

# ANATOMY OF A DOCTORAL VIVA

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## ABSTRACT

This paper analyses how one doctoral viva proceeded from the perspective of five participants. Data were collected from the two examiners, the candidate, the director of studies and the chair. Initial impressions, question and answer strategies, behavioural features and post-viva thoughts are analysed. Examiners' questions are mapped within a matrix that illustrates criticality of certain issues. A model proposes three evidence-based domains of defence for consideration by supervisors, candidates and chairs.

*'The viva! There was something mysterious about it. All the guidelines and explanations that I received prior to the event were theoretically very helpful, but could not provide the real picture of what exactly took place in that room. Our eyes were glued to the door waiting for it to open and welcome another Ph.D. walking out. However, encouragement and anxiety mingled just as the smiles of the successful candidates and the frustration of the disappointed ones produced a feeling of ... **What is actually happening in a viva?'***  
(Candidate)

## The Setting

In April, 2001, a candidate was awarded the degree of Doctor of Philosophy following a successful defence of the thesis. Five people were involved in this event ~ the candidate, two examiners ~ one with more examining experience than the other, the candidate's supervisor and a chair for the viva. The chair and the supervisor made no academic contribution to the viva. We were present at this event performing two of the above roles.

This paper sheds light on the process and activity that occurred in one doctoral viva. It illustrates how the outcome from that event was arrived at by the examiners and influenced by the candidate. It also offers an analysis of the dynamics and role relationships of the five people who were in the viva voce room (Garfinkel, 1968). In this way our findings, models and proposition, could help supervisors, candidates and examiners to consider, and discuss, how they are preparing for their respective roles in the doctoral viva process.

## The Process

Our approach to the research was ethnographic due to the nature of the data to be collected and the manner of its collection (Hammersley and Atkinson, 1983. Hammersley, 1998). We invited the other three participants to provide responses upon ten open-ended topics that related to their perceptions on, and reflections about, the viva (Schön, 1983). Our accounts of the ten topics were included in the data. In this way we were able to assemble the lived experiences from all of those people who attended the doctoral viva (Murray and Lawrence, 2000).

The analytical process was based on content analysis of the five sets of data (Robson, 1993). Trends and commonalities were identified and these were cross-checked, sorted and coded against the ten topics. The topics were divided into four main categories into which the refined data were then allocated (Glaser and Strauss, 1980). Documentary analysis was conducted upon the doctoral thesis and the examiner's reports (Scott, 1990).

Our research was inductive as it sought to develop theory that was grounded in the evidence and therefore produced conclusions which were high in validity (Strauss and Corbin, 1990. Mason, 1996). Thus, this research does not claim generalisability but it offers a proposition to be tested by others (Blumer, 1969).

### **Views on the Event**

At the University to which the doctoral thesis was submitted, the formal assessment process has two stages. Firstly, the examiners read the thesis and prepare independently written reports. These reports are sent to the University and copies are provided to each examiner, the chair and the supervisor before the viva. Secondly, a viva voce examination is convened in which candidates defend their thesis before two examiners. The University provides examiners with a booklet of 'Guidelines' to assist them in their role. An independent member of staff whose role was administrative rather than academic chaired this event. University regulations allow for candidates to invite their supervisor to attend the viva in an observing role.

The following extracts provide insights that five persons had upon these two stages of assessing, or defending, doctorateness (Trafford and Woolliams, 2001).

