

Reengineering BPR: A critical exploration

being a Thesis submitted for the Degree of PhD

in the University of Hull

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I have come to realise that the PhD is not a solitary venture. It can neither be attempted in isolation nor can it be undertaken so as to impact only on the writer. While my intention was always to minimise the adverse effects on those people special to me, I know that this was not always the outcome. A lot has happened since I embarked on this research project; I am not the same person who began this work in 1996. Life has really thrown a 'mixed bag' at me since that time. However I hope that those who shared my worries and concerns, have also been able to rejoice with me during the exhilarating times when progress was more evident.

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ABSTRACT

Reengineering BPR: A critical exploration

by Christina Dimitri Athanasiou

Purpose and aims of the thesis: This thesis critically reviews the current BPR literature through the perspective of the systemic/holistic management thinking, in such a way as to bring the study of BPR into a new era. Central to this holistic type of thinking are the concepts of Processes, Radicality, IT/IS, Culture and Human Element awareness: these concepts are used to explore core publications in reengineering literature. More specifically the aims of the thesis are to (i) explain why BPR needs redefining, (ii) redefine it as a holistic activity, (iii) provide guidelines to do that and also (iv) show the feasibility of this approach.

Research Method: For the achievement of the above aims, a combination of research methodology strategies and techniques was used. These include a documentary review approach and a comparative analysis for gathering and disseminating the data. These were complemented by case study material, which is used to assess the plausibility of the suggestions made in this particular thesis.

Findings: While exploring the notion of BPR it was identified that (i) the notion has no universally accepted definition, (ii) largely the definitions and numerous core reengineering readings (Davenport 1993, Johansson et al. 1993, etc.) give emphasis to different extreme orientations (e.g., IT oriented, processes oriented) and thereby attract negative criticism (Jones 1996, Case 1999), (iii) there is no code of practice (no formal guidelines) when practising reengineering, and largely (iv) there is a great amount of inconsistency between what the examined BPR authors say they do, and what they actually do in practice (e.g., Hammer and Champy 1993).

Recommendations: Recognising the novel link between a number of major fields of activity (Processes, Radicality, IT/IS, Culture and Human Element), enabled a new holistic definition and a new form of guidelines to emerge, and be operationalised; that is, for this author to present a set of theoretical and practical ways of improving the BPR managerial tool. Such guidance, though, is not intended to be sterile and staid. Indeed, this guidance will itself incorporate critical thinking around the issues

involved in an intervention like BPR, by the further enhancement of multi disciplinary discourse about organisational learning and awareness. It is concluded that this set of recommended guidelines could provide a framework for an enriched, holistic and successful BPR initiative.

Key Words: BPR, IT, Processes, Human element, Culture, Time/Radicality, Holistic/Systemic Thinking, Multi disciplinary Management Approach

*Knowledge comes from noticing resemblances and
recurrences in the events that happen around us*
(Cited in Kast and Rosenzweig, 1970 : 494)

Wilfred Trotter

*What we need are great complexifiers, men who will not only seek
to understand what is it they are about, but who will also dare to share that
understanding with those for whom they act*
(Cited in Kast and Rosenzweig, 1970 : 494)

Daniel P. Moynihan

CHAPTER 1

1.0 Background

In the 1990s organisations have been trying to become leaner, they have been trying to restructure themselves, and one of the focuses of that activity has been in Business Process Reengineering (BPR). The BPR notion has been around for the last decade or so and Hammer (1990) is considered to be the 'father' of the notion. However, throughout time, businesses have tried to solve their problems by trying anything new the market has to offer them. In the late 70s and mid 80s it was the Peters and Waterman *'In Search of Excellence'* (1982) fad to which people felt they had to adjust their organisations. Then there was the Quality fad (in the 1980s the development of the International Quality Assurance Management Systems Standards, QAMSS set-off, DelMar and Sheldon 1988, Besterfield 1990) and the Western World tried to improve its business by following the successful Japanese ways of conducting business. Early in the 1990s BPR made its official appearance after Hammer's (1990) initiation. A book followed this by the same author and Champy in 1993.

With growing appreciation from the consultancy world about this new idea, BPR has now become established as another tool for problem management. A number of business consultants like Champy (1993), Davenport and Short (1990), Davenport (1993), Johansson et al. (1993), Coulson-Thomas (1994) published some of their BPR ideas based on their personal experiences. This, though, was criticised by other authors (Weicher et al. 1995, Jones 1996, Harrington et al. 1998, and Case 1999) who tried to make sense of what was really happening. From these contributions, it is apparent that such thinking had not reached its full potential. This, I believe, is because nowadays organisational life has become more complex owing to the greater freedom to market products and services in different markets world-wide. Organisations have to pay attention to all possible dynamics that might affect their strategic movements. Elements that before were taken for granted when business transactions were made can no longer be assumed. One example might be the satisfaction of the human¹ element and its development in the organisation. As people become more educated, they expect to find fulfilment in their workplaces and not to be exploited. Previously, this might have not mattered to an organisation because monopolistic situations existed. Now, however, the market environment is changing

constantly and competition is a major concern. If an organisation does not recognise and address new trends, it will concede advantage to its competitors. Understandably, then, along with the pursuit of organisational and environmental changes BPR should start looking at other information banks which would enable it to learn and modify, to adapt better to change. My piece of work readdresses the issues on which BPR is found predominantly to focus, and tries to make it more suited to the contemporary, integrated and holistic way of changing organisations.

BPR is also a very complex and evolving subject matter; and as I will show a highly politicised area which over the last decade has been a huge money spinner for organisations. Not only business organisations and consultancy firms but also academic institutions have profited from BPR. It represents a challenging area to examine. As Flood and Jackson (1991) would argue, 'In the modern world we are faced with innumerable and multifaceted difficulties ...'; also 'we are faced with 'messes', sets of interacting problems, which range from the technical and the organisational to the social and political and embrace concerns about the environment, the framework of society, the role of corporations and the motivation of individuals' (1991 : xi). This situation (whether we want it or not) affects everybody, inside and outside the organisation. At the present time more complex problem situations are seen to be reproduced (Ragsdell 1997). It can, then, be argued that originality and novelty are essential for successful management of such complexity; creative thinking (in terms of a BPR initiative) offers those qualities. Understandably, then, along with the pursuit of other methodologies and techniques (e.g., TQM, Feigenbaum 1983, Taguchi 1985) in the market arena, there has been a steady increase in interest in BPR.

Interest in BPR has grown because of:

- (i) extensive usage of the notion by large multinational companies such as IBM Credit, Ford Motors, Kodak (Hammer and Champy 1993), Wal-Mart Inc. and Toyota (Johansson, McHugh, Pendlebury and Wheeler 1993). The results of their decisions to turn around their organisational processes feature in articles published by Harvard Business Press (Hammer 1990) and other publications (e.g., Johansson et al. 1993).
- (ii) production of a wide range of published material, highlighting the early

90s reengineering movement. Examples, in addition to those cited above include, Davenport (1990, 1993), Obeng and Crainer (1996), Coulson - Thomas (1994), Ould (1995), Morris and Brandon (1993).

(iii) an increase in the number of major consultancies offering BPR as part of their product lines (Jones 1996). Also in academia the notion of BPR was emerging and centres (e.g., Warwick Research Business Improvement Centre) were established to deal with this new phenomenon.

Thus, in this time of great interest I believe that this contribution will take BPR forward and serve to re-awaken interest in the BPR notion.

