

Boundary Crossing Issues Between Academia, Business and Government

Kay Fielden

School of Computing and Information Technology, Unitec Institute of Technology
Auckland, New Zealand

ABSTRACT

In this paper issues arising from crossing boundaries between the three worlds of academia, business and government in performing informatics research are explored. In particular the issues arising for informatics researchers in conducting case studies in business are explored following the qualitative research phases set out by Denzin and Lincoln [1]. Habermas [2] provides a philosophical and structural framework on which to base this exploration. Informatics case study research is selected to deconstruct because it is the most common qualitative method chosen by informatics researchers. The framework developed in this paper is one attempt to address Hirschheim and Klein's [3] claim that the field of information systems is a 'fragmented adhocracy' in which disconnects exist between researchers and practitioners in business, researchers and government, researchers and the rest of academia and also within the ever-growing context in which informatics research takes place. Such a framework provides a navigation aid for dealing with the complex issues associated with dilemmas, disconnect and distortions that may arise in undertaking case study research.

Keywords: Boundary crossing issues, Case study research

1. INTRODUCTION

A conceptual framework underpinned by Habermas's structural analysis of the public sphere [1], complexity theory [4], [5], and human activity systems [6] has been developed to explore domain boundary crossing issues in informatics research. From the social sciences emerges the concept of the qualitative researcher as guest in the private spaces in the world [7] and from complexity theory [4] the tension points for miscommunication in qualitative research. Informatics researchers undertaking case study research in organizations enter with a predominantly academic world view. A researcher who is also a professional within the world of business, may have the ability to 'shape-shift' between practitioner and researcher views. Within this conceptual framework the dilemmas, disconnects and distortions are explored with respect to case study research in informatics. Adopting a multidisciplinary approach contributes to the development of a philosophy of informatics; a discipline that serves the organizational world in a multiplicity of ways. Only the domains of academia, business and government are considered in this paper. Whilst all domains are surrounded and exist within social dimensions and have been subject to analysis by Oldenburg [8] into first, second and third spaces; the first space is where we live, the second place where we work and the third space is neutral, social spaces in which

conversation takes place, this paper is situated primarily within the second space: the space where we work. This is making the assumption that 'research' is 'work' and that such activities are formally defined, legislated and controlled.

The structure of the paper is as follows: the terms 'public' and 'private' are defined and situated within the theoretical framework provided by Habermas [2]; qualitative research phases are defined Denzin and Lincoln [1] for case study research; a set of dilemmas, disconnects and distortions are outlined with respect to both public and private space and stages of the research process; and implications arising from these dilemmas, disconnects and distortions for case study research in informatics are outlined.