### **Pre-viva perceptions/impressions/expectations**

*I had gone through the 'Audit Your Thesis' list provided by my supervisor, finally reaching the concluding statement at the foot of the page, which said: 'Thus Doctorateness!!!'.*

*'It is just perfect', I thought to myself. I did not miss anything. (Candidate)*

*My first impressions were of the general clarity and power with which the thesis was argued, together with the originality of the topic and a sophisticated understanding of research methodology. Initial concerns centred primarily on the limited reference to other's work in related areas of knowledge. (Examiner)*

*... My expectation was that the viva would explore my concerns and those of the internal examiner...the candidate would be required to address any major deficiencies that were established... (Examiner)*

*It was clear that the candidate was well prepared for the examination not in terms of a last minute rehearsal, but because the thesis was well structured and displayed all the elements of doctorateness. (Examiner)*

*In comparison with many theses that I have examined, it was clearly destined to be a pass. Everything that should have been included to display doctorateness was included. (Supervisor)*

### **Strategies in displaying doctorateness**

*Different candidates approach the beginning of the viva in different ways: nervous, over relaxed, hyper . In this case the candidate approached with a confidence that was not intimidating - just right, in fact, to put examiners at their ease without being so confident that they start to feel embattled. (Chair)*

*The candidate had a very clear view of what was where in the bound document so that flow was never interrupted by any pauses ... the candidate showed how a real confidence can be built on with tough 'returns' to questions ... (Chair)*

*The candidate had asked the key questions at every stage "why did I do it like this" and had a clear defence ready. (Chair)*

*I could see confidence in the candidate's body language ~ leaning forward to emphasise best points and make clear eye contact with the examiners, literally straight between the eyes! (Chair)*

*The candidate defended well because the candidate knew that the work mattered and had a clear, unique grasp of the context in which it mattered. (Chair)*

*'... I recognised that this process of defining the limits of the thesis and its particular contribution to knowledge was a reflection of doctorateness ...'(Examiner)*

*The viva largely revolved around the candidate's spirited defence of the specifically original features of the research. (Examiner)*

*Appearance of total control over ability to defend concepts, research design, findings and conclusions. ... Moved comfortably inside the thesis content, displaying complete familiarity with arguments. (Supervisor)*

*The candidate was competent and thereby confident in both describing the research and in demonstrating understanding of the research process generally. (Examiner)*

*The candidate was able to deflect one or two difficult questions from the external by explaining that the question fell outside the remit the candidate had chosen. (Examiner)*

*The examiner's question was so long that when the end came I just could not figure out what the question was. I kindly requested a repeat of the question. (Candidate)*

*I knew I couldn't afford any unanswered questions. I convinced myself that there couldn't possibly be anything I wouldn't know the answer to. (Candidate)*

*The thesis was built like a castle ... Walls were impenetrable. ... capacity to repel external examiners was displayed through confidence/knowledge, conceptual agility, positive assurance in stated boundaries of thesis, foundations of knowledge gained through thinking about and justifying the defence. (Supervisor)*

### **Behavioural stages**

*The viva proceeded as I expected. It was a high academic discussion between equals. (Candidate)*

*... the pace was stressful .... there were no pauses between questions. There was a flow of conversation ... (Candidate)*

*Non-verbals had a strong effect on my state of mind. The Chair, who did not take part in the academic discussion, was non-verbally quite involved, as expressing enthusiasm quite candidly by nodding his head. (Candidate)*

*The candidate's readiness to throw back questions to the examiners that were not understood ... while not exactly a defence attack spiral, this determined defence of the limits of the thesis strongly influenced the examiners' behaviour... (Examiner)*

*The candidate went for the examiner with a straight rebuttal of the basis of the question and then used the opportunity to clarify and expand a position. After that the examiners were like puppies, nervous to expose any further 'misunderstandings' and then, in time, genuinely interested in the candidate's perspective. (Chair)*

*It was clear that we (examiners) were going to recommend the award of a Ph.D. and therefore chose to tease the candidate with questions that were a little more provocative and contentious ~ with the intention of giving the candidate the opportunity to debate some of the more conceptual aspects of the research. (Examiner)*

*It was fascinating to see such attention in the looks of the examiners and the stance of the candidate. It was as if a non-verbal bridge existed between them across the table. The chair clearly enjoyed the exchanges, and constantly made quite supporting noises. (Supervisor)*

*On a couple of occasions I wanted to applaud when the candidate rebutted an examiner's question so elegantly. (Supervisor)*

