of activist thinking, Nora was most disapproving of the tendency for students to push (and be encouraged to push) a particular moral position in their work (for example, to take a view that 'all violence is bad'). At best, Nora thought such intrusions irrelevant; at worst they demonstrated for her an unthinking form of 'political correctness':

> There are no value judgements [in critique], as in this is a good way to be, this is a bad way to be. So, for example, if you're talking about violence you don't have a contentious judgement which proclaims 'all violence is bad' because that's sort of not relevant.

In contrast to other informants, who thought the taking of an ideological stance always implicit in the idea of being critical, for Nora, the two notions were wholly 'incompatible':

> If [in one's thinking] there is a kind of element of good or bad, that is not being critical, that is not critique. That is value judgement of a subjective and emotional kind, and it always reduces to ideology. You don't have ideology in critique.

Critical thinking as self-reflexivity

A final notion was an understanding of critical thinking as a form of self-reflexiveness. In many of the previous themes considered so far, 'critical thinking' has typically been thought of as a type of thinking that students need to direct at the knowledge (or whatever it is they are engaged with) in their studies. In this final theme, the particular type of thinking identified is not one directed at a form of knowledge as such, but rather turned back at the originator of these thoughts – the thinking self. This particular understanding of critical thinking was perhaps articulated most succinctly by Zoe (literary/cultural studies).

> When students are given [material to consider], then for me critical thinking is … about not only being able to critique the material in front of you, but also to critique your own assumptions about what's in front of you … So [it's a] sort of self-consciousness, or self-reflexiveness.

The first of the definitional strands discussed in this article was the idea of critical thinking as the making of judgements. For those informants who discussed the idea of reflexivity, critical thinking needed to be understood as much as a developing 'awareness' or a 'self-consciousness' about how judgements are made, as the actual judgements (or 'interpretations) themselves:

> What we try to assist the students in doing is to become much more self-conscious about the way that they are making sense of texts. So critical thinking in that context is very much to do with [students] being aware of how they have arrived at the interpretations that they're making. (Lois, literary/cultural studies)

Lois also thought of critical thinking as an irredeemably 'contingent' activity, one in which the thinker's own subjectivity invariably plays a role. For Lois, such a view – one held in many parts of the academy, she thought – has its basis in a Kantian epistemological outlook, which precludes the possibility of any entirely objective knowledge (or indeed objective critique) of things:

> In the back of my mind is Kant's first critique – the critique of pure reason. That's something that I think a lot of people basically now just assume – that one can't know things in themselves, that one's knowledge is always contingent, and is always shaped by one's own perceptual and conceptual apparatus.

For Lois, part of becoming a 'reflective' critical thinker was in a sense to come to terms with this indeterminacy, and to understand the contingent and variable nature of one's beliefs and judgements. Brian, from the same discipline area, also emphasized this contingent quality and thought that to have an appreciation of the 'problem of knowledge' – as well as one's permanently 'fraught' relationship with it – lay at the heart of a genuinely critical outlook. For Brian, it was those students whose engagement with the subject gave no indication of this type of 'reflexivity' who really struggled:

> Knowledge of whatever is a much more fraught process than we might initially think … The worst writing from students is those who do not give a sense that all this is problematic.

Discussion and implications for teaching

The preceding discussion has outlined the ways that academics from a range of disciplinary backgrounds understand the notion of critical thinking. There are several conclusions that can be drawn from their various commentaries. The first is that far from being a largely 'buried' and 'ineffable' concept within university education, as is suggested in the research literature (Atkinson 1997; Fox 1994), it would appear that academics – or those in the study at least – have quite developed understandings of the notion that they are able to articulate in cogent and often very engaging ways. Evidence from the interviews also suggests that these understandings are often well conveyed to students.

Another conclusion is that the idea of critical thinking clearly defies reduction to some narrow, and readily identifiable cognitive mode, of the type, for example, promoted from within the critical thinking movement (Ennis 2001; Facione 1990; Ikuenobe 2001). Instead, in the interviews, we saw much variety in the way that academics' understood the term, a finding more in keeping with those advocating a more multi-dimensional view of critical thinking (Barnett 1997; Clinchy 1994; McPeck 1992). In the interviews, this variety was evident not only in the differing accounts of various informants, but also on occasions in a variety of conceptions articulated by a single informant.

Along with seeing critical thinking as a term having multiple meanings, the interviews suggested that it is also a contested notion. This was evident in a number of quite divergent, even incompatible, accounts by informants – for example, in the different views expressed about whether critical thinking is at heart an 'evaluative' mode, or a more 'constructive' one; or whether the term necessarily entails the adopting of an ethical and activist stance towards the world; or how much being critical involves a logical and rational outlook. Although not investigated in any systematic way, there would appear to be a disciplinary basis for some of the variation observed. Thus, we saw for example, that the philosophers seemed generally to favour a more rational and evaluative approach, while in the other disciplines, the preference, on the face of it, appeared to be for looser, more interpretative forms of critique (see Jones 2009; Moore 2011a, 2011b for more detailed discussion of this point).