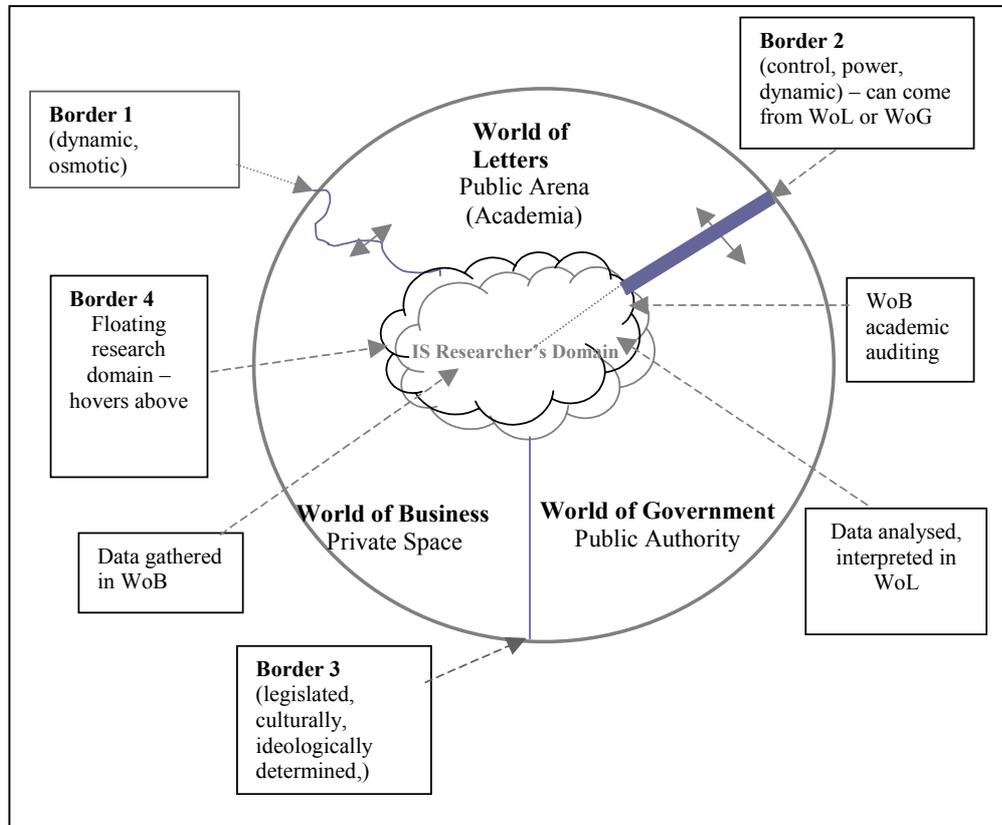
2. DEFINING PUBLIC AND PRIVATE SPACE

Habermas [2] traces the history of public and private domains. For the purposes of this paper the private realm, public sphere and public authority are defined as shown in Figure 1. These realms are situated within second spaces [8], 'where we work'. It can be seen that organizational research – the domain of the case study researcher – straddles the boundaries of all three: private realm, public sphere and public authority. The case study researcher is centered above and within the word of business usually, but not necessarily associated with an academic research institution. This case study researcher also has public and private arenas, as do organizations, participants, research institutions and funding bodies. Indeed, as we delve deeper within the three realms of the world of business, the world of letters, and the world of government the dilemmas, disconnects and distortions become more complex. In the public sphere, research and research institutions are situated within the world of letters. This world of letters incorporates both public and private space. Case study research in organizations overlaps public authority, where research consent requirements are legislated (or have delegated legal procedures), and research institutions, predominantly reliant on public funding. For the individual case study researcher her/his world is centered above and within the public sphere in the world of letters. We could consider that the individual researcher also overlaps the world of business and the world of government in the dissemination of research results in journals, conferences and electronic forums. In this paper external boundary crossing issues between the world of business, the world of letters and the world of government are discussed. Further research is required to deconstruct the complexities within each of these domains and is not discussed here. Gubrium and Holstein [9] p204 state 'contemporary social life . . . is conducted in a virtual plethora of public sites and locations interpreted from diverse perspectives, more and more of the formal organized . . .' which has as its underlying assumption the blurring of boundaries between public and private spaces in

the world. Oldenburg [8] in defining three social connected spaces considers ‘where we live’, ‘where we work’, and a third neutral space where conversation takes place as the primary form of communication. These neutral spaces exist in public

space including virtual spaces. This discussion is situated within Oldenburg’s second space – the world of work. Dilemmas, disconnects and distortions arise for the case study researcher entering contemporary social life in the workplace

Figure 1 Domain Borders



as boundaries become fuzzy. Each external boundary identified in Figure 1 is of different nature and depends on the world in which the point of view is based. Perceptions of boundaries and the dilemmas, disconnects and distortions that occur will differ from one world environment from another. The view of the border crossings will be quite different from within the world of business. For instance the border between the world of letters and the world of government will be an unknown entity within the world of business. Likewise the border between the world of letters and the world of business will be of little interest within the world of government. The only view represented within this paper is that of the case study researcher in informatics. This is represented in Figure 1 as crossing the three borders but not quite ‘present’ in the world of government or the world of business (except during a particular case study). The only the control elements of legislation (and delegated authority) in the World of Government are considered. The only element of Habermas’s [2] public arena considered is the world of business.

The Boundary between the World of Letters and the World of Business (Boundary 1)

This boundary could be regarded as both ‘leaky’ and dynamic, shifting as academic researchers immerse themselves in the world of business in gathering research data in multiple ways. Immersion usually means that the academic researcher absorbs organizational culture in the particular case study domain that in

turn is transformed into either knowingly or unwittingly into research analysis, interpretation and reporting. ‘Knowing’ transformation implies a direct link between the world of business and the world of letters in the particular case study research domain. Expressed in another way, the ‘disconnect’ knowingly becomes a ‘connect’ and a 2-way bridge between the world of business and the world of letters is established. Unwitting transformation into research analysis and interpretation implies a ‘leaky’ boundary rather than a 2-way bridge. Osmosis, rather than rational knowing informs the research results. It is this osmotic process that is difficult to identify, quantify and understand. And yet this unwitting knowing is one of the elements that impart richness to case study research in the immersion process.

The Boundary between the World of Letters and the World of Government and (Boundary 2)

Boundary 2 (Figure 1) between the world of letters and the world of government could be viewed as a major international border crossing (like Los Angeles International Airport). Boundary 2 is the predominant control border where legislated authority either resides completely within the world of government or is delegated to the world of letters via legislated academic research procedures that govern the bounds of all academic research including case study research in informatics. Boundary 2 is only as fixed as the current legislation governing and controlling it and floats according to the level to which

delegation occurs between the world of government and the world of letters. This also appears to be nationally and culturally dependent and local legislative frameworks governing research activities.