*During two pauses in the questions the candidate turned to look at me. For reassurance? I nodded and smiled as positively as possible to say 'Brilliant!' (Supervisor)*

### **Post-viva thoughts**

*The viva affirmed something that I knew theoretically, but maybe by inclination or background was reluctant to acknowledge: that definitions of originality also embrace saying something nobody has said before, obviating obeisance to existing research. (Examiner)*

*The acid test is whether the viva was conducted in a manner that enabled the examiners to probe the research of the candidate and provide an appropriate environment for the candidate to explain and defend their work. I was satisfied this had been achieved efficiently and effectively. (Examiner)*

*In retrospect, I even enjoyed the experience. I enjoyed the intellectual interaction. (Candidate)*

*I felt that the examiners were sincerely interested in my answers and they really wanted to know more about my research. (Candidate)*

*The design and conduct of the research, coupled with the way that it was presented in the thesis, made the defence relatively easy. This showed in the viva and the way that questions were answered to the examiner's satisfaction. (Supervisor)*

### **Unveiling the Viva**

The location of the viva was a finely decorated 'Board Room', with a view through double door windows onto lawns and flowerbeds. Eight leather swing chairs surrounded a polished mahogany table, three watercolour paintings of the local village hung on the walls, and the carpet was soft and springy. The room was airy, light flowed in through the window and there was a notice outside on the ante-room door that said 'Quiet Please. Examination in Progress.'

A pre-meeting between the two examiners lasted for the scheduled 30 minutes. In this time they shared their views on the thesis and agreed their agenda for the viva. (Examiner) Entering the room at 14.30, the Chair introduced the candidate and the supervisor to the two examiners. The candidate sat down and placed the thesis on the table, with a single page of notes by its side.

The five people were seated at one end of the rectangular table. At its head sat the chair, with the two examiners being opposite the candidate and the supervisor. Three water jugs and five glasses formed a tableau between examiners and candidate ~ until the chair invited the candidate to '*Help yourself to water at any time*'. The candidate said '*Thank you*', poured a glass of water and took a small sip (Cryer, 2000). The examiners sat quietly with friendly smiles on their faces. (Supervisor)

The chair explained that before the viva commenced it would be helpful for the examiners to know something about the candidate's occupation, place of work, and general reason for choosing the topic of the research. (Chair) These opening remarks achieved the purpose of putting the candidate at ease and allowed the candidate to speak in an open and unconstrained way. (Candidate, Examiner, Supervisor)

During the next 53 minutes the viva unfolded. Throughout the viva, the supervisor wrote down the text of each question that was asked and also observed the social processes that were occurring. In this viva 36 separate questions were asked. However, since some had more than one element, the candidate gave answers to 47 questions. (Supervisor) There were two short periods when three-way discussions between the examiners and the candidate, rather than the direct posing of questions, explored issues of mutual scholarly interest. The viva displayed a sequence of stages that *'may have emerged as a strategy of questions to the candidate'* (Examiner) but were seen by the candidate as *'... questions that I had to answer which may have had an order. However, I was more concerned to understand and answer the questions than to detect any long-term strategy.'* (Candidate)

The two examiners asked alternating blocks of questions. Each block contained similar issues for the candidate to consider. The less experienced examiner asked 5 (11%) questions that were conceptually grounded. The remaining 11 (23%) questions from this examiner concerned:

- ◆ structure and content;
- ◆ findings;
- ◆ location of the study.