A reasonable question after the above, then, would be why I am interested in researching about BPR. It was something new and everybody was talking about it while I was doing my MBA degree in 1994. The 'mystique' that surrounded the whole notion was something that excited me. That was my initial attraction towards this approach, but after I had carried out some research on the matter, I came to believe that the whole notion needed to be clarified in terms of certain elements that seem to have an impact on BPR initiatives and also that there was a need to place it in a sort of context, which I saw as lacking in the readings I had reviewed.

It was at this point, that I started asking several questions about BPR. What exactly is BPR and if we can say what a BPR really is, how does one go about doing a BPR in a company? These questions enabled me to set out the aims of the thesis. These are to:

- explain why BPR needs redefining,
- redefine it as a holistic activity,
- provide guidelines for the user; and
- show that it can work.

In other words, I wish to look at this idea of business transformation called BPR in order to identify and add what is missing, to make it more efficient, richer and effective than it is perceived as being at present. To be able to answer all the questions above, I embarked on 'an adventurous BPR research journey'. Three major possible lines of investigation presented themselves: (i) a real life project intervention (do it myself), (ii) evaluating interventions that have already been conducted and (iii)

critically evaluate what is being said about BPR by looking at the core contributors' publications on the topic. These will be discussed in the next part of this thesis and also full explanation will be given why the first two options were rejected and why the third is seen as the most appealing and appropriate for this thesis to follow. In addition to this, some realities in developing such a research idea will emerge (Saunders and Lewis 1997). An additional point for the reader would be the fact that for every line of investigation pursued for the purposes of this research, Saunders and Lewis Techniques Framework (see App 1 - Table 2) was followed.

Throughout this 'short journey of mind' I had to mix with academics, BPR practitioners, and other business professionals. Taking part in a number of national and international seminars and conferences and reading some of the literature on the topic of BPR gave me the impression that,

- practitioners presented many different conflicting ideas about what BPR is; some seemed unsure or unable to define BPR;
- many BPR practitioners appeared to be holding back information about their applications of BPR;
- it did not seem to be possible to get beyond the barriers people had erected almost as a fortress around BPR;
- BPR was failing² in up to 70 per cent of interventions (Hammer and Champy 1993, Jones 1996).

This was the learning I gained during my journey to find out more about BPR. Why was there such secrecy? Why was it failing in so many cases? What were the politics that led practitioners to disclose only so much about their BPR practice? How could one find out what BPR really is, given the diverse interpretations? This learning intrigued me as a researcher to try and find out more about the notion of BPR. However this turned out to be a disappointing and fruitless exercise for many months. I believe it was, nevertheless, eventually a productive and insightful experience. It also acted as *a research compass*, which indicated that the examination of this notion needed to be carried out while using the third line of investigation. This line of investigation incorporates a review of the major proponents of BPR literature to reveal what is happening in this field. Initially I thought that it was the only way I

could explain the behaviour of the BPR people to whom I was talking. While researching the material, though, I found a degree of confusion existed regarding BPR. There was confusion about both its definition and its practice. For example, some people might consider it as a TQM change initiative; different BPR proponents focus on different types of change, mostly emphasising IT or processes, which I found extraordinary for a major organisational change programme; thus, many authors seemed to be practising BPR based on their own improvisation and not based on any specific code of practice. Furthermore BPR was actually failing in a very high proportion of interventions (Hammer 1993, Wellins and Murphy 1995, Eisenberg 1997). Thus, there was no consistency in the way BPR was defined or applied and also, the very high failure rate suggested that something was missing from its applications. This indicated that perhaps BPR needed to be applied in a more holistic way, which took into account other important organisational factors, which have clearly so far been underemphasised.

All these factors motivated me to want to develop a clearer vision of BPR, which would not only help the understanding of others and myself but also improve the implementation success rate of BPR. I saw this as an interesting field for my PhD study and from this thinking I formulated the aims set out in the next section.

1.1 Aims of the Thesis

As briefly stated above the ultimate aims of the thesis are to:

- *explain why BPR needs redefining,*
- *redefine it as a holistic activity,*
- *provide guidelines to do that, and also*
- *show the feasibility of this approach.*

This thesis aims to be a useful contribution to the BPR movement. In pointing out ways of enriching the discipline of BPR while introducing concepts from recent organisational change developments it is my belief that the nature of the pursuit of BPR can be modified beneficially. It can become more considerate, complete, clearer and holistic about the importance of a number of elements that are involved in the process which till now BPR acknowledges, but does not sufficiently emphasise. This

modification brings greater expectation that the discipline of BPR will better satisfy some of the dynamic organisational needs of the 21st Century. I attempt to bring the understanding and application of BPR up to date through the introduction of 'holistic BPR' and I suggest a number of ways for the future BPR reader/user/writer and practitioner to achieve it. This would also provide them with clearer direction as to what to look for, and where, when reengineering.

It might be asked why I chose those particular aims. I would say that I derived the above aims mainly for three reasons. Firstly *my experience* while interacting with people involved in BPR projects has indicated that these people were not entirely sure what they meant when they were saying what they were doing. Some of them had conflicting ideas and were unsure/unable to define BPR, others were withholding basic information about their applications of BPR. Secondly *the idea that BPR was failing* in up to 70 per cent of interventions pointed to the fact that something was wrong with it. Thirdly while studying BPR's literature I discovered that *writers were not consistent about BPR's definition and practice*, they were confusing it with other types of change initiative and above all they seemed to base what they were doing on their own inspirations and not on any specific code of practice. Numerous examples of such inconsistencies appear in Chapters 4,5,6,7 and 8. These inconsistencies I believe, are also the reason why so many BPR authors are IT oriented and/or process oriented while reengineering. This combination of reasons led me to believe that there was a need for a clearer BPR vision, a vision which could bridge all these inconsistencies, and lack of clarification I found to exist in the BPR field.

Next I will present an overview of the structure and contents of this thesis.

1.2 Thesis Structure

This thesis is presented in four sections. Each individual section tells a story in its own right and brings an original contribution from a selected standpoint; from the associated literature or from the practical experiences of the people involved. But, together, the synergistic properties of the four sections relate a much finer story.

1.2.1 Introduction

This introductory part *outlines the structure of the thesis and details the aims of each*

section. Chapter 1 starts by clearly stating the aims of this thesis which are to explain why BPR needs redefining, to redefine BPR as a holistic activity, to provide guidelines to do so, and to demonstrate that it can work. This chapter proceeds with how I will carry these out.

1.2.2 Section A: Research Methodology

The purpose of section A, comprising Chapter 2, is *to describe and justify the research methodology employed:* a documentary approach in conjunction with a comparative research technique being the selected approach. However, as will be shown, this research strategy is also supported by a variety of research strategy styles (descriptive, exploratory, critical, creative and above all systemic) which are consistent with my deeper argument.

A second aim here is *to show to the reader the research avenues* this author considered before arriving at the suggested research methodology. The work of Saunders and Lewis (1997) was extensively used for two reasons: (i) it was used to orientate the author of this research on the paths available in investigating the matter and (ii) to familiarise the reader of this thesis with the several lines of investigation which were considered as possibilities and why they have been rejected. The main purpose was to help me derive the best possible approach for accomplishing my objectives.

1.2.3 Section B: Defining BPR

The second section *aims to demonstrate, at a theoretical level, what BPR is* (as articulated in the various writings that have been examined) and *whether there are* any common principles and methodological guidance when initiating such a change programme.

Based on the above section's findings this section sets the scene in which the objectives of this thesis are grounded. Drawing on at least two fields of academic research - 'BPR' and 'the management discipline' - section B develops the conceptual framework of this thesis' storyline (see also Figure 3.4).

