Dialogical encounter
argument as a source of rigour in the practice based PhD

Sally McLaughlin, University of Technology, Sydney, Australia

Abstract

This paper distinguishes between three views of argument: "argument as structure," "argument as confrontation" and "argument as dialogical encounter." Empirical studies of the criteria that examiners bring to the assessment of PhDs are cited. The studies provide evidence that qualities that align one or other of the three modes of argument figure significantly in the criteria that examiners bring to the assessment process. Embedded in the studies are respondents' comments that suggest that the range of conceptions of argument held by PhD examiners is broad. Explicit use of the term "argument" is often made in reference to a minimal concept of argument – "argument as structure." However, the reported comments indicate a significant bias towards qualities associated with concepts of argument that lie somewhere along the spectrum between "argument as confrontation" and "argument as dialogical encounter" as a marker of quality in PhD research. Drawing on the work of Hans Georg Gadamer the paper will explore the possibilities opened up by adopting the view of "argument as dialogical encounter" in the context of the PhD. In particular I consider the issue of how PhD projects be structured so as to support the construction of arguments appropriate to practice based research in design?

Keywords

Argument; Gadamer; Hermeneutics; Rigour; Practice Based Research; Phd Examination

Practice based research is an emerging form of research both within design (Gray & Malins, 2004; Downton 2003) and within practice oriented disciplines more generally (Winter, Griffiths, & Green, 2000). Rigour remains a central concern for the practice based researcher (Biggs & Büchler, 2007).

One approach to addressing issues of rigour is to adapt models that exist in more traditional research practices (Winter, Griffiths & Green, 2000, Biggs 2007). In this paper I will concentrate on the issue of rigour as it applies in the context of PhD research and is manifest in the PhD thesis. The focus of the paper will be an exploration of the claim that argument, in the form of dialogical encounter, a genuine encounter with alternative positions, is a potential source of rigour in PhD research.

In the first section, I outline the theoretical background to this claim. Dialogical encounter is a central theme of the hermeneutics of Hans Georg Gadamer (1989; 2006). Gadamer develops this theme as both a literal and metaphorical account of the resources that allow us to move beyond an existing understanding of a situation.

In the second section, I explore the claim in relation to two empirical studies of PhD assessment practices. The studies focus on identifying criteria and practices that examiners brought to the task of examining PhD theses. The findings of the study are considered with a view to determining a) the extent to which the examiners considered argument to be a significant feature of the PhD; and b) whether the examiners made distinctions between the modes of argument that may be evident in a PhD.

In the third section, I consider the merits of configuring the various conceptions of argument – "argument as structure," "argument as confrontation" and "argument as dialogical encounter" – as options along a continuum ranging from a focus on internal coherence at one end to a concern with broad reflexive, contextual engagement at the other. I explore the way in which the Gadamerian concepts of dialogical encounter (the exploration of multiple perspectives), the hermeneutic circle (the iterative development of understanding by moving between consideration of part and whole), and the recognition of human finitude (the recognition that understanding is an ongoing task, that we need to always leave ourselves open to the possibility of developing new perspectives, new insights about a situation) might influence the structure and development of PhD research. In particular I consider how these concepts might provide a coherent perspective from which to consider examiners' comments relating to the use of literature, research design, the interaction between various components of the research, the analysis of findings and the outcome of the research.

I conclude the paper with a discussion of the relevance of Gadamer's concept of dialogical encounter to a debate taking place with regard to issues of rigour as they show up in the context of practice based research in art and design.

Dialogical Encounter

Richard Bernstein (1991, pp.337-338) draws a distinction between two modes of argument. The first may be described as a 'confrontational' or 'adversarial' mode of argument. In this mode the author 'goes after' positions that are at odds with his or her own position with the aim of exposing the weaknesses of those positions. The second mode of argument is characterised as a 'dialogical' mode. Here the author seeks to engage in genuine dialog with alternative positions. The author's aim in engaging in this mode of argument is to challenge his or her own understanding of the phenomena under investigation by seeking "to strengthen the other's argument as much as possible so as to render it plausible" (Gadamer as cited in Bernstein, 1991, p.338).

Bernstein acknowledges that both modes of argument have their place. The 'confrontational' mode can be useful in interrogating a position, it can help to identify the issues at stake, expose vague claims, and draw attention to difficulties that need to be addressed. However, in adopting this mode of argument the author runs the risk of being "blind to what the other is saying and to the truth that the other is contributing to the discussion" (Bernstein 1991, pp.337). The 'dialogical' mode of argument demands imaginative projections that move beyond the author's existing position. Only by being open and responsive to the potential of alternative perspectives can one hope to be truly attentive to the possibilities and limitations of one's own position.