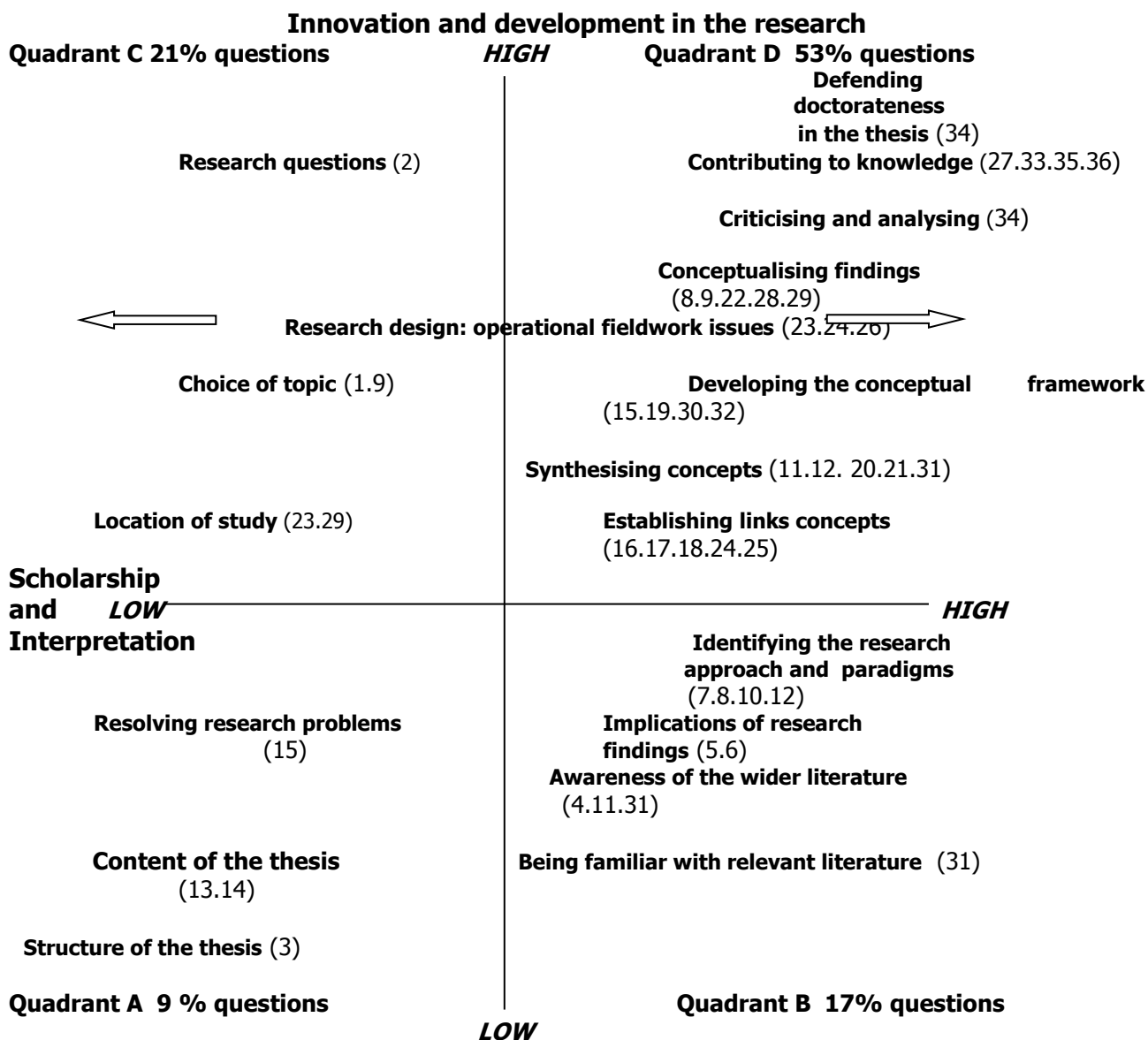
The evidence shows that the more experienced examiner asked the candidate 31 (66%) questions which concerned:

- ◆ Familiarity with relevant, and wider, literature;
- ◆ Problems that arose during undertaking the research and their resolution;
- ◆ Identifying the research approach and paradigms;
- ◆ Establishing links between, and synthesising, concepts;
- ◆ Developing the conceptual framework;
- ◆ Conceptualising the findings;
- ◆ Contributing to knowledge;
- ◆ Defending the doctorateness of the thesis.