More specifically, Chapter 3 is intended to firstly *explain why BPR needs to be*

redefined in order to become more holistic and secondly, to *give a new definition for BPR*. In doing so, a 'search path' is employed and perceptions of BPR prevailing in the currently examined literature are presented. An additional aim will be to explain *BPR's origins* and *examine whether there is any set of common principles and/or any form of methodological guidelines* that govern a change programme such as this one.

This is a chapter that identifies a number of elements that drive the BPR notion, some of which are already seen to be of vital importance to this initiative (e.g., processes), others that are not (e.g., human element); some that are overemphasised (e.g., IT) and others that have been neglected (e.g., timing, culture). Based on that and also because of the conflict of opinion found to exist in the examined BPR readings, I decided to critique each of the elements separately and to present the findings to the reader. This is made possible with the use of a conceptual framework (see Figure 3.4) to guide the further analysis of the BPR literature.

1.2.4 Section C: Concepts and Issues in BPR. A Review of the recent developments in the reengineering and management literature

The aim of the third section is *to put into action* the conceptual framework described in the section above, in order to demonstrate that if the BPR initiative is to become holistic it needs to look at a number of different domains that will enable it to do so and not just be driven by one of them. I argue that if BPR is driven by only one or two elements, it makes it weak, because it underemphasises other elements, which could possibly work towards its success. Elements like the *timing (radical change factor)*, *process*, *information technology (IT/IS)*, *the human element* and *culture* will be explored individually, each in their own right. This is done to show that in a BPR activity there is the need for greater integration of the different aspects and for future successful BPR interventions to take place. This will become more apparent in the collective reflection parts of each of the chapters involved in this section (Chapters 4, 5, 6, 7, 8) as the critical analysis unfolds.

In revealing most of the attributes of the above elements, it is found that in the BPR literature examined, there is a great degree of diversity of opinion on matters such as how to define the notion, and how to apply it. It is found that there is no unanimous

way of approaching the subject and I believe this is due to the intuitive behaviour of the practitioners involved, rather than in response to any methodological guidelines when reengineering. For the purpose of this thesis and for carrying out the third aim of this thesis I suggest a number of guidelines that need to be followed when reengineering. Generally, though, the idea is to integrate as much as possible the elements involved in such activity for an enriched, holistic, enlarged and successful future BPR intervention.

Chapter 4 is titled 'The current concepts and controversies regarding the radical thinking (time factor) and the level of change in the BPR arena' and its aim is to *show* that in order for a BPR to be radical and therefore be different and distinctive from other company-wide types of change programmes (e.g., TQM initiatives) that go on in organisations, I believe *there is a need for Timing Constraints to the interventions that are conducted*. To achieve that, I provide the reader with an analytical and critical exploration of the element of time as seen by the several authors' readings examined. A suggestion is also put forward for redressing the timing element and that includes 'three chronological BPR levels' (see also Table 4.2 which incorporates in the current BPR literature a short, medium and long term time spectrum to address the timing issue) by which I hope to distinguish BPR from other tactical programmes; also the reasons why I believe this is possible are presented.

Chapter 5 aims to *demonstrate that having a purely process BPR orientation results in a BPR being little more than a TQM intervention and consequently the processes focus should be one among several*. This will be demonstrated when I reflect on the BPR readings examined. The core BPR readings will be examined in two areas: (i) how they define processes and (ii) how their process orientation affects their overall BPR thinking. This will be done to indicate to the reader that this element is important to a BPR initiative, but that overemphasising it leads to problems for the organisation.

The findings will show, that indeed, there are some authors whose BPR work is process driven. I suggest that the above should not be happening if we argue for a holistic BPR initiative and I also suggest that for a successful BPR a contextual type of thinking is required. I believe that process thinking is flawed because while thinking and acting in those terms the 'human element', for instance, is excluded.

Processes are not people. People are different entities which BPR practitioners need to consider when reengineering, mapping and restructuring any of the reengineered company's processes to enable them to build a relationship that could work and give the desired results. BPR practitioners need the human element to co-ordinate, support and direct the relationship processes can have with the rest of the components of the BPR programme, and the organisation in general. The tendency of not doing so, at present, is receiving a negative critique from other BPR writers like Caldwell (1994), and Jones (1996).

Therefore, to redress these problems I will suggest that the future BPR thinker use a diamond framework (see Figure 5.2) to enable him/her to combine possible process related activities, thereby identifying and keeping healthy process relationships in a reengineering activity. In addressing these interrelated issues I believe there is a good ground for a future contextual BPR type of thinking, to remedy the current inadequacies inherent in the BPR notion.

Chapter 6 will show *that if BPR takes IT as its primary focus, then it becomes little more than the introduction of new Management Information Systems in the organisation, whereas I believe that IT needs to be one amongst several orientations that need to be taken into account.* To demonstrate the above I will be investigating how some BPR writers perceive IT and its role in their overall thinking. This will help demonstrate that the IT concept is very important to any contemporary change initiative including BPR but when overemphasised it leads to (i) the misleading of organisations in thinking that what they are actually doing is BPR and (ii) most of the time, IT instead of aiding organisations to change, disables them.

To redress these tendencies identified, I will suggest that future BPR practitioners should use 'a multidimensional loop of activity-relationships' that their IT can set up in a BPR change initiative (see Figure 6.2). This would enable the companies involved to harvest opportunities and fight threats arising from the dynamic environment of change within which they will be operating.

The objective of Chapter 7 is to show that *there is a need for the current BPR literature to give more attention to the human element in a BPR initiative.* I will

demonstrate that the readings examined take the human element for granted (with minor exceptions) and that is, I believe, one of the reasons why BPR records so many failures.

Therefore, after examination of these readings, I will conclude that in order to satisfy the above identified needs, future BPR thinking and practice should incorporate learning from other domains of literature related to the human element. In doing so I believe the BPR practitioner will become more aware of the context of human affairs and also how that affects their activities. This, I believe, will also add to the systemicity of the BPR initiatives they carry out in the future.

I will also suggest an approach (see Figure 7.5) which enables all BPR initiative elements to be considered and that is for further elimination of the tendency to overemphasise individual elements in such change programme.

Thirdly I will recommend a two-fold managerial action plan for future effective BPR decision making in the area of human relations. This will also reflect on how the future BPR user could tackle the issue of downsizing - a much more ameliorated way to do so.

Chapter 8 deals with the relationship people have with their roots and customised ways of carrying out their jobs. The objective of Chapter 8 *is to stress the need that the element of culture be recognised when reengineering*. When identified and utilised effectively, culture has a lot to offer towards the success of BPR interventions. To demonstrate the above objective, reference will be made to how the examined BPR readings reflect on the topic. It will be shown that culture has been almost neglected and not really discussed in BPR literature terms. The findings will also indicate that the authors who refer to it are quite uncertain as to its meaning, and that generally the examined BPR perception on the matter lacks a direction in terms of what managers should do and how to deal with this element in the current and future events.

Therefore I will conclude that what BPR writers should do here, firstly, is to make a broader reference and connection to the concept of culture by blending the latter with the BPR's own literature. A way in which this can be achieved can be found in the

relevant chapter. I also suggest that it would be beneficial if the future BPR users/writers/thinkers place BPR in a sociological context. This will allow them to evaluate critically the way the concept of culture in BPR relates to the rest of the organisational change. Another suggestion here reflects on the formulation of a strategy that this author sees as the means of familiarising people (BPR participants) with the element of culture (their own, the organisational one, etc.) in combination with a number of techniques of achieving that. An example is given here, which is the introduction of a training scheme that can work towards the enhancing of employee competencies. I will also argue that, above all, cultural-related activities need to be integrated and guided by a number of specialist consultants in the field (specialists in human resource/personnel management, etc.) which can lead to the success of such an intervention.