'Dialogical encounter' is a central theme arising from the ontological position explored by Hans Georg Gadamer (Gadamer 1989, 2006). Gadamer offers an alternative to the extremes of objectivism and relativism (Bernstein 1983). Gadamer's ontological position, his position on our relationship to the world, might be characterised as "perspectival realism" (Wachterhauser, 1994). Gadamer challenges the objectivist assumption that the way to true knowledge is to rid ourselves of our preconceptions and to view the phenomena under consideration from a completely neutral detached point of view – a view from nowhere. Building on Heidegger's careful phenomenonogical descriptions of the prior understanding that we bring to everyday situations such as entering a lecture theatre (Heidegger, 1982), or using a hammer (Heidegger, 1962), Gadamer maintains that understanding is only made possible by the prior understanding that we bring to a situation. Prior understanding is formed primarily through being inducted into practices that shape the way in which we orient ourselves to the world. Practices range from the driving practices of residents in particular localities (Spinosa, Flores, & Dreyfus, 1997) and our child rearing practices (Dreyfus,

1991), to the practices operating within particular professions and the practices that shape our ethical judgements (Bernstein, 1986). Our practices shape the way in which we act in the world, and the way in which we perceive the world. Our practices operate at basic levels of perception governing what we notice, what shows up for us. Our practices give us a perspective from which to view a situation. It is recognition of the solidarity that arises from our being inducted into shared practices that frees us from the spectre of relativism (Bernstein, 1983).

If we accept that we can only ever have an understanding of a situation by coming to that situation from a particular perspective, then this raises the issue of how it is possible to move beyond that perspective. This is where Gadamer's model of dialogical encounter comes into play. Gadamer develops detailed descriptions of the way in which our understanding is transformed through engaging in open dialog with an "other." When we enter into a conversation each participant brings a particular perspective to the matter at hand. Through the course of the conversation similarities and differences emerge. If we are attentive to the differences, if we genuinely try to project into the situation to see how the other's claims might make sense, then our own initial conception of the situation is inevitably changed. At the very least we have a broader conception of the way in which the situation at hand might be interpreted. At a more fundamental level, key aspects of our initial conception of the situation may no longer seem tenable. Gadamer employs the term "fusion of horizons" to describe the development of our initial perspective (horizon) that occurs through open dialog. Through dialog, the initial perspective may shift in ways that align more effectively with the perspective of the other, but this is always a development of an initial perspective. Our changed perspective will never be identical to the perspective of the other. The initial projection into the situation is always productive of any future understanding of the situation that we might attain.

Gadamer develops the theme of "dialogical encounter" with a view to exploring both literal and metaphorical applications. Gadamer's work arises out of the tradition of hermeneutics, a tradition concerned with the practice of interpreting texts. In the context of the hermeneutic tradition, the "dialogical partner" is the text. In the context of empirical research, the dialogical partner might initially be the site of research, and as the research progresses, the dialogical partner might become the research findings or data. Data can reveal it's otherness by not appearing to fit with the expectations generated by our initial projection into a situation – an appropriate response would be to try to develop alternative perspectives on the situation that would allow us to make sense of the data. In the context of practice, the practitioner projects into a situation through action. The dialogical partner might be aspects of the practice context in which the practitioner acts – for example, the medium which he or she employs, the problems or issues which he or she seeks to address, or the stakeholders impacted by his or her actions. The otherness of the situation might reveal itself through any or all of these aspects as the implications of the action emerge.

From a Gadamerian perspective dialogical encounter is central to any concept of rigour in the human sciences. In this paper I report on a preliminary study where I adopt the theoretical perspective on argument opened up by Gadamer, with a view to understanding the extent to which Gadamer's model of "argument as dialogical encounter" is manifest in existing PhD assessment practices.

PhD assessment: a review of two empirical studies

In this section I review the findings of two qualitative studies of the assessment practices of PhD examiners in Australia the UK. Both studies were based on examiners' self reported understanding of the criteria and practices that they employed when examining a PhD. My review will focus on the following: Is there evidence that examiners consider argument to be

a significant feature of the PhD? Do examiners make distinctions between the modes of argument that may be evident in a PhD?

I have chosen to focus on these studies because they are based on insights into process of PhD assessment derived from examiners. These are insights that have evolved from practice. As such, it might be expected that they might be both more revealing and more inclusive than criteria vetted through institutional policy making processes (see for example the list of criteria published in Gray and Malins, 2004 pp.188-189).

The first study (Winter, Griffiths & Green, 2000), based in the UK, was motivated by a desire to identify the basis on which to make judgements of worth with regard to practice based PhD theses. The approach of the researchers was a) to report on their own experiences as assessors and an author of practice based PhD theses in education; and b) to survey 91 examiners of traditional PhD's from a range of disciplines (21 including the sciences, Music, English, Philosophy, Sociology, Information Technology, Art History, Women's Studies, Law, Nursing and Education) with a view to identifying those qualities that would allow them to make a determination with regard to borderline theses. The responses to the survey are reported in full. The authors acknowledge that the study is preliminary and that their findings and conclusions are provisional. Reflecting on the outcomes of the survey, the authors claim that most of the criteria identified would apply equally to the practice based PhD thesis as they would to theses based on more traditional modes of research.