This separation of roles was *'... not apparent at the time ...'* to the candidate. (Candidate)

In parallel to the verbalised questions there were various forms of non-verbal communication (Miles and Huberman, 1994). At a simple level this consisted of the examiners 'passing' the questioning to each other through hand or arm gestures, and inviting the candidate to answer through smiles and appropriate facial expressions. On two occasions the candidate made a positive move to look at the supervisor *'... for encouragement ...'* and found it in the reassuring smile which awaited that look. (Candidate, Supervisor) However inadvertently, the chair contributed to the viva through an almost constant smile of appreciation, some supporting 'ums' and a few grunts of appreciation when the candidate made a telling point. On the occasions when the candidate corrected an examiner, the chair was unable to contain an appreciative gasp. (Candidate, Examiner, Supervisor)

The flow of questions, and their interpretation, shows that the examiners recognised and commended two significant approaches which the candidate had to the research. Firstly, the examiners explored how the thesis exhibited innovative features of research design that used concepts in a developmental manner. Secondly, the examiners commended the scholarship and interpretation of 'realities' that were presented by the candidate (Berger and Luckman, 1967). These two sets of features represent distinctively different heuristic devices to explain the location and significance of questions in one doctoral viva. The features have been used as axes in a model that displays each question's relative location. However, those questions that dealt with more than one issue have been shown in their respective quadrants. Figure 1 shows this model.



**Figure 1 Relative location and significance of questions in the doctoral viva examination**

In Figure 1, Quadrant A contains issues that were technical in origin and had a relatively low scholarly or innovative significance to the outcome of the viva. Quadrant B represented a higher level of scholarship through its focus on the literature basis of the thesis. The questions in Quadrant C obliged the candidate to explain issues of increasing conceptualisation, namely research focus, handling choices in research (Bryman, 1988, 1989) and the design framework. These three quadrants, whilst being potential areas in which examiners may ask questions, appeared to lack criticality in determining the outcome of the viva voce examination.

It is only in Quadrant D that issues which were high in scholarship, interpretation, innovation and development, attracted a significantly higher proportion of questions. The inference that can be drawn from this evidence is that the questions in Quadrant D were critical determinants for the examiners who used them to judge the capability of the candidate in defending the thesis. (Candidate, Examiners, Supervisor)

It can be argued that if a candidate is unable to answer questions in Quadrant D to the satisfaction of the examiners, then that person has shown their inability to defend the conceptual basis of their thesis. As a consequence, the candidate will also have failed to show how their research makes a contribution to knowledge, and therefore the claim to doctorateness in their thesis will be unsupported.

The distribution of questions between the four quadrants, and by the examiners, is shown in Table 1.

Examiners	Quadrant A	Quadrant B	Quadrant C	Quadrant D	Questions
Less experienced	3	4	4	5	34%
More experienced	1	4	6	20	66%
Total questions	4	8	10	25	47(Total)
% Questions	9	17	21	53	100%

**Table 1** Distribution of questions per examiner and per domain

This Table indicates that the more experienced examiner posed the more conceptually searching questions to the candidate from the domain of quadrant D. It also shows that both examiners increased the proportion of questions as the agenda moved along the continuum of the four Quadrants.

In this viva both examiners agreed that the candidate's answers to the questions in Quadrant D of Figure 1 and Table 1 above, were insightful, based on evidence in the thesis, conceptually grounded and extended knowledge. (Chair, Examiners, Supervisor) For these reasons the examiners were able, unreservedly, to recommend the award of the Doctorate of Philosophy to the candidate at the end of the viva.