1.2.5 Section D: Evaluation and Reflections

The final section of the thesis *brings the arguments and discursive strands of the previous four sections together*. It is a platform where all sections outlined in this thesis are no longer deliberately separated. This is where they are purposely shown to enrich one another. This is where I can show that what has been argued in these previous sections can be put into action, if future BPR supporters are willing to work towards the suggested paths of integration. These penultimate chapters also provide the concluding reflections of this research project and emphasise the contribution (briefly stated below) I make to the BPR movement. They make clear that I go beyond what is set out in the current BPR literature (Hammer 1990, Hammer and Champy 1993, Davenport and Short 1990, Davenport 1993 and 1995, Johansson et al. 1993, etc.) and stress the contribution that I make to the theoretical and, it is hoped, the practical arenas in the study of BPR. *Simply, my contribution is in the development of a systemic BPR model which addresses all of the identified weaknesses, provides guidelines and demonstrates the feasibility of this suggested approach (see also Figure 9.1).*

More specifically, the objective of Chapter 9 is twofold. Firstly it is to *present to readers the guidelines* that they should be addressing when they are doing a BPR; which is, as previously stated, a subsidiary aim of this thesis; secondly *to evaluate*

them. To achieve this, the arguments and discursive strands of the earlier chapters are brought together. This will be demonstrated by reflecting on case study material presented earlier in the thesis in order to show that what I am arguing for can be operationalised as well.

1.2.6 Conclusion

The objective of Chapter 10 is to *consolidate* the information conveyed in the earlier Chapters of this thesis, to *acknowledge the achievement of the aims* of this study and to *emphasise the contribution* I make to the BPR movement.

The next chapter covers the research methodology path which has been chosen for this thesis.

*Many seemingly unrelated things follow similar or identical
rules of behaviour, and ... knowledge of one therefore provides
understanding of another*

(Cited in Kast and Rosenzweig, 1970 : 494)

Alfred Kuhn

CHAPTER 2

2.0 Introduction

Having explained the aims and the structure of this thesis, we now move to the objectives of this chapter which are (i) to describe and justify the research methodology chosen and its different supportive styles for the completion of this thesis and (ii) to look at the research avenues considered for carrying out my research.

Prior to the presentation and justification of research methodology employed in this thesis, reference will be made to the concept of methodology, along with the nature of its four sociological paradigms in the social sciences. That is to enable the reader to identify the differences that govern this methodological world and to give him/her to understand why particular emphasis was given to the Interpretive approach; for the completion of this thesis.

Following this, I will focus on the research methodology strategies and techniques used for carrying out what this thesis has set out to achieve. The combination of a documentary review approach and a comparative analysis is the most appropriate for the achievement of my research objectives, and in this part I present them and explain why they were chosen.

Then I will explain the lines of investigation I adopted for exploring the field of BPR in order to achieve this thesis' objectives. This is to indicate to the reader the reasons why I have chosen to follow the third line of investigation and not the other two.

The chapter concludes with a summary.

2.1 Methodology in general / What is the concept of methodology in social sciences?

In sociology, and more generally in the social sciences, methodology is taken to be 'a discipline, bordering on philosophy, whose function is to examine the methods which are used or which should be used to produce valid knowledge' (Hindess 1977 : 2). It is in this sense that Talcott Parsons refers to: 'the questions of the grounds of empirical validity of scientific propositions, the kinds of procedures which may on general grounds be expected to yield valid knowledge' (Parsons 1966 : 23).

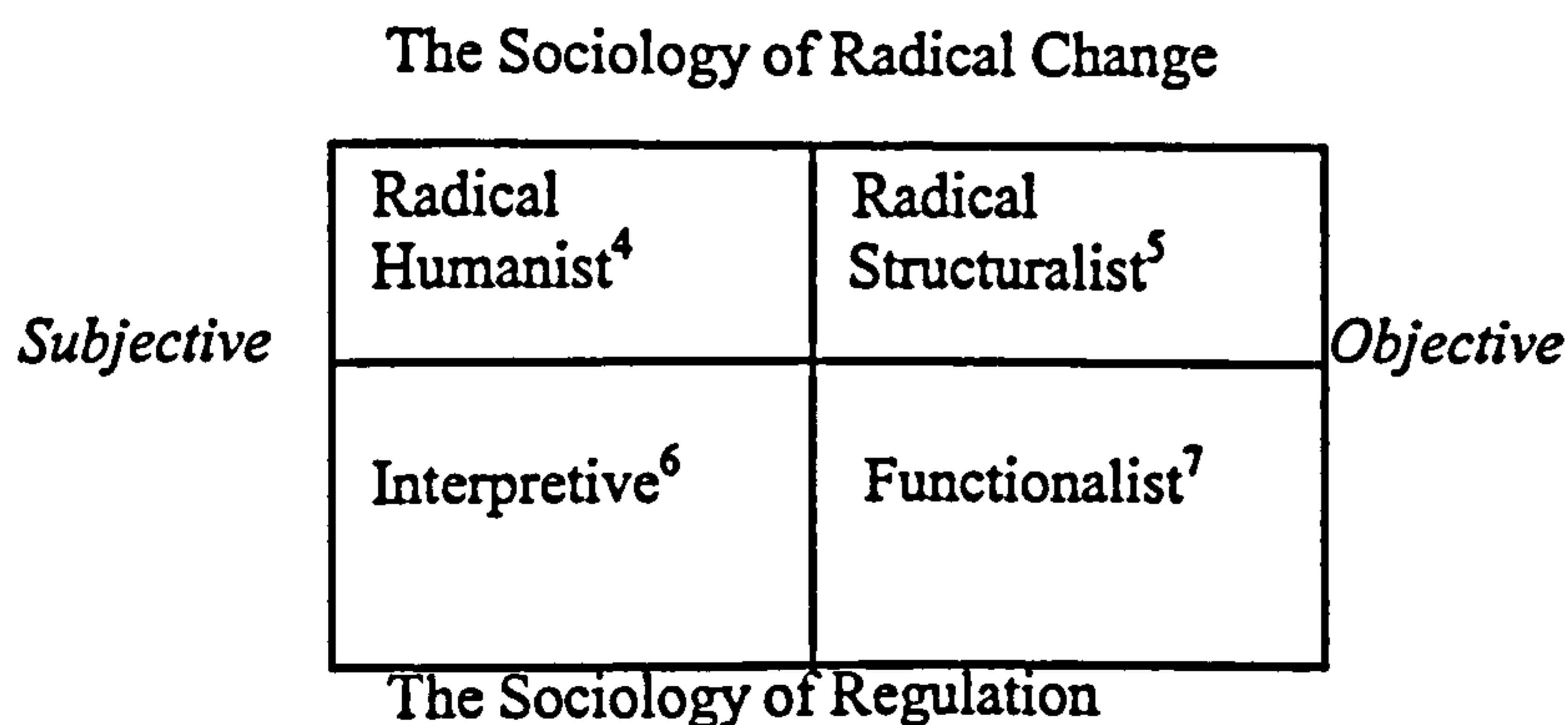
Hindess (1977 : 16) also argues that methodology lays down procedures to be used in the generation or in the testing of propositions by those who wish to obtain valid knowledge. These procedures, Parsons (1966 : 23) notes 'are justified by means of philosophical arguments. It is clear that methodology's claim to prescribe correct procedures to the sciences must presuppose a form of knowledge which is in some sense superior to that produced in the sciences'. Therefore a methodology is the product of philosophy³ and sciences are the realisation of their methodology.