The second, Australian based study (Mullins & Kiley, 2002), was designed to clarify the criteria and processes relevant to PhD assessment more generally. The focus of this study was the traditional PhD. The study was based on 30 semi structured interviews with experienced examiners, defined as having examined the equivalent of five PhD theses in the previous five years, across the domains of science (14), maths/engineering (3), social science (9) and humanities (4). This study was more comprehensive than the first in both design and analysis but the responses to the interviews are reported only in summary.

I was not involved in either of the original studies and am relying entirely on published data.

The analysis reported in this paper is framed by a specific theoretical interest – understanding the extent to which modes of argument akin to Gadamer's model of "argument as dialogical encounter" are sought out in the context of PhD assessment. The first question under consideration was: *Is there evidence that examiners consider argument to be a significant feature of the PhD?* The data available was originally analysed for the explicit presence of the terms "argument" or "argues." The first pass through the published data focussed on explicit use of these terms by respondents. The second pass explored use of these terms by the researchers involved in the original studies as manifest in their published reports.

The third pass through the data involved identifying respondents' comments that included terms that have an implicit relationship to the term argument. Three conceptual clusters of terms were identified corresponding to the three modes of argument: "argument as structure," "argument as confrontation" and "argument as dialogical encounter." A fourth cluster was developed to account for those comments that might relate to either a confrontational or dialogical mode.

The second question considered was: *Do examiners make distinctions between the modes of argument that may be evident in a PhD?*An initial pass through the data was structured by Bernstein's categories of "argument as confrontation" and "argument as dialogical encounter" however it quickly became apparent that these categories were not sufficient to cover the uses of the term argument evident in the published data. A third category "argument as structure" was introduced. The rationale for the introduction of this specific

category will be discussed in the relevant section below. As in the previous section those comments explicitly including the terms "argument" and "argues" derived directly from the respondents were the first to be considered. This was followed by consideration of the context of use of the term argument by the original researchers.

The third pass through the data involved identifying and classifying respondents' comments that included terms that have an implicit relationship to the term argument – the conceptual clusters described above were employed. A fourth pass examined the original researchers' use of these related terms.

Both the Winter et al study and the Mullins and Kiley study reported responses from PhD examiners drawn from a wide variety of disciplines. There was insufficient information in the published data to categorise the responses in terms of the disciplinary background of the respondents. Further, there was insufficient data reported to identify the ontological/theoretical commitments of the respondents.

Is there evidence that examiners consider argument to be a significant feature of the PhD?

Argument is explicitly mentioned in only four of the eighty seven reported comments in the Winter, Griffiths, & Green study. Negative features included: "failure to follow up and evaluate alternative lines of argument" (Winter, Griffiths & Green, 2000 p.33); and "lack of focus, stated aim, 'tightly managed' structure or coherent argument" (Winter, Griffiths & Green, 2000 p.33). Positive features included: "presents a sense of the researcher's learning as a journey, as a structured, incremental process of both argument and discovery" (Winter, Griffiths & Green, 2000 p.34); and "argues against conventional views, presents new frameworks for interpreting the world" (Winter, Griffiths & Green, 2000 p.35).

Explicit use of the term in the reported comments by respondents in the study is similarly limited, however they do report a comment report a comment that indicates a direct correlation between research and argument – "Is this actually 'research' – is there an argument?" (Mullins and Kiley, 2002, p.377).

In contrast to the limited use of the term by respondents, argument features prominently in Mullins and Kiley's summary of the characteristics of a "positive" thesis. Mullins and Kiley (2002, p.379) identify five broad characteristics of positive theses: "scholarship" ("originality, coherence, and a sense of student autonomy or independence"), "the development of a well structured argument" ("argument, conceptualisation, conclusion, design, logic and structure"); "sufficient quantity as well a quality of work" (quality was linked to the concept of "publishability"); "reflection" ("critical assessment of their own work," "critical of their own argument"); and the capacity to "work their way through problems" ("recognising and dealing with contradictions"). Not only is "the development of a well structured argument" one of the five key features of positive theses, but the category of "reflection" is elaborated by reference to criticality in relation to the author's own argument.

 "Argument" also featured in the list of seven characteristics used to identify a poor thesis. These characteristics were "lack of coherence"; "lack of understanding of the theory"; "lack of confidence"; "researching the wrong problem"; "mixed or confused theoretical and methodological perspectives"; "work that is not original"; and "not being able to explain at the end of the thesis what had actually been argued at the end of the thesis."

In their summary of what makes an outstanding PhD, Mullins and Kiley (2000, p.380) report that "examiners were looking for students who exhibited a sense of confidence in the way they dealt with the material and sophistication in the way they presented their argument."

Finally, Mullins and Kiley (2000, p.383) list "the structure of argument" as one of five indicators that examiners use to make "substantive judgements" with regard to the quality of the thesis.