At 15.20 the examiners drew the viva to a close by asking if the candidate wished to add anything further to the discussion. This prompted the reply: *I felt I had a lot more to say if I only had the time at my disposal.* (Candidate) Everyone smiled. The candidate and supervisor then left the room. Some minutes later the chair emerged and invited the candidate to return to the Board Room with the supervisor. Both sat down in their original seats. The chair then announced that *'The examiners are pleased to recommend that you be awarded your doctorate by the University. We were all most impressed by your defence of your thesis. Many congratulations from us all.'* (Candidate, Supervisor)

The candidate and the supervisor smiled. Everyone stood up. The examiners and chair shook the candidate's and supervisor's hands with obvious pleasure at what had just transpired. Then the candidate asked if the examiners, chair and supervisor would be willing to sign the front page of the thesis. They all agreed and wrote some personal words to the candidate.

The candidate and the supervisor left the Board Room and went into the adjoining ante-room where the candidate's recollection was that:

*I felt mentally exhausted even though the viva took only 53 minutes. The intensity of the discussion and the flow of questions just drained every bit of energy out of me. I think I didn't even listen to what was said at the end, and I remember asking my supervisor whether I had finished without corrections. My supervisor just nodded, and said 'yes' with a smile of triumph. I wanted to go back and ask the examiners again just to make sure. I felt as if I had just finished a long climb to the top of the mountain but really didn't believe I was there - I would describe this feeling as happiness mixed with a sort of pleasant confusion.* (Candidate)

After the viva the candidate was unable to describe the Board Room, the view through the window, the carpet or the paintings ~ one of which was immediately in front of the candidate just above the heads of the two examiners. However, the candidate had retained a clear image of both examiner's faces and their eyes. (Candidate)

## **The Notion of Defence**

Our experience of this viva allowed us to witness, as observers (Sanger, 1996), the successful defence of a doctoral thesis. Views from the two examiners, candidate, the chair and supervisor have been triangulated to identify perceptions and common understandings of how that defence was undertaken (Denzin, 1989. Mason, 1996).

The evidence shows that all parties believed the thesis to be of a doctoral level before the viva itself commenced. In their individual preliminary reports to the University before the viva, both examiners reported that the candidate's thesis:

- Represented a significant contribution to knowledge of the subject by the discovery of new facts and the exercise of independent critical powers;
- Provided evidence of originality;
- Was satisfactory as regards presentation and succinctness;
- Possessed an appropriate Abstract. (Examiner)

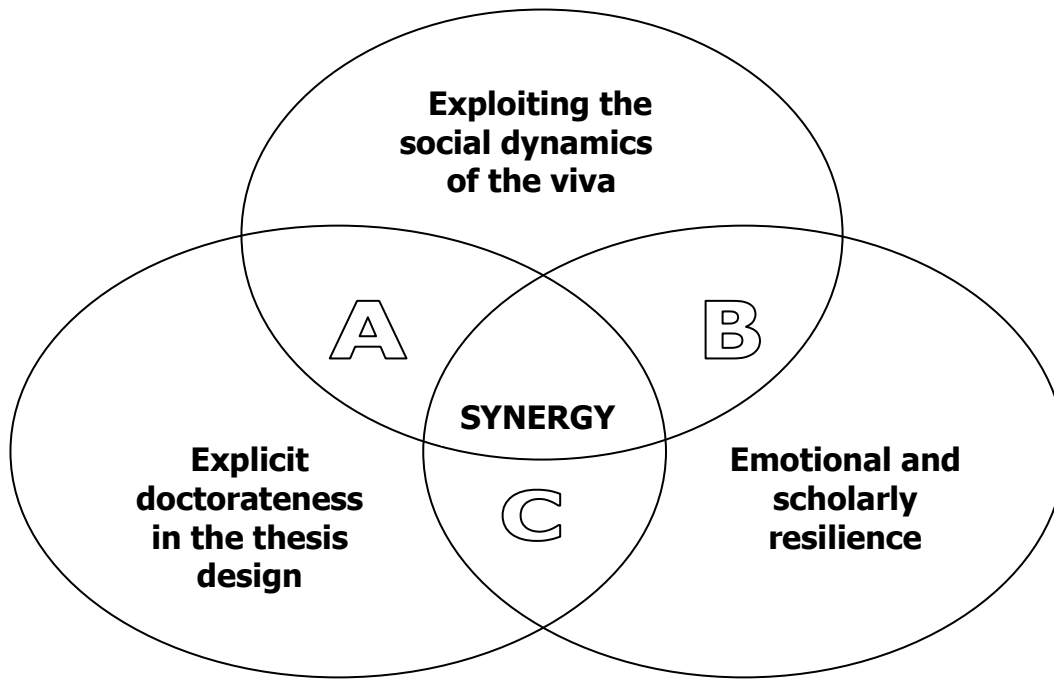
The candidate also possessed a belief in the scholarly merit of the thesis, and thus was able to approach its defence in a positive and confident manner. (Candidate, Supervisor) These two features appear to be central to the successful defence of this doctoral thesis.