2.1.1 Sociological 'Paradigms'

Burrell and Morgan's (1979) classification of sociological paradigms, I would say, is a very good way of exploring the foundations of the social theory. If a researcher is eager to carry out an investigation in the social sciences world, most probably his or her actions could be further justified in one of their given paradigms; *the functionalist, interpretive, radical structuralist and radical humanist* (as indicated in Figure 2.1), and according to the assumptions these theories make about the nature of society.

In the figure we can also see the two dimensions of those approaches, the *subjective* and *objective extremes* and the *extremes of striving for radical change* and *maintaining the status quo*.

Figure 2.1 Four paradigms for analysis of social theory



(From Burrell and Morgan 1979 : 22)

The reason why I am referring to this special categorisation is to give the reader a deeper understanding of where this thesis is heading in revealing its several findings. It is very important, as will also be explained later, to identify and justify the line of

investigation that I have adopted for collecting my data.

By classifying the BPR notion into one of these social paradigms - given to us by Burrell and Morgan (1979) - clearer paths of investigation and analysis of the concept will be imposed. Revealing the BPR literature allows different interpretations to be presented, analysed and criticised; since I adopt this subjective approach for the research purposes of this thesis, it can be clearly seen that I am working in a scenario that fits in the interpretive paradigm. This approach will also indicate how knowledge was acquired in order to shape this process of findings.

In addition to that I believe that this initiative will be the vehicle in aiding this research in introducing what needs to be done to fill in the gap we face today regarding the BPR (e.g., human aspects – enhancing employees' competencies by further knowledge and training etc.)

Clearly, an analysis of texts can be done in a functionalist manner (for example, considering how many words of a particular type are used and how regularly, as opposed to others of another type, in a particular text); but for this specific research I believe a greater amount of information can be revealed if we think in interpretivist terms when analysing and exploring the work of a number of contributors who deal with the concept of BPR.

It is possible that until now researchers have been looking at BPR in terms of the functionalist paradigm and it might be argued that this could account for how the concept is developing. If we look at it from another paradigm (I suggest the interpretive paradigm) then it might be possible to identify what is missing from BPR to account for its failures (e.g., human aspects – enhancing employees' competencies by further knowledge and training, etc.).

This part is followed by the research methodology employed for the fulfillment of the objectives of this research.

2.2 Research Methodology Strategies and Techniques

A Documentary Review approach has been adopted in order to collect my data for the

completion of this thesis. An extensive overview of the major publications on the reengineering topic made it possible. According to Punch (1998 : 190) 'documents, both historical and contemporary, are rich source of data for social research'. The same author also notes that our society has a distinguishing feature which is 'the vast array of documentary evidence, which is routinely compiled and retained, yet much of this is neglected by researchers, perhaps because of the collection of other sorts of social data (experiments, surveys, interventions, observations) has become more fashionable'. This phenomenon he considers 'ironic', a view that I find myself agreeing with, 'since the development of social science depended greatly on documentary research' (McDonald and Tipton 1996 : 187). A couple of examples that justify the above can be found in sociology. Marx, Durkheim and Weber worked primarily from documents; similarly, the work of the Chicago School of Sociology was often based on written documents (Hammersley and Atkinson 1995 : 158). Documentary sources of data can also be used in various ways when analysing social research. Punch (1998 : 190) explores that further and he says that 'some studies might depend entirely on documentary data, with such data the focus in their own right (here I see this thesis sharing this way of researching in the social field); and others that may be collected in conjunction with interviews and observations'. Therefore, depending on the shape of the research, the analyst selects the most appropriate way for carrying out the objectives previously set for it.

My research strategy also covers the concepts of *Descriptive*⁸, *Explanatory* and *Exploratory* (these will be explained further at a later stage in this part) (Dubin 1978 : 87) research which allows further findings to emerge. This descriptive mode will allow this research to unfold by presenting what has been said about BPR while examining the major contributors' work concerning this notion.

Elements such as *stating the characteristics* of those contributors' work will enable me as a researcher to explain in the best possible way what BPR is - or at least, what it is perceived to be - and point out where else we might need to give more emphasis in order to make this notion more advanced for further usage.

This combination of descriptive, explanatory and exploratory techniques initiates a creative, interdisciplinary⁹ (*allows the use of several disciplines the same time*) and

complementary¹⁰ (*it puts those disciplines together to create a whole*) style while writing this thesis and also adds value to my research along the lines of the interpretivistic paradigm in which I am working.

Klein (1990) further discusses this synthesis of ideas with several backgrounds in her book *Interdisciplinary: History, Theory and Practice*. I believe it will be useful and enlightening to support this study's combination of techniques with what she has to say about interdisciplinarity and integrativity.¹¹

Julie Thomson Klein provides 'an excellent analysis of the nature, history and problems of interdisciplinary research and practice, something which reveals important insights to social scientists' (Bahm 1992 : 193). She begins by a history of the evolution of interdisciplinarity as a problem of knowledge. Klein cites Plato as 'the first to advocate philosophy as a unified science' (1990 : 18). Her examinations include the Mediaeval trivium and quadrivium, modern Wissenschaft, the International Encyclopaedia of Unified Science, area studies, the Foundation of Integrative Studies, the Organisation of Economic Cooperation and Development, Marxism, Structuralism, Information theory, Systems theory, Operations research and Chaos theory.

According to Klein, recent *restructuring of knowledge*, resulting from new divisions of intellectual labour, collaborative research, team teaching, hybrid fields, comparative studies, increased borrowing across disciplines, and a variety of unified, holistic perspectives, has created a *profound epistemological crisis* (1990 : 11). All are interdisciplinary, involving ideas of unity and synthesis, and a common epistemology. By exploring 'a variety of historical sociological, economic, political and philosophical insights', Klein surveys a 'wide confusion' of concepts among scholars, observes 'a need of synthesis' in scholarship and states that in her current book tries to deal and provide that synthesis (1990 : 14). Klein asserts that interdisciplinarity 'is neither a subject matter of body of content. It has a process for achieving and integrative synthesis' (1990 : 188). She provides an ideal model involving stages in methods of process and regards such a process as somewhat dialectical.

Two questions may be raised concerning the terms *content* and *world view*. When any integrative process is complete, at any stage or at many stages, the achieved 'answers' (reference to the final stage of Klein's model) become 'subject matter and content'. Although problems regarding successful integrations may not yet have become bothersome to theorists, surely the concept of interdisciplinarity should include such answers as content. Klein uses the terms *interdisciplinary* and *integrative* interchangeably. Yet, what has become integrated also remains interdisciplinary.

Klein's concluding emphases focuses on the *interdisciplinary individual* rather than *an interdisciplinary world view*, though she regards 'disclosing the concealed reality of interdisciplinarity as one of the five tasks of utmost importance' (1990 : 195/196). Alas, different disciplines often presuppose widely different worldviews, especially for example those basic to differing civilisations (e.g., Bahm, *Comparative Philosophy: Western, Indian and Chinese Philosophies Compared*, 1977). It is a function of interdisciplinary process to synthesise such differences. This *synthesis* or *organisis* is the 'concealed reality of interdisciplinarity'.