The Boundary between the World of Government and the World of Business (Boundary 3)

Boundary 3 between the world of government and the world of business from the case study researcher’s point of view is controlled ideologically, and is culturally determined. The extent to which legislated business practices impinge on the case study researcher’s understanding of the research domain within the world of business may differ between states, countries and across cultures. For this particular philosophical framework (Figure 1) only the dimensions of boundary 3 that impact on case study research are considered.

3. CASE STUDY RESEARCH – AN EMERGENT AND PRACTICAL RESEARCH METHOD

Case Study research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework. Qualitative research in informatics is dominated by case studies ([10], [11], [12]). Yin [13] has defined case study research as an empirical study that is an investigation of a real-life contemporary phenomenon, ‘especially when the boundaries between phenomenon and context are not clearly evident’: p13. Case study research can be underpinned by a variety of philosophical assumptions, particularly in the move of informatics research from the technological to the organizational [14].

Phase 1: The Researcher as a Multicultural Subject	History & research traditions conceptions of self & others, ethics & politics of research
Phase 2: Theoretical Paradigms and Perspectives	Positivism, interpretivism, constructivism, hermeneutics;
Phase 3: Research Strategies	
Phase 4: Methods of Collection and Analysis	
Phase 5: Interpretation & Presentation	Criteria for judging adequacy practices and politics of interpretation writing as interpretation; policy analysis evaluation traditions

Table 1 The Research Process[1], p20

4. RESEARCH PHASES AND EXTERNAL BOUNDARY CROSSING ISSUES

Denzin and Lincoln[1] suggest that there are five phases in the qualitative research process (Table 1). Case study research can be described as an emergent methodology. Manen [15] suggests that ‘A certain openness is required in human science research that allows for choosing directions and exploring techniques, procedures and sources that are not always foreseeable at the outset of a research project.’ P162. Whilst emergent research methods are grounded in their own respective theoretical domain, they are essentially practical in nature. It is the ‘lived experience’ that is researched.

Research Phase 1: The Case Study Researcher

The case study researcher embraces multiple dimensions of self and multiple world-views in the necessary immersion process in studying a particular organizational domain. Backed by academically and intellectually situated informatics research knowledge the case study researcher has both historical and political dilemmas to face, at least initially in embedding her/himself into an in depth understanding of the organization. Little is known about the border between the world of business and the world of government, at least initially that adds to the uncertainty faced by the case study researcher (Table 2).

Research Phase 2: Theoretical Paradigms and Perspectives

Theoretical paradigms and perspectives that underpin case study research philosophy are gained and adopted within the world of letters. The informatics researcher brings to the case study a particular philosophical perspective gained through research experience and training. Regardless of whether case study research is positivist, interpretive, or critical there is little or no boundary crossing in research phase 2 between the world of letters, the world of business and the world of government. It seems inevitable that little or no theoretical understanding of case study research crosses into the world of business or the world of government. Research phase 2 could be described as a ‘total disconnect’ (Table 2).

Research Phase 3: Research Strategies

The case study researcher usually enters the chosen case study domain for a limited period of time to gather data in a multiplicity of ways. This snapshot in time approach is well suited for short-term investigations in a world where technological innovation may render research results obsolete before being communicated back to the public domain. Research strategies are usually initiated within the world of letters based on theory established and adopted in research phase 2. Ethical dilemmas arise at the border between the world of letters and the world of government as research proposals are approved – about the world of business. It is evident that there is a “disconnect” at this border where research controls are in place when decisions made in the world of government need to be communicated to the world of letters about a world of business research domain. Whilst the research strategy is situated within the world of letters control is legislated within the world of government. However case study research is conducted within the world of business – a dilemma faced by many case study researchers (Table 2). Communication distortions arise across all three borders.

Research Phase 4: Data Collection and Analysis

Yin [13] recommends multiple data collection methods in an attempt to capture the richness, complexity and depth in any case study research. The informatics researcher entering the world of business from the world of letters brings a different worldview. Dilemmas faced in case study research in crossing the border between the world of letters and the world of business are unexpected or emergent results that may have political, cultural or ideological implications. The case study researcher may also have ethical dilemmas to address, for instance when organizational decision- making is based on structural lines and research data is gathered outside of the decision-making domain. If the case study researcher is also an employee/employer within the case study being observed dilemmas may occur because of the multiple roles adopted by the researcher.