While explicit use of the term "argument" by respondents in both studies is limited, implicit references to argument abound. A difficulty arose in analysing these implicit references in that that discriminations as to what counts as an implicit reference to argument cannot be isolated from assumptions about what argument is, about what counts as argument. I will therefore defer analysis of the relative prominence of these implicit references to argument until after consideration of data relating to modes of argument.

Do examiners make distinctions between the modes of argument that may be evident in a PhD?

In the remainder of the paper I will draw a distinction between three modes of argument: "argument as structure," "argument as confrontation" and "argument as dialogical encounter." The categories "argument as confrontation" and "argument as dialogical encounter" are theoretical categories, derived from Bernstein as described earlier in this paper. The category "argument as structure" was introduced in response to the data. Mullins and Kiley, for example, associate "the development of a well structured argument" with "logic and structure" (2000, p.379).The category is intended to capture the sense in which an argument might be conceived as a sequence of claims backed by evidence. The concept of "argument as structure" can be distinguished from the other modes of argument in that it is primarily concerned with internal coherence. The other modes of argument are defined in terms of the relationship to an external position – "an other." The distinction between "argument as confrontation" and "argument as dialogical encounter" has already been discussed.

The comments reported in the Winter, Griffiths, & Green indicate uses of the term "argument" that move between the three modes. The comment "lack of focus, stated aim, 'tightly managed' structure or coherent argument" (Winter, Griffiths & Green, 2000 p.33) suggests a view of argument as a structural feature of the thesis. The emphasis is on internal coherence, on ensuring that the argument responds to a stated aim. There is no indication that the appropriate response should extend beyond ensuring that claims follow on from one another, and from the data. There is no indication of an assumption that argument implies that alternative views need to be taken into account. The comment "argues against conventional views, presents new frameworks for interpreting the world" (Winter, Griffiths & Green, 2000 p.33) suggests a confrontational model. Here the "other" is conceived of in terms of "conventional views." The researcher must present the merits of the new frameworks that he or she has developed by arguing against the alternatives. "Failure to follow up and evaluate alternative lines of argument" (Winter, Griffiths & Green, 2000 p.33) evokes a dialogical mode. The implication is that the researcher is bound to consider the merits of his or her own argument by considering the possibilities opened up by alternative positions. The comment, "presents a sense of the researcher's learning as a journey, as a structured, incremental process of both argument and discovery" (Winter, Griffiths & Green, 2000 p.34), is difficult to classify. The reference to a structured incremental process suggests a view of argument as structure, however the quote taken as a whole, suggests a reflexive relationship between argument and discovery, which might be considered to be a form of dialogical encounter where the researcher opens themselves up to consideration of the alternative perspectives that present themselves as they work through the research process, the "process of argument and discovery."

In the Mullins and Kiley study, the researchers' themselves appear to adopt a view that the term "argument" refers primarily to the structure of the thesis. Comments relating to

"argument, conceptualisation, conclusion, design, logic and structure" are synthesised into the positive characteristic "the development of a well structured argument" (Mullins & Kiley, 2002, p.379). In their summary of the characteristic of a poor thesis, the only comment referring directly to argument seems to be conceived of in similarly structural terms – "not being able to explain at the end of the thesis what had actually been argued at the end of the thesis" (Mullins & Kiley, 2002, p.379). The comment "Is this actually 'research' – is there an argument?" (Mullins & Kiley, 2002, p.377) is difficult to classify but it is conceivable that it could refer to argument in the most minimal sense – as a sequence of inferential structures.

It is important to note, however, that under the broad category of "reflection" Mullins and Kiley report a comment – "critical of their own argument" (Mullins & Kiley, 2002, p.379) – that indicates a desire to see evidence of a confrontational or dialogical mode of argument. Further, when they turn their attention to the qualities of an outstanding thesis, the confrontational/dialogical modes of argument come into play in the introduction of "a level of sophistication in the presentation of (an) argument" – "The outstanding PhDs…are critical of previous work in the area or make critical assessment of their own work." (Mullins & Kiley, 2000, p.380).

Moving beyond those comments where the term "argument" has been used explicitly, there is substantial evidence in the Winter, Griffiths, & Green study that the range of conceptions of argument cover the full spectrum from argument as structure, to the confrontational/adversarial mode, and the dialogical mode. It is difficult to assess whether the Mullins and Kiley study uncovered a similar range of views as the outcomes are reported only in summary. Only limited use has been made of comments reported in that study in the analysis below.

Comments oriented towards the conception of argument as a structural feature of the PhD include the negative features: "conclusions stated to early and not brought together," "lack of clearly formulated conclusions," "ill-justified changes of direction," "lack of initial focus/conviction" (Winter, Griffiths & Green, 2000, pp.32-33); and the positive features: "maintains clear and continuous links between theory, method and interpretation," "connects theory and practice," "displays coherence of structure (e.g. the conclusions follow clearly from the data)," "possesses a definite agenda and an explicit structure" "is comprehensive in its theoretical linkages *or* makes novel connections between areas of knowledge," "Shows depth and breadth of scholarship – synthesising previous work and adding original insights/models/concepts" (Winter, Griffiths & Green, 2000, pp.34-35). Drawing on the Mullins and Kiley study, where the comments are reported only in summary, the only relevant reported comment is: "Logical progression of ideas, work and presentation" (Mulins & Kiley p.379).