When an 'answer' has been arrived at, its nature includes this organisis of both. It then needs to be understood by analysis, synthesis and organisis. Granted, when two or more disciplines are integrated, the process is synthetic. Analysis and organisis serve the understanding of persisting interdisciplinarity also. Bahm (1992) also notes that Klein's epistemological crisis exists because logicians and epistemologists are not yet familiar with the nature of existing things as organisms. The wholes and parts of things constantly dynamically interact dialectically. The nature of dialectical processes is still foreign to scientists presupposing that 'if it cannot be measured it does not exist'; Klein, he continues, 'is correct in asserting that interdisciplinary synthesis is in many respects a dialectical process' (Bahm 1992 : 194).

In the light of these introductory remarks on integration and interdisciplinarity, it would also be beneficial to consider the experiences of a practical example given by McDonald¹² (1997) regarding these issues when dealing with Social Sciences and Humanities.

In 1989, the Social Sciences and Humanities Research Council of Canada (SSHRC)

established a strategic research theme on applied ethics - a theme which has been characterised by its welcome emphasis on integration of theory and practice and academic interdisciplinarity as central to applied ethics generally and business and professional ethics specifically. The team supporting this initiative recognised the need for interdisciplinary expertise and it was sensitive to, and aware of the diverse research perspectives and methodologies represented on the team.

A number of universities and other organisations took part presenting projects in competitions for further funding by the SSHRC. The categories were bioethics, business and environmental ethics (Applied Ethics Programmes). In the six competitions on that theme for research funding, bioethics has received more support than other eras of applied ethics, including business ethics.

Nonetheless, McDonald argues that 'research business and professional ethics has made significant strides over the past few years and that specific theme in applied ethics has fostered integration and interdisciplinarity' (1997 : 635/642). These were initiated by the number of sources of data put together by the team. For example *electronic mail* was the major medium to challenge creatively the data gathered and distributed. In addition to that we see '*Forums- by invitation only*' created a network for further integration (McDonald 1997).

The above examples indicate that in comparative analysis, characteristics of synthesis lead to integration of ideas. Thus, this integrative style of writing can also enable the number of BPR ideas that exist to be put together and to be further analysed and examined.

2.2.1 Documentary Review Approach and Comparative Analysis

(includes the preliminary methodological conceptual framework for this research)

In order for this thesis to meet one of its overall objectives, which is to redefine BPR as a holistic activity, a set of special strategies will be applied. An overview of the major publications on the topic ['Documentary Review' as Price (1965), Dubin (1978), May (1993) and Ragin (1994) would call it], will be applied for the analysis of the BPR literature. The reader can also see an integration of the issues taking place,

in order to present a holistic approach when examining the notion.

The major players here that influenced my thinking are Price (1965), Golembiewski (1969), Kast and Rosenzweig (1970), Dubin (1978), Morgan (1983), May (1993) and Ragin (1994). For example, Morgan (1983) presents a collection of diverse papers directed towards social research. In his own introductory paper, he interprets the research process as involving ‘...choice between modes and engagement entailing different relationships between theory and method, concept and object, and researcher and researched, rather than simply a choice about method alone’ (Morgan 1983 : 19-20). Studying Morgan (1983) was helpful in clarifying the research strategy. For further clarification of the overall process, though, I aimed at Golembiewski’s suggested technique (1969). Golembiewski was a social scientist with special interest in political science. In his book *‘Methodological Primer for Political Scientists’* (1969) he indicates that the comparative technique involves defining and contrasting to other positions. Its rationale is supported by several points which represent the justification of undertaking such an approach in the interpretive - hermeneutics¹³ paradigm.

Under the title of conceptual focus and locus (what and where is comparative analysis) Golembiewski states that it is ‘a single, broad - gauged approach, which by definition represents the basis of all theory building’ (1969 : 230). It provides the elements of listing, explaining and comparing sets of phenomena that will enable the author to criticise constructively and to draw conclusions and relate them to further scientific activity.

The way this constructive sequence of events will be achieved is by applying a strategy further named documentary review, which will allow for data to be collected and analysed thoroughly.

The rationale for this position has merit and I shall cite several points Golembiewski makes to support it; firstly Golembiewski notes that, ‘comparison is the basis of understanding the phenomena around’ (1969 : 231). In other words, we give similar labels to phenomena that we think are similar in certain ways and then we evaluate elements by comparing. Secondly he suggests that, ‘the process of classification,

should rely on that identification of similarities and differences amongst relevant sets of phenomena' (1969 : 231). As a third step it is recommended that we should be aware that comparison *is a crucial concomitant of induction*. 'The fruitfulness of any generalisation for future investigation is closely related to the breadth of the parent sample of observations and to the degree to which these are couched in comparable terms' (1969 : 231). And lastly, 'after observable propositions have been deducted general statements, the process of verification must make use of comparative replications' (Golembiewski 1969 : 231).

In short, comparative analysis is a crucial component at every step in the process of understanding how theoretical concepts have been created. To support the point further, we can take a look at how Kast and Rosenzweig (1970) reflected on this issue. To *compare* they say, means 'to examine in order to observe or discover similarities or differences. We are all continually involved in simplified comparative analysis of organisations. For example, a student investigates a number of institutions' (1970 : 496). For organisation theorists and practising managers, though, comparative analysis is much more comprehensive and several key questions are involved: 'what characteristics or dimensions should be used in the analysis?' or 'how do we obtain information relevant for comparative purposes?' (1970 : 497).

In general, the answer given by these particular authors *'depends on the purpose of the analyst'*. In other words, it depends on the aims or objectives of the study undertaken. Thus, they continue, 'appropriate analysis includes information (however obtained) on whatever dimensions seem useful in gaining a better understanding of relevant organisational scenarios' (1970 : 497).

At this point one might question the importance of this type of analysis. The 'what is done' and 'how can it be done' questions were briefly discussed above. It is also useful to consider the 'why' of comparative analysis. What does it contribute to organisation theory and management practice (in general)? For Kast and Rosenzweig, there are two main themes that stand out: (i) understanding and (ii) application. They suggest that *'when dealing with complex affairs (in this case I might say BPR), to 'understand' means to be able to describe and explain what is 'happening' - including how variables are related, what causes what, and the relative importance of*

the various forces involved' (1970 : 499).

Consequently, by exploring and comparing the current status of BPR, the differences and the similarities between the different authors' publications will be revealed, with the ultimate aim of injecting or pointing out other categories of thought that might be useful for further development of the notion itself.

This research strategy also enables me as an author to direct future research, since it should yield a maximum amount of new information.

The integrative technique, as argued by Cooper (1987) is

'a tool of reviewing and summarising past research by drawing overall conclusions from many separate studies that are believed to address related or identical phenomena. The integrative reviewer hopes to present the state of knowledge concerning the relation(s) of interest and to highlight important issues that research has left unresolved' (Cooper 1987 : 11).

Cooper here adds value to what he is saying by making a reference to Price (1965) who says that,

'from the reader's view-point, an integrative research review is intended to replace those earlier papers that have been lost from sight behind the research front and to direct future research so that it yields a maximum amount of new information' (Price 1965 : 513).

Using a documentary approach, I believe, stimulates comparison amongst the elements analysed and gives to the research a systemic lense to view the BPR topic.

May (1993) sees documentary research as a 'becoming more popular method of research which, alongside others yields valuable insight into social and political life' (1993 : 150). He adds that these sources of interpreted events and their recording in relevant documents can be 'utilised in their own right' and that is 'for telling us a great deal about the way in which events are constructed at the time, the reasons employed, as well as providing materials upon which to have further research investigations' (May 1993 : 133).