In presenting the study's finding, it is important to stress that there is no attempt here to establish any definitive or exhaustive account of the varieties of critical thinking. This is for the reason that the research was restricted to a limited range of disciplines, and indeed to the views of a limited number of representatives from each of these. One can indeed posit other possible understandings of the concept, ones that might emerge from investigation of other fields and disciplines – for example, to see critical thinking, at heart, as a form of 'problem-solving', as is the tendency among some of the more applied disciplines (Boud and Felitti 1991; Hoey 1983, 2001). What we can say with certainty, though, is that the notion is a complex one, and that in this complexity there is the potential for a fair degree of confusion for students in the way they engage with the idea in their studies.

What implications then does this situation have for teaching? One can cite several. The first concerns the issue of institutional meta-languages, and the need for key terms like 'critical' to be clarified as well as they can be to students in their studies. As a first step, it seems important for teaching academics to take on board an idea that is now well-accepted within contemporary linguistics, but not necessarily in other fields; this is that words are fundamentally 'polysemous' in nature. As Gee (2004) explains:

> Words do not have just general dictionary-like meanings. They have different and specific meanings in different situations where they are used, and in different specialist domains that recruit them (41).

This suggests then that clarification will come not from some generic exposition of meaning, as occurs, for example, in the common practice of providing students with glossaries of key terms in university study; e.g. 'discuss', 'argue' etc (Davies and Devlin 2007). What is needed instead are acquisition processes that are rooted within quite specific study contexts, and which involve deliberate acts of 'dialogue and interaction' (Gee 2004, 54). This might take in a range of teaching activities: helping students to identify in specific assignments how critical thinking might enter into their work; showing students textual instantiations of the thinking that is being asked of them in specific situations; allowing students the opportunity to express their queries, doubts – fears even – about the requirements of critical thinking on a course of study. It is a source of some optimism that methods such as these seemed a part of the teaching routines of many of the informants who took part in the study.

A second implication concerns the variety of critical modes identified in the study. One would not want to suggest here that what students need is to be taught, in some separate and discrete way, a whole range of different ways of being critical. In such a project, there would be the potential for additional confusions. In any teaching program aimed at clarifying the idea of critical thinking, it is important to recognize that, while the term connotes a variety of cognitive modes, we need also to assume that there exists some common thread of meaning, or what Wittgenstein (1958, 31) famously referred to as a 'family resemblance' of meanings. This suggests the need for a transdisciplinary approach, where students are encouraged to reflect on the variety of educational and intellectual processes they experience in the 'different specialist domains' of their studies, and to seek to recognize any coherences that might exist in these processes. Figure 1 outlines an imaginary assignment task, one

---

An imaginary assignment task

At University X, it is claimed that students will develop, among other things, the ability to **think critically**. Think about several subjects you have completed on your course.

 In what ways (if at all), do you think work in these subjects has helped you to develop your abilities as a **critical thinker**? How would you describe the type of **critical thinking** you needed to develop in each case? Did this seem to be the same, or was it different in some sense? Is it somehow easier being **critical** in one subject than another?

In what ways (if at all), do you think these **critical capacities** might have relevance to your life (e.g. as a student, as a worker, as a citizen etc.)?

Does University X, in your judgement, make good its claim that it teaches students to be **critical**?

Figure 1.   Imaginary assignment task.

which, in the way that undergraduate study is presently structured, is difficult to imagine being enacted. It is one though that seeks to capture in a practical way some of the ideas about 'critical thinking' being proposed in this article.

Conclusion

In his now famous text, *Keywords*, Williams (1976) explored the complexity of a range of keywords and concepts that for him characterize modern intellectual life – a shared, but 'imperfect' vocabulary, as Williams described it, that lies at the heart of our discussions of life's 'most central processes' (12). In terms rather similar to Wittgenstein, Williams suggests that any effort that seeks to simplify the meanings of difficult words (such as we have seen within the critical thinking movement) is unlikely to help resolve confusions:

> I do not share the optimism, or the theories which underlie it … which suppose that clarification of difficult words would help in the resolution of disputes conducted in their terms and [which are] often visibly confused by them. (20)

Instead of seeking to 'purify the dialect of the tribe', an expression borrowed from Eliot, Williams suggests we need to see the 'imperfections' and uncertainties of words as matters of 'contemporary substance', and as 'variations' to be insisted upon:

> Variations and confusions of meaning are not faults in a system, or errors of feedback, or deficiencies of education. They are in many cases, in my terms, historical and contemporary substance. Indeed they are often variations to be insisted upon, just because they embody different experiences and readings of experience, and this will continue to be true in active relationships and conflicts, over and above the clarifying exercises of scholars or committees. What can really be contributed is not resolution, but perhaps at times that extra edge of consciousness. (21)

Thus, in the act of trying to understand and appreciate these 'varieties of tradition and experience', what might emerge, Williams suggests, is an 'extra edge of consciousness'. This evocative expression, which suggests a mainly empathic view of knowledge and of its creators and purveyors, may be as good a definition as any for the difficult term we have been considering in the preceding pages. Indeed, in trying to make sense of 'critical thinking', and in working out how it might be best taught, it may be that it is above all this quality – 'an extra edge of consciousness' – that we should hope to encourage in our students, and also in ourselves, and in the world generally, in spite of the many challenges that we all face.