Research Phase/World		Border 1 World of letters/world of business	Border 2 World of letters/world of government	Border 3 World of business/ world of government
1 Researcher Academic researcher image, subjective self in the process	Dilemmas	No historical or political view of world of business How to enter world of business Uncertainty	Multiple roles Proposal approval Power and control issues	Uncertainty Little understanding of world of business initially
	Disconnects	Sub-research domain dependent	Language disconnect	Not understood by researcher
	Distortions	Little common ground	Differing world views	Ethical & political
2 Theory Solely situated within the world of letters	Dilemmas	-----Little or no border crossing activity-----		
	Disconnects	-----Total disconnect-----		
	Distortions	-----Little understanding across all borders-----		
3 Strategy Solely situated within the world of letters	Dilemmas	Suitable theory not practical	Ethical dilemmas, proposal approval	Research strategy situated within academia
	Disconnects	Disconnect between theory & practice	Communication between academia & government about business	Total disconnect
	Distortions	-----Little understanding across all borders-----		
4 Data Collection Multiple methods – within world of business	Dilemmas	Emergent results	Ethical dilemmas at data collection	Little knowledge initially
	Disconnects	Cultural, ideological, communicative	Language of data collection tools	Different language
	Distortions	What is not said or is not permitted to be said	Distorted results	Not known
5 Interpretation Process situated within world of letters Results disseminated to all	Dilemmas	Reporting & interpreting emergent results	What to report – political correctness	World of government auditing of academic research outputs
	Disconnects	Reporting language	What is not reported	Total disconnect
	Distortions	Missed data not reported or analyzed	What is accepted as legitimate research Acceptance of emergent results	Academic interpretation – not government

Table 2. Border -Crossing Issues/Research Phases

Multiple data collection methods may give rise to ethical dilemmas as in-depth issues emerge. The case study researcher may also know little about the border between the world of business and the world of government and the implications for data collection and analysis. Data collection instruments couched in informatics theoretical language are source of disconnects on the world of business/world of letters border. Distortions may arise as the case study researcher become more aware of what is not said or what 'is not permitted to be said' and recorded as data. Missing data and/or 'politically correct' data gives rise to distorted results.

Research Phase 5: Interpretation and Presentation
Klein and Hirscheim [16] nominate 'a principle of multiple interpretations' in their guidelines for evaluating interpretive research. Multiple interpretations imply multiple world-views and

theories. In research phase 5, interpretation of case study data gathered and analyzed is situated within the world of letters. Results are disseminated from the world of letters back into the world of business. Results are also communicated back into the world of letters via academic publications and conferences. Academic research is audited from the world of government. Dilemmas faced by the case study researcher lie in the reporting and interpreting of emergent results, what to report back to the world of business, and the audit process legislated from the world of government on the status of world of letters research outputs.

Dilemmas also occur when the 'greater good' is reported either across the world of letters/world of business or the world of letters/world of government border that may not necessarily be in the interests of the researched organization. Dilemmas may also happen when there is a blurring of boundaries between the world of business, the world of government and

the world of letters as funding agencies influence research outputs.

Disconnects may arise in the prescribed reporting style and language at the world of letters/world of business border, and on the data analyzed, interpreted and not reported on the world of letters/world of government border. From the case study researcher's point of view there is often a complete disconnect at the remaining border between public authority and business. Distortions occur when incomplete reports are presented within the world of business across the world of letters/ world of business border. Distortions may also occur when world of letters interpretations are presented to the world of government in 'academic language'.

Distortions, Disconnects and Dilemmas Summarized

Grounding distortions disconnects and dilemmas that arise in case study research (Table 2) in a structural analysis of the boundary crossings between the academia, business and government provide a useful deconstruction tool. When this is over-laid with Denzin & Lincoln's [1] 5-phase research process a much clearer picture of the problems that arise at each border appears. Border crossing issues do not necessarily indicate an insurmountable problem, nor do they necessarily indicate a problem. The advocates of complexity theory in organizations [4], [17] suggest that it is at domain boundaries where most productive activity occurs. Awareness of boundary crossing issues between these three worlds at each research phase provides additional resources for informatics researchers undertaking case studies.