I believe that in the social sciences field, researchers have a wide variety of documentary sources at their disposal; documents that inform their reader on political

and scientific developments in our society that reflect on our daily lives. Nevertheless, despite their importance for research purposes and in permitting a range of research designs, Hakim (1987 cited in May 1993 : 133) notes that this is one of the least explained research techniques in the literature. Why this should be so? May (1993) here briefly recalls Ken Plummer's (1990 : 149) response on the tendency people have towards empiricism, which leads to the neglect of the developments and usage of this technique; and as an antidote to these tendencies his 1990 book clarifies that social research has much to learn from these sources. I agree, and engaging in this thesis in data collection gathering via this approach, I believe, will be mostly beneficial. Another possibility here has to do with the method itself. Comparing this method with other methods available to the researcher for collecting data, documentary research according to Platt (1981a) 'is not clear cut and well-recognised category, like survey research or participant observation... . It can hardly be regarded as constituting as a method, since to say one will use documents is to say nothing about how one will use them' (1981a : 31).

The two reasons given above can also form two more points for criticism¹⁴ of this method (the non-use of empirical research when collecting the data and the fact that is not a clear-cut method). For the first point I would answer that, for this specific research it was not feasible to engage in an empirical research (see also the research avenues presented in the next part) and on the other hand, being an interpretivist, I see that in using empirical research the positivistic aspect allows for biased decisions to be taken. For the second criticism, my reply will be given via Scott's (1990) and May's (1993) dispositionings, which are presented below.

According to May (1993 : 134), 'the ambiguities and tension surrounding documentary research are changing as more researchers utilise documents due to increasing availability of data in modern information societies'. As such, researchers need to be aware of the documentary sources which may be used, as well as the ways in which they are used (and that also reflects on Platt's 'how' on the previous quotation).

Thus, I would like to consider myself as 'a researcher who belongs to this new category of researchers in the social sciences environment and that is by trying to

examine different perspectives and processes (despite the critique this method receives) within the BPR notion which will inform and advance the currently examined BPR literature (readings and application).

My sources for information when pursuing the collection of data for this thesis when using this type of technique include 'documents but also secondary sources such as people's accounts of incidents or periods in which they were involved' (May 1993 : 134). Also the internet, conference speeches, articles that have been published commenting on the BPR issue, along with published case studies dealing with how BPR is applied and perceived (such case studies will be used to validate my suggested guidelines, see also chapter 9). That is despite the fact that, according to the above author, there are many definitions of documents, which are narrow in scope (May 1993).

On the same matter John Scott (1990) gives a broader definition for research purposes which this thesis adapts and is worth quoting at length. This is because I see this definition as validating the sources of data this thesis uses for collecting its material for further examination. What will also be presented below is not just a definition but a 'justified' one, as May (1993) argues; a point we will come back after Scott's (1990) quotation.

'A document in its most general sense is a written text... . Writing is the making of symbols representing words, and involves the use of a pen, pencil, printing machine or other tool for inscribing the message on paper, parchment or some other material medium... . Similarly, the invention of magnetic and electronic means of storing and displaying text should encourage us to regard 'files' as 'documents' contained in computers and word processors as true documents. From this point of view, therefore, documents may be regarded as physically embodied texts, where the containment of the text is the primary purpose of the physical medium' (Scott 1990 : 12-13).

Going back to the comment made concerning this definition's justification we see a number of authors like Samuel (1982), Anderson et al. (1990), Plummer (1990) and Dex (1991) viewing debates, political speeches, administrative and government committee records and reports, the use of mass media, novels, plays, maps, drawings, books and personal documents such as biographies - autobiographies, diaries, oral histories (as latter used in work and life history analyses) being used as the sources of

documentary research; also the use of photographs (Scott 1990 : 13) to express or criticise different scenarios. This catalogue of sources makes Scott's book aim to recognise this diversity in documentary sources as a valuable feature of social research not surprising at all. This, I believe, provides the rationale for the procedure to be adopted for following the third line of investigation. In addition to the above, I see the documentary approach I have adopted for the collection of this thesis data as also providing this analysis with the means to be critical of the way the whole matter of BPR is approached. Michel Foucault (1984) once stated that conceptualising a documentary source and you approach it in a critical way is an action, which is not so concerned with the relationship between the author and the document but with what, is hidden in the text.

'It is a very familiar thesis that the task of criticism is not to bring out the work's relationship with the author, not to reconstruct through the text a thought or experience, but rather to analyse the work through its structure, its architecture, its intrinsic form, and the play of its internal relationships' (Foucault 1984 : 103).

I would agree with the above and I would say that yes, this is the critical approach I have adopted in exploring the BPR material involved, which enables me as a researcher to suggest ways of bettering what this thesis has already found to exist in the currently examined BPR literature, after analysing the material gathered. This is also something, which I believe is directly linked with the creativity and discovery aspects found when researching in the social sciences field. Strauss and Corbin for this matter state that,

'Creativity manifests itself in the ability of the researcher to aptly name categories; and also to let the mind wander and make the free associations that are necessary for generating stimulating questions, and for coming up with comparisons that led to discovery. The comparisons sensitise the researcher, enabling him or her to recognise potential categories and identify relevant conditions and consequences when they appear in the data' (1990 : 27).

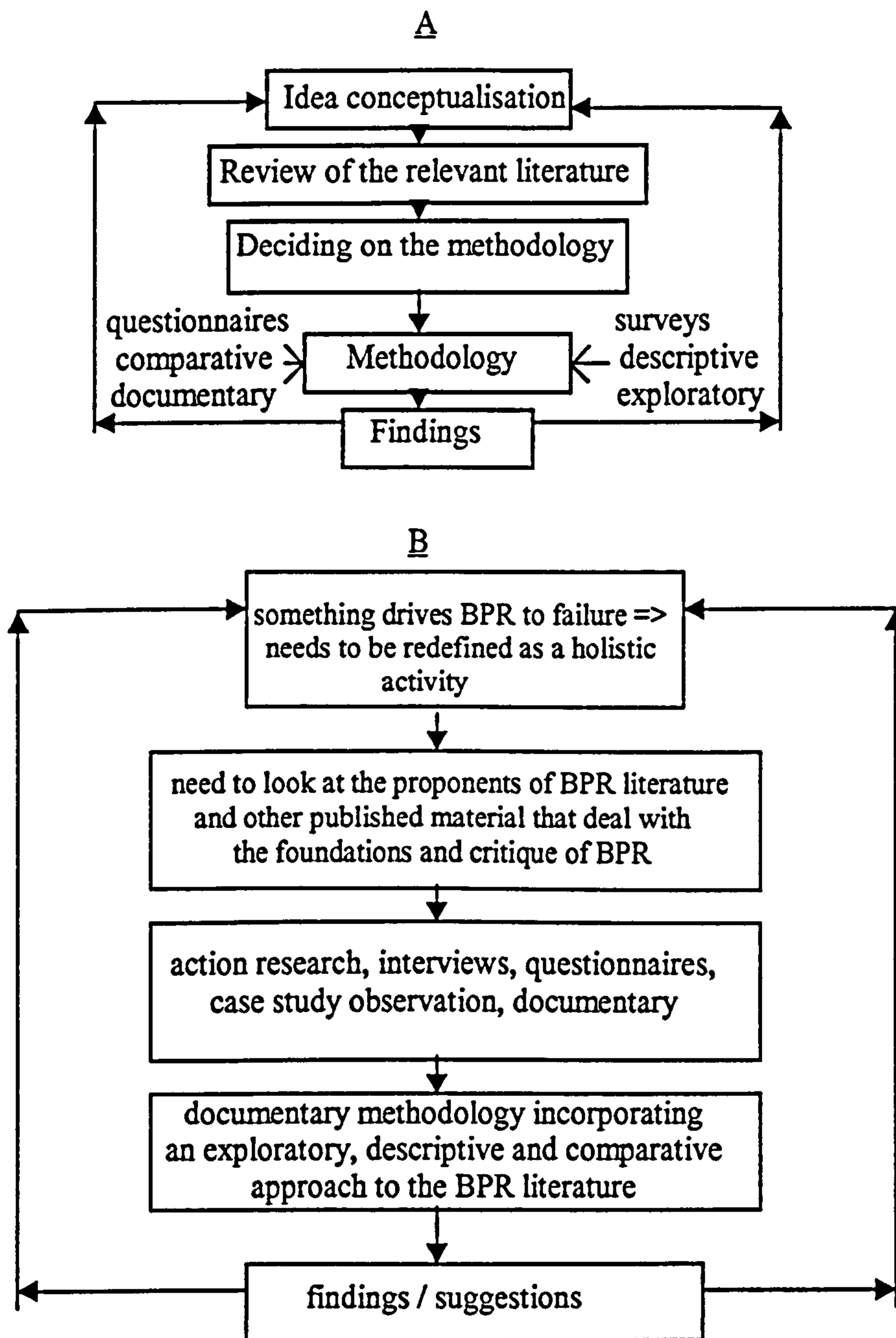
I see this particular research as in line with the above when analysing the data that have been collected for the making of this thesis, especially the part which refers *to the generation of stimulating questions*, something which the reader will clearly sense emerging when going through this BPR exploration. Of course, this is done to enable this author to recognise potential guidelines that the future BPR literature, its users