Comments oriented toward the confrontational/adversarial view of argument include: on the negative side, "failure to defend properly the validity and generalisability of innovative research methods" (Winter, Griffiths & Green, 2000, p.33); and on the positive, "argues against conventional views, presents new frameworks for interpreting the world" (Winter, Griffiths & Green, 2000, p.35).

Comments that indicate a view that lies somewhere along the spectrum between the confrontational and the dialogical view of argument include: on the negative side, "dogmatic presupposition of issues," "apparent unawareness of the limitations of the work undertaken," "uncritical use of references" (Winter, Griffiths & Green, 2000, pp.32-34); on the positive, "shows readiness to examine apparently tangential areas for possible relevance," "shows iterative development, allowing exploration and rejection of alternatives," "possesses an internal dialogue – plurality of approach/method, to validate the one chosen," "a broad theoretical base treated critically," "successfully critiques established

positions," "engages critically with other significant work in the field," "draws on literature with a focus different from the viewpoint pursued in the thesis, "maintains a balance between delineating an area of debate and advocating a particular approach," "goes beyond its sources to create a new position which critiques existing theoretical positions," "Contains innovation, speculation, imaginative reconstruction, cognitive excitement: 'the author has clearly wrestled with the method, trying to shape it to gain new insights" (Winter, Griffiths & Green, 2000, pp.33-35). Mullins and Kiley (2002, p.380) report two comments in the context of summarising their findings with regards to the qualities of an outstanding thesis. Both emphasise the opening up of new perspectives, articulating those perspectives with reference to previous work in the domain. The first is from an examiner with a science background: "The outstanding PhDs have beautifully conceived ideas that open up a new area or really answer an important question, and are critical of previous work in the area or make a critical assessment of their own work." The second is from an examiner in the humanities: "you can see that the material is taken and used originally at every level – methodology, literature review, etc. Right from the beginning it makes you see an area that you thought you knew in a way that you hadn't thought about before."

Comments more specifically oriented towards a dialogical view include: on the negative side, "failure to follow up and evaluate alternative lines of argument" (Winter, Griffiths & Green, 2000, p.33); and on the positive, "gives a systematic account of the topic, including a review of all plausible possible interpretations," "skilfully organises a number of different angles (required by the extended length of the work)" (Winter, Griffiths & Green, 2000, p.34).

The first point that should be made with regard to the analysis above is that "argument" is a complex term. Mullins and Kiley (2002, p379) refer to argument as if it were a straight forward concept, but analysis of the comments cited above indicates that the term "argument" is being used by the examiners to refer to a very different modes of argument – requiring a wide variety of supplementary terms to distinguish between those modes. Further, many forms of expression that do not make explicit reference to the term "argument" are used to describe qualities that align with one or other mode of argument.

While the examiners' comments suggest an inclusiveness that would in most instances recognise a dialogical mode of argument as a valuable quality within a PhD thesis, this very inclusiveness suggests that the notion of argument as an encounter with an external position is perhaps being overlooked, and that the potential of dialogical encounter as a source of rigour is not being adequately recognised.

Revisiting the question "Is there evidence that examiners consider argument to be a significant feature of the PhD?"

As has been noted earlier, the Mullins and Kiley data is reported mainly in summary so analysis of the relative importance of the implicit references to the various modes of argument reported in that study would not be meaningful. The analysis of implicit references in this section will be restricted to the Winter, Griffiths & Green study.

Comments included in the conceptual cluster associated with "argument as structure" include terms that broadly corresponded to the following: "defined focus/aims," "coherence/control of material/structure/organisation," "justified/clearly formulated conclusions," and "links between components of research eg. theory, method, interpretation; or theory and practice."

Comment included in the conceptual cluster associated with either "argument as confrontation" or "argument as dialogical encounter" include terms corresponding to "examination/interrogation of assumptions/prejudices/advantages and disadvantages of approaches," and "critical engagement with literature/positions other than own." A category

of comments that might be considered to be loosely associated with this conceptual cluster were comments relating to "contextualisation" and "breadth of understanding of the topic or area." It was decided not to include these comments as the link to criticality or argument was not evident.

Comments specifically associated with the model of "argument as confrontation" included terms such as "defends against" or "argues against."

Comments specifically associated with the model of "argument as dialogical encounter" included terms such as "exploration of alternative approaches/angles/lines of inquiry."