6. DISCUSSION

Whilst legislation (situated in the world of government, Figure 1) may allow for changing circumstances of emergent qualitative research methodologies, informed consent is still required before any research takes place. Disconnects may arise between world of government and the world of letters when legislation requires a deterministic framework for case study research in which the complete research process is known in advance of the study. Hirscheim et al [16] suggest a 'high-level classification scheme that includes applicative knowledge' p244 as a potential solution to addressing 'disconnects' in the informatics field. Such a body of knowledge, they propose may improve communications between stakeholders in informatics research. In this paper 'disconnects' have been separated into dilemmas, disconnects and distortions that may exist between the three worlds of letters, business and government (Figure 1). Whilst Hirscheim et al [16] have considered the problems and issues associated with 'disconnects' internal to the informatics field, the stance adopted in this paper is that of the case study researcher at the boundaries that exist between the world of letters, the world of

business and the world of government. The framework developed is an attempt to extend the work of Hirscheim et al [16] in the predominant qualitative research method: case study. Hopefully, this provides a way forward to further understanding of the dilemmas, disconnects and distortions that may arise as boundary crossing issues in informatics research. Hirscheim et al's action points addressed in this paper include: furthering the understanding of stakeholder issues from a broad conceptual level; drawing attention to communication problems that arise at the borders between domains of widely differing activities in informatics – like the worlds of letters, business and government; and the development of a conceptual framework as both a learning and a communication tool between IS research stakeholders. A fruitful direction for future explorations of the border crossing issues that arise in case study is to create a landscape of dilemmas, disconnects and distortions that include multiple points of view, obstacles, creative tension, and legislative and policy changes. Further research is also required to deconstruct the complexities within each of these worlds as only one point of view has been presented here.

6. CONCLUSIONS

In this paper dilemmas, disconnects and distortions that may arise from crossing between the world of letters, the world of business and the world of government have been considered for each phase in the research process for case study research in information systems. A conceptual framework based on Habermas's [2] public authority/public space/private arena view of society has been developed to provide an additional conceptual tool for case study researchers as they immerse into case study research at each stage of the research process. Such a framework provides a navigation aid for dealing with the complex issues associated with dilemmas, disconnect and distortions that may arise in undertaking case study research.

7. REFERENCES

- [1] Denzin, N. K., & Lincoln, Y. S. (Eds). **The Handbook of Qualitative Research** (2nd ed). Thousand Oaks, California: Sage Pub, 2000.
- [2] Habermas, J. **The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society**. Great Britain: Polity Press, 1996.
- [3] Hirscheim, R. & Klein, H. K. "Crisis in the IS Field?" **Journal of the Association for Information Systems**, Vol. 4, No. 5, 2003, pp 237-293.
- [4] Stacey, R. **Strategic Management and Organizational Dynamics**. (2 ed). Great Britain: Pitman 1996.
- [5] McKenna, S. "Learning Through Complexity." **Management Learning**, Vol. 30, No. 3, 1999, pp 301-320.
- [6] Checkland, P., & Scholes, J. **Soft Systems Methodology in Action**. Chichester: Wiley, 1990.

- [7] Janesick, V. "The Choreography of Qualitative Research Design: Minuets, Improvisations, and Crystallization". In N. K. Denzin & Y. S. Lincoln (Eds.), **The Handbook of Qualitative Research** (pp. 379-400). Thousand Oaks, California: Sage Pub, 2000.
- [8] Oldenburg, R. **The Great Good Place: Cafes, Coffee Shops, Community Centers, Beauty Parlors, General Stores, Bars, Hangouts, and How They Get You through the Day**. New York: Paragon House 1991.
- [9] Gubrium, J. F., & Holstein, J. A. **The New Language of Qualitative Method**. USA: Oxford University Press, 1997.
- [10] Orlikowski, W.J. & Baroudi, J.J. "Studying Information Technology in Organizations: Research Approaches and Assumptions", **Information Systems Research**, Vol. 2, 1991, pp. 1-28.
- [11] Alavi, M. and Carlson, P. "A review of MIS research and disciplinary development", **Journal of Management Information Systems**, Vol. 8, No. 4, 1992, pp. 45-62.
- [12] Holian, R. "Doing case study in my own organisation: ethical dilemmas, hopes and triumphs". **Action Research Online**. <http://www.scu.edu.au/schools/gcm/ar/ari/p-rholian99.html>, 1999.
- [13] Yin, R. K. **Case Study Research, Design and Methods**, 3rd ed. Newbury Park, Sage Publications, 2002.
- [14] Benbasat, I., Goldstein, D.K. and Mead, M. "The Case Research Strategy in Studies of Information Systems," **MIS Quarterly**, Vol. 11, No. 3, 1987, pp. 369-386.
- [15] Manen, V. **Researching Lived Experience: Human Science for an Action Sensitive Pedagogy**. USA: State University of New York Press, 1990.
- [16] Klein, H. K., & Hirscheim, R. "The Rationality of Value Choices in Information Systems Development." **Foundations of Information Systems**, September, 1996.