and practitioners, could consider for making the best out of the usage of the notion called BPR.

Next I will clarify how I will analyse the documents used for the exploration of the BPR notion. By choosing to be critical when exploring the BPR readings a 'qualitative documentary approach' was used (May 1993 : 145) and not a quantitative one (by saying qualitative I mean with no statistics involved). This can be explained because of the fact that there are no figures to analyse but a moderate number of documents that reflect on the literature side of the BPR notion. For this reason the employment of a comparative analysis technique was considered to be the most appropriate one, despite the fact that most of the times the latter is complemented or carried out with quantitative techniques - e.g., statistical records (Strauss and Corbin 1990, Ragin 1994). In many ways according to Ragin (1994 : 130), 'the comparative approach lies halfway between the qualitative¹⁵ approach and the quantitative¹⁶ approach'. Also, for this research's completion, I believe the utilisation of a descriptive, explanatory and exploratory modes could strengthen this thesis's analysis to achieve its ultimium aim; which is to explore, and critically analyse the aspects involved and to suggest ways of improving the current status of the BPR literature.

Overall, though, a framework like the one presented below has been used as a foundation for me to arrive at a conceptual framework of this thesis as shown in Figure 3.4, where the most appropriate methodology needed to be used to carry out the objectives of this thesis was identified (Figure 3.4 is a diagram which explicitly shows *how* the analysis of the relevant material was achieved, after following the third line of investigation discussed earlier).

Figure 2.2 Preliminary conceptual framework (this is where and how the methodology of this research was decided – A part let to B part)

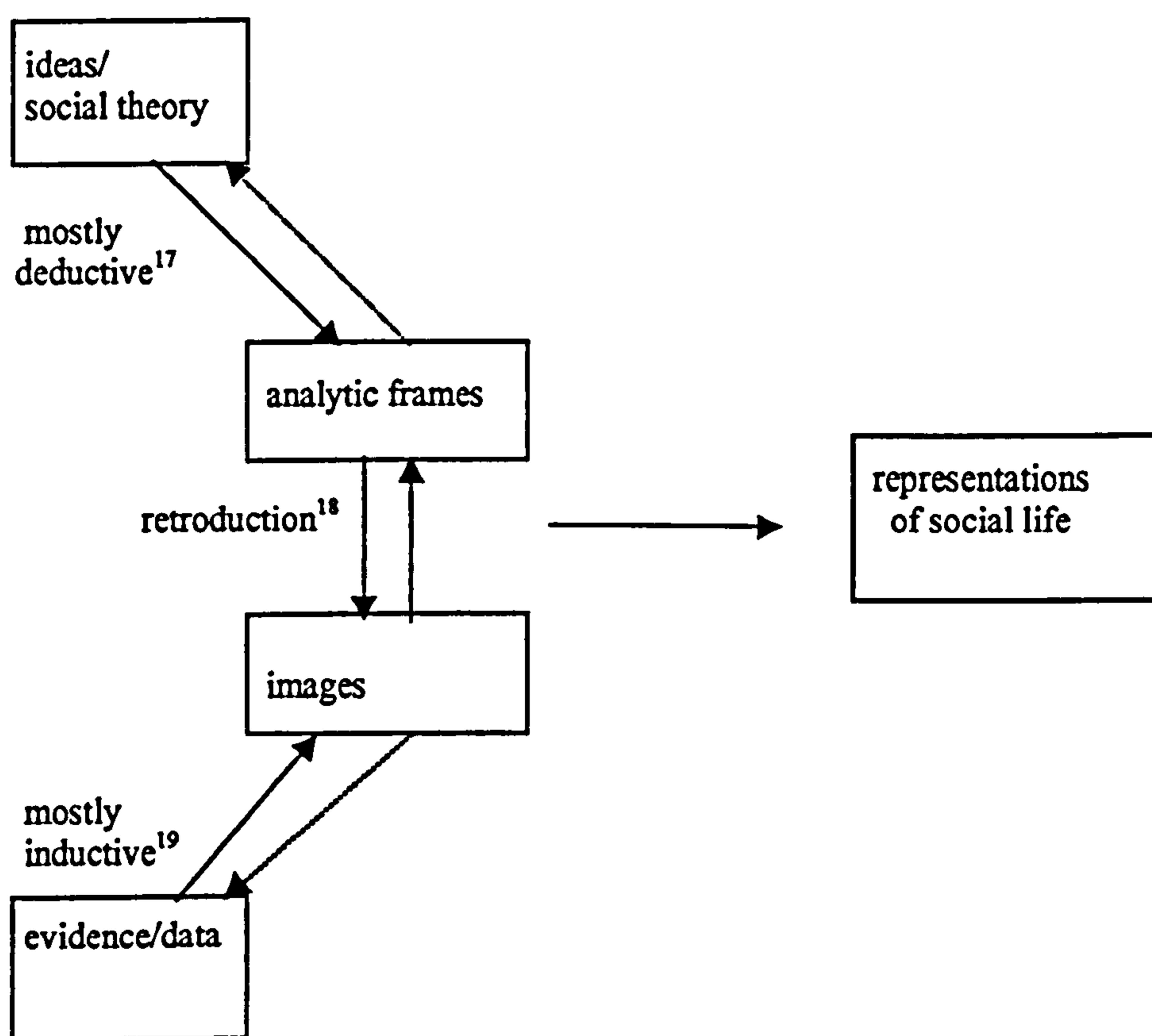


My decision to use the above type of methodological combination, I believe, will be advantageous for this thesis because its focus will be centrally on the *integration* and the *enlargement* of the common area emerging from the exploration and interlinking of the aspects under debate in this particular thesis (shown as the shaded area in Figure 3.