Categorising the comments according to these conceptual clusters brought a number of aspects of the Winter, Griffiths, & Green (2000) study to light. First, terms associated the concept of "argument as structure" featured quite prominently in the "negative features" of a thesis. This corresponds to the findings reported in summary in the Mullins and Kiley report where a lack of these structural features was seen as significant failing in a thesis. Interestingly, a number of terms associated with the other modes of argument also showed up as being relevant to the list of "negative features." This is somewhat at odds with the reported outcomes in the Mullins and Kiley study.

Qualities associated with the concept of argument as structure were also present in the list of positive features of a PhD thesis. A significant number of the features listed as positive features of a PhD aligned with the "argument as confrontation" and/or the "argument as dialogical encounter" models. Discrimination between the two models could not be determined to the extent that any significant difference in the relative importance of the two models could be perceived. As in the Mullins and Kiley study it appears that the confrontational and dialogical models of argument assume greater importance as examiners move their attention away from consideration of the potential failings of a thesis (borderline cases) and towards those aspects of a thesis that mark it out a work of quality.

Discussion

Argument as Dialogical Encounter or *Argument + Reflection*

The empirical studies reveal that the use of the term "argument" is very broad. Is there any value in insisting on the use of the term "argument" to cover the full range of activities that might be envisaged under the categories "argument as structure," "argument as confrontation" and "argument as dialogical encounter?" Would it be better to expect that the term "argument" should imply only the display of minimal structural features (a clear relationship between research question, research approaches, findings and conclusions; a logical progression of ideas) and to supplement the criteria of "the development of a well structured argument" with additional features such as "critical review of previous work in area" and "defends against inevitable critiques" (argument as confrontation); or "critical review of all plausible interpretations relevant to topic" and "critical reflection on own argument" (argument as dialogical encounter)?

The first point to make here is that the different modes of argument carry with them very different expectations about the form that the argument should take. "The development of a well structured argument" is not a feature that would remain unchanged across the different modes of argument. Second, it is unlikely that any thesis of quality would engage exclusively with any one mode of argument. While it might be appropriate to adopt a dialogical mode when exploring issues central to the topic of the thesis, a confrontational mode or even a structural mode might be appropriate when dealing with issues that are peripheral to the main site of investigation. Conceiving of the various modes of argument as options, the relative merits of which should be considered throughout the design of the PhD research, has

the potential to provide a valuable perspective on the project design. Third, from a Gadamerian perspective, dialogical encounter, shows up as a fundamental resource in the pursuit rigour. Dialogical encounter is not a feature that can be added on to the argument proper, but an ethical position that has the potential to influence every stage of the thesis. Some of the ways in which the dialogical model of argument might play out in relation to specific aspects of the form of PhD research are discussed below.

Some implications for the form of a PhD

There are a number of points at which a Gadamerian engagement with a plurality of perspectives might come into play in the development of a PhD thesis. These parallel some of the detailed comments reported in the Winter, Griffiths & Green study.

First, working from a model of dialogical encounter, it would be expected that the purpose of the background literature review should be seen as both the articulation of the boundaries of the study and identification of alternative lines of enquiry (traditions). This approach would seem consistent with the following: "grasps the scope and possibilities of the topic," "gives a systematic account of the topic, including a review of all plausible possible interpretations" (Winter, Griffiths & Green, 2000, pp.33-34).

Second, it might be expected that the methodology should include a range of approaches to the investigation of the topic. Triangulation is often cited as a source of rigour in the context of qualitative research. From a Gadamerian point of view, the value of triangulation might be seen to lie in the range of perspectives on the phenomena under consideration that the findings from multiple methods can offer. Relevant comments include: "shows diligence and rigour in procedures – catholic and multifactorial approaches to problems," "possesses an internal dialog – plurality of approach/method, to validate the one chosen (Winter, Griffiths & Green, 2000, pp.33-34).

A number of comments in the Winter et al study recommend an iterative approach to the development of the research. This would be consistent with Gadamer's concept of the hermeneutic circle (Gadamer, 1989, p.265) where understanding emerges through an iterative process of moving between considerations of part and whole. From a Gadamerian point of view, all aspects of the study should be considered in relation to one another and should be reviewed as new perspectives emerge. Relevant comments include: "presents a reflexive, self-critical account of relationships involved in the inquiry and of the methodology," "shows readiness to examine apparently tangential areas for possible relevance," "shows iterative development, allowing exploration and rejection of alternatives" (Winter, Griffiths & Green, 2000, pp.33-34). The comment "maintains clear and continuous links between theory, method and interpretation" (Winter, Griffiths & Green, 2000, p.34) might also be relevant as it seems to imply that theory and method might be impacted by interpretation and thus open to new considerations and revision.

The consideration of multiple perspectives might also be expected to apply to the interpretation of findings and to consideration of the implications of findings. Relevant comments from the examiners include: "skilfully organises a number of different angles," "draws on literature with a focus different from the viewpoint pursued in the thesis" (Winter, Griffiths & Green, 2000, p.34).