Our evidence suggests that the doctoral defence may be explained by three sets of variables which collectively show that the candidate possessed:

- 1 Explicit scholarship appropriate to the subject area
  - ◆ Commitment to, and a reasoned belief in, the doctoral foundations of the thesis;
  - ◆ An appreciation of how the thesis displayed doctorateness throughout its text;
  - ◆ An ability to identify and exploit the synergy between chosen research paradigms and the respective features of doctorateness.
  
- 2 Personal resilience
  - ◆ Confidence in responding to questions that were conceptually founded, and relating answers to evidence and / or concepts in a way that engaged with the examiners;
  - ◆ A willingness to deflect, or reject, inappropriate questions in the knowledge that such action was 'correct in the circumstances';
  - ◆ A positive contribution to moving the discussion onwards and engaging with the examiners at any level of questioning.
  
- 3 Interpersonal awareness
  - ◆ An ability to read, and then to respond to, the social dynamics of the viva;
  - ◆ A capacity to establish Adult / Adult relationships (Berne, 1968, 1975) with the examiners so that answers to questions became preludes to joint discussion of mutual interests;
  - ◆ Knowing one's own strengths and being at ease in using them ~ socially, personally, professionally and intellectually.

The evidence from the five people who attended the viva suggests that all of the above characteristics were present in the defence of the thesis at this viva. As a result, the relationship between these characteristics can be portrayed as a Venn diagram, as shown in Figure 2.





**Figure 2 Domains of defence and the location of synergy**

**Legend for the overlapping areas**

- A** Enthusiasm and excitement about the research, the thesis and its contribution to knowledge.
- B** Willingness and ability to defend the 'I Believe' factor of doctorateness in the thesis.
- C** Confidence in the architecture, design, conduct and conceptual conclusions of the research.

The conjunction of the three domains ~ A, B and C ~ could be seen as a synergistic relationship that represented added value within the process of defence. We would argue that the candidate was able to create, and extend, this triple domain as a result of being positively active in the three lesser domains. Therefore, the candidate's ability to defend the thesis, and to display doctorateness, was apparent to ~ and accepted by ~ the examiners.

Thus, it is possible to offer the proposition that: **the larger the extent of synergy between explicit scholarship, personal resilience and interpersonal awareness of the candidate towards the process of the viva, the more likely it is that the thesis will be successfully defended.**

**Conclusions**

This paper has shed light upon the process of one doctoral viva voce examination. Evidence has been presented to show how the outcome from that viva was arrived at by the examiners and influenced by the candidate. This process has been set in a wider social context by including the views of two non-participants ~ the chair of the viva and the supervisor.

An inductive approach to this research enabled theories to be proposed that are grounded in evidence, and so possess high validity. These findings pertain to this particular viva and care must be taken in making assumptions about other vivas. The applicability of the findings must be judged by examiners, candidates and supervisors in similar situations.