References

Atkinson, D. 1997. A critical approach to critical thinking in TESOL. *TESOL Quarterly* 31, no. 1: 71–94.
Barnett, R. 1997. *Higher education: A critical business*. Milton Keynes: Open University Press.
Barrie, S., and M. Prosser. 2004. Generic gruate attributes: Citizens for an uncertain future. *Higher Education Research and Development* 23, no. 4: 243–46.
Boud, D., and G. Feletti. 1991. *The challenge of problem-based learning*. London: Kogan Page.
Bourdieu, P. 1977. *Outline of a theory of practice*. Trans. R. Nice. Cambridge: Cambridge University Press.

Capossela, T. 1998. What is critical writing? In *The critical writing workshop: Designing writing assignments to foster critical thinking*, ed. T. Capossela. Portsmouth, NH: Heinemann.

Chanock, K. 2000. Comments on essays: Do students understand what tutors write? *Teaching in Higher Education* 5, no. 1: 95–105.

Clinchy, B. 1994. On critical thinking and connected knowing. In *Rethinking reason: New perspectives on critical thinking*, ed. K.S. Walters, 33–42. Albany, NY: State University of New York Press.

Davies, W.M. 2006. An 'infusion' approach to critical thinking: Moore on the critical thinking debate. *Higher Education Research and Development* 25, no. 2: 179–93.

Davies, W.M., and M. Devlin. 2007. *Interdisciplinary higher education: Implications for teaching and learning*. Melbourne: Centre for the Study of Higher education, University of Melbourne.

Ennis, R. 1987. A taxonomy of critical thinking abilities and dispositions. In *Teaching thinking skills: Theory and practice*, ed. J. Baron and R. Sternberg. New York: W.H. Freeman.

Ennis, R. 1992. The degree to which critical thinking is subject specific: Clarification and needed research. In *The generalizability of critical thinking: Multiple perspectives on an educational ideal*, ed. S. Norris, 21–37. New York: Teachers College Press.

Ennis, R. 2001. An outline of goals for a critical thinking curriculum and its assessment. http://facultyed.uiuc.edu/rhennis/outlinegoalsctcurassess3.htm (accessed October 26, 2002).

Facione, P. 1990. *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. Millibrae, CA: California Acemic Press.

Fox, H. 1994. *Listening to the world: Cultural issues in academic writing*. Urbana, IL: National Council of Teachers of English.

Gee, J.P. 2004. *Situated language and learning: A critique of traditional schooling*. New York: Routledge.

Hoey, M. 1983. *On the surface of discourse*. London: Allen and Unwin.

Hoey, M. 2001. *Textual interaction: An introduction to written discourse*. London: Routledge.

Ikuenobe, P. 2001. Teaching and assessing critical thinking abilities as outcomes in an informal logic course. *Teaching in Higher Education* 6: 19–35.

Jones, A. 2007. Multiplicities or manna from heaven? Critical thinking and the disciplinary context. *Australian Journal of Education* 51, no. 1: 84–103.

Jones, A. 2009. Redisciplining generic attributes: The disciplinary context in focus. *Studies in Higher Education* 34, no. 1: 85–100.

McPeck, J. 1992. Thoughts on subject specificity. In *The generalizability of critical thinking: Multiple perspectives on an educational ideal*, ed. S. Norris, 21–37. New York: Teachers College Press.

Moore, T. 2011a. Critical thinking and disciplinary thinking: A continuing debate. *Higher Education Research and Development* 30, no. 3: 261–74.

Moore, T. 2011b. *Critical thinking and language: The challenge of generic skills and disciplinary discourses*. London: Continuum.

Norris, S. 1992. Introduction: The generalizability question. In *The generalizability of critical thinking: Multiple perspectives on an educational ideal*, ed. S. Norris, 1–8. New York: Teachers College Press.

Paul, R. 1996. A draft statement of principles. National Council for Excellence in Critical Thinking. http://www.criticalthinking.org.ncet.html (accessed October 22, 2002).

Pike, K. 1967. *Language in relation to a unified theory of structure of human behavior*. 2nd ed. The Hague: Mouton.

Siegel, H. 1988. *Educating reason: Rationality, critical thinking and education*. New York: Routledge.

Van Gelder, T. 2000. Learning to reason: A reasonable approach. In *Cognitive Science in Australia, 2000: Proceedings of the Fifth Australasian Cognitive Science Society Conference*, ed. C. Davis, T. van Gelder and R. Wales. Adelaide: Causal.

Williams, R. 1976. *Keywords*. London: Collins.

Wittgenstein, L. 1958. *Philosophical investigations*. 2nd ed. Oxford: Basil Blackwell.