Finally, it is a central tenant of Gadamer's position that understanding is always provisional, that we must always be open to the possibility, that new perspectives may be developed that will supplant those that are currently available. If a researcher were to hold fast to the model of dialogical encounter then it might be expected that the position or positions arrived at through the thesis research would not be conclusive, that the most significant contribution of the thesis might be in a more refined articulation of the topic. Relevant comments include:

"indicates the future development of the work," "opens up neglected areas or takes a new viewpoint on an old problem," "presents new frameworks for interpreting the world" (Winter, Griffiths & Green, 2000, pp.34-35).

Some implications for the form of the practice based PhD in design

Biggs & Büchler (2007) provide a useful perspective on the state of play with regard to discussions of the issue of rigour within the context of practice based research in art and design. I agree with Biggs & Büchler that practice based research "should not be set apart from traditional academic concepts" and that "elements of academic research need to be reframed in such a way as to account for the specificities of design practice, without losing their original purpose" (Biggs & Büchler, 2007, pp.64-65). Biggs & Büchler characterise rigour as a property of process, suggesting that it entails "systematic and thorough search" (2007, p.66). This elaboration of the term "rigour" is linked to an extract from an OED definition of research: "the act of searching (closely and carefully) for or after a specified thing…" (Biggs & Büchler, 2007, p.65). Biggs and Büchler make reference to this systematic and thorough search playing out in the context of literature search, methodology and "the chain of reasoning" that establishes a logical connection between the methods and the outcomes of the research (Biggs & Büchler, 2007, pp.68-69).

I would argue that the model of "argument as dialogical encounter" reveals the possibility of bringing an ethical dimension to the concept of rigour. Depending on the project, engagement with the perspectives of the other might include engagement with the perspectives of other researchers in the field; with other practitioners in the field; with users, clients; and with perspectives that represent the interests of those impacted by the environmental, economic, social and cultural implications of the project more generally. The emphasis shifts from a concern with being systematic, towards an aspiration to be empathetic, to really hear what the other is saying, to try to make as much sense as is possible of what the other is saying, and to allow the perspectives that we bring to our initial understanding of a situation to be opened up through consideration of the perspective of an other.

The Biggs & Büchler paper is in large part a response to an earlier paper by Wood (2000). Wood suggests that the practice based researcher should move away from the concept of rigour as it has traditionally played out in the context of the PhD because it is bound to a confrontational/adversarial mode of argument that does not adequately recognise the need to support students in (i) recognising their own insights; (ii) identifying with other facts, arguments and views; (iii) clarifying their own position and (iv) evaluating their own knowledge (Wood 2000, p. 46). It is difficult to understand Wood's claim with regard to point (iii) as clarification of one's own position would seem to be the principle merit of engaging in the confrontational/adversarial mode (Bernstein, 1991 pp.337). However, points (i) (ii) and (iv) do highlight the potential shortcomings of the confrontational/adversarial mode of argument. But is the PhD necessarily tied to the confrontational/adversarial mode of argument? I would also take issue, as have Biggs and Büchler, with Wood's very narrow characterisation of rigour as "logical accuracy and exactitude" (Wood 2000, p.46). It should be acknowledged, however, that even if the concept of rigour is interpreted more broadly, as in Biggs & Büchler's "systematic and thorough search" (2007, p.66), the concept does seem to omit, and possibly even be at odds with some of the potential qualities of practice based research that Wood is interested in promoting: situated judgement, deep reflection, heuristic thinking, insight and innovation.

Rather than moving away from the concept of rigour and rejecting the form of the PhD in the context of practice based research I would suggest that the concept of rigour should be expanded to include seeking out alternative perspectives and an ethical engagement with

the position of the other. Further, I would suggest that the traditional form of the PhD, if it were structured around a model of argument as dialogical encounter, holds significant potential with regard to supporting a process of enquiry that achieves an appropriate balance between situated judgement, deep reflection, heuristic thinking, insight and innovation on the one hand, and systematic inquiry on the other.

One final point should be made with regard to the concept of "insight." Biggs and Büchler suggest that insight is a problematic term in the context of research because it "connotes a subject-dependent internal sight rather than external evidence based assessment" (Biggs and Büchler, 2007, p.68). Gadamer's concept of dialogical encounter offers a very different characterisation of "insight." Considered from a Gadamerian perspective insight might be characterised as the recognition or resonance that occurs when the perspective out of which the researcher has been operating, interacts with that of an other, in such a way that the researcher is made aware of a previously implicit aspect of his or her understanding of the situation. The awareness may be in the form of a challenge to that understanding, an awareness that something is not quite right, that something does not quite fit, or it may arrive in the form of a recognition that there are parallels between an aspect of the researcher's perspective and the perspective of the other. The alternative perspective may arise out of literature search, research data, engagement in practice, engagement with research participants, with peers, and with auditors and/or assessors. Further, the implicit understanding of which the researcher is made aware, is necessarily shaped by shared social practices. All understanding is subject dependent (perspectival) but this does not mean that understanding is merely internal to a subject. Understanding is socially constructed, our interactions with others allow aspects of our socially constructed perspectives to come into awareness. Insight should not be placed in opposition to "external evidence based assessment." Insight should instead be characterised as the orientation and reorientation that occurs as we come to understand the phenomena under investigation. Insight is what guides us in understanding the evidence that we should look for. Insight, when operating effectively, allows us to recognise relevant evidence when we see it.