Whilst this research set out to explain how a thesis was defended by a candidate, it has identified that the experience of examiners has a direct significance on how the viva unfolds (Phillips and Pugh, 1994). The respective roles of internal and external examiners, and their mutual expectations of each other, clearly influence the range and type of questions asked of the

candidate (Salmon, 1992). The examiners also displayed evidence of their different subject domains, perspectives on research approaches and types of examining experience. As a consequence, it was apparent that the relationship between the candidate and the two examiners, as well as the relationship between the examiners themselves, corresponded with the image of dancing with an unknown partner. Thus, a viva voce examination presents examiners and candidates with a potentially unfamiliar social context in which to conduct a mutually important 'rite of passage' (Olsen, 1968).

The candidate had focussed so intently on the examiners and their questions as to be oblivious of the surroundings. As a result, the candidate had no sense of time passing. It is also worth noting the contribution that non-verbal communication had in supporting and encouraging the candidate. Thus, the viva represented an occasion which, in this situation and for this candidate, displayed high levels of attention to the primary content issues and their associated social processes.

It is apparent that the successful outcome from this viva has to be explained from a pluralist perspective of overlapping factors. The evidence shows that achieving, and extending, synergy between the key variables in the defence of this thesis was critical to the outcome of the viva. Thus, no single feature of the doctoral viva ~ the quality of the thesis, the 'capability' of the candidate, or the viva itself ~ can explain the process of successfully defending this doctoral thesis.

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### **References**

- Berger, P. and Luckman, T. (1967) *The social construction of reality*. London, Allen Lane.
- Berne, E. (1968) *Games people play*. Harmondsworth, Penguin.
- Berne, E. (1975) *What do you say after you say hello?* London, Corgi.
- Blumer, H. (1969) *Symbolic interaction*. Englewood Cliffs, NJ, Prentice Hall.
- Bryman, A. (1988) (Ed.) *Doing research in organisations*. London, Routledge.
- Bryman, A. (1989) *Research methods and organisational studies*. London, Unwin Hyman.
- Cryer, P. (2000) *The research student's guide to success*. Buckingham, Open University Press.
- Denzin, N.K. (1989) *The research act: a theoretical introduction to sociological methods*. 3<sup>rd</sup> Ed. New Jersey, Prentice Hall.
- Garfinkel, H. (1967) *Studies in ethnomethodology*. Englewood Cliffs NJ, Prentice Hall.
- Glaser, B. and Strauss, A. (1980) *The discovery of grounded theory*. London, Weidenfeld and Nicholson.
- Hammersley, M. (1998) *Reading ethnographic research: a critical guide*. 2<sup>nd</sup> Ed. Harlow, Addison Wesley Longman.
- Hammersley, M. and Atkinson, P. (1983) *Ethnography: principles in practice*. London, Tavistock.
- Mason, J. (1996) *Qualitative researching*. London, Sage.
- Miles, M.B. and Huberman, A.M. (1994) *Qualitative data analysis: an expanded sourcebook*. 2<sup>nd</sup> Ed. London, Sage.
- Murray, L. and Lawrence, B. (2000) *Practitioner-based enquiry*. London, Falmer Press.

Olson, M.E. (1968) The process of social organization. London, Holt, Rinehart and Winston.

Phillips, E.M. and Pugh, D.S. (1994) How to get a Ph.D. Buckingham, Open University Press.

Robson, C. (1993) Real world research. Oxford, Blackwell.

Salmon, P. (1992) Achieving a Ph.D.: ten students' experience. Stoke on Trent, Trentham.

Sanger, J. (1996) The compleat observer? A field research guide to observation. London, Falmer Press.

Schön, D.A. (1983) The reflective practitioner: how professionals think in action. London, Temple Smith.

Scott, J. (1990) A matter of record. Cambridge, Polity Press.

Strauss, A. and Corbin J. (1990) Basics of qualitative research: grounded theory procedures and techniques. London, Sage.

Trafford, V.N. and Woolliams, P. (2001) Assessing doctorateness in practice-based doctorates. DBA Annual Forum, University of Cranfield, May.