Conclusion

In accordance with Winter, Griffiths & Green (2000, p.31) and Biggs (2007, p.69) I hold that the development of practice based research is well served by an exploration of exploration of norms of practice operating within traditional research areas. The difficulty lies in the fact that these norms are often implicit, or minimally articulated, and may vary according to ontological position and theoretical perspectives adopted by the researcher or research institution.

This study reported in this paper proceeds from a commitment to an ontological position defined by Gadamer's philosophical hermeneutics. The focus has been on concept that is central to the concept of rigour that arises from this ontological perspective – dialogical encounter.

Based on the evidence considered in this paper, qualities associated with one or other modes of argument discussed in this paper features prominently in the assessment PhDs across a range of traditional research contexts. What is also apparent is that the term "argument" was not often explicitly used when referring to these qualities. This suggests that the model of argument as dialogical encounter, while consistent with qualities that assessors might look for in a PhD thesis, is not adequately recognised a potential source of rigour within the context of the PhD. It has been my aim in the discussion section of this paper to suggest some of the merits of this mode of argument, in the context of PhD research generally and practice based research in particular. Exploring the concept of rigour from a particular

ontological perspective appears to be showing up relationships between the qualities that one might look for in a PhD thesis that would not otherwise be apparent. Perhaps one of the issues that practice based researchers in design should confront is the need to clarify the ontological position from which the researcher is working, and the concepts of rigour that that position entails. This seems to be an important component of research in areas where qualitative research features prominently, such as ethnography, but is not yet common practice in design research.

References

Bernstein, R. J. (1983). *Beyond Objectivism and Relativism: Science, hermeneutics and praxis*. Philadelphia: University of Pennsylvania Press.

Bernstein, R. J. (1986). Nietzsche or Aristotle? Reflections on Alasdair MacIntyre's After Virtue. In R. Bernstein (Ed.), *Philosophical Profiles: essays in a pragmatic mode* Cambridge UK.: Polity Press.

Bernstein, R. J. (1991). *The New Constellation: The Ethical-Political Horizons of Modernity/Postmodernity*. Cambridge, UK: Polity Press.

Biggs, M. A. R., & Büchler, D. (2007). Rigor and Practice-based Research. *Design Issues, 23*(3), 62-69.

Downton, P. (2003). *Design Research*. Melbourne: RMIT Publishing.

Dreyfus, H. L. (1991). *Being in the World: A commentary on Heidegger's Being and Time, Division 1*. Cambridge M.A.: MIT Press.

Gadamer, H.-G. (1989). *Truth and Method* (J. Weinsheimer & D. G. Marshall, Trans. Second, Revised ed.). London: Sheed & Ward.

Gadamer, H.-G. (2006). *A Century of Philosophy: Hans-Georg Gadamer in Conversation with Riccardo Dottori* (R. Coltman & S. Koepke, Trans.).

Gray, C., & Malins, J. (2004). *Visualizing Research: A Guide to the Research Process in Art and Design*. Burlington: Ashgate.

Heidegger, M. (1962). *Being and Time* (J. Macquarrie & E. Robinson, Trans.). New York: Harper & Row.

Heidegger, M. (1982). *Basic Problems of Phenomenology*. Indiana: Indiana University Press

Mullins, G., & Kiley, M. (2002). 'It's A PhD, not a Nobel Prize': how experienced examiners assess research theses. *Studies in Higher Education, 27*(4), 369-386.

Spinosa, C., Flores, F., & Dreyfus, H. L. (1997). *Disclosing New Worlds: Entrepreneurship, Democratic Action, and the cultivation of Solidarity*. Cambridge, MA.: MIT Press.

Wachterhauser, B. R. (1994). Gadamer's Realism: The "Belongingness" of World and Reality. In B. R. Wachterhauser (Ed.), *Hermeneutics and Truth* (pp. 148–171). Illinois: Northwestern University Press.

Winter, R., Griffiths, M., & Green, K. (2000). The 'Academic' Qualities of Practice: what are the criteria for a practice-based PhD? *Studies in Higher Education, 25*(1), 25-37.

Wood, J. (2000). The Culture of Academic Rigour: Does Design Research Really Need It? *The Design Journal, 3*(1), 44-57.

Sally McLaughlin

Sally McLaughlin is a Lecturer in Visual Communication at the University of Technology, Sydney. Sally's current research explores the relevance of the philosophical hermeneutics of Heidegger and Gadamer to design practice. Philosophical hermeneutics is an ontological position that has significant implications for the conception practice within a research context. Philosophical hermeneutics is a position that acknowledges the perspectival nature of our understanding, opening up the task of building awareness of perspectives constructed through visual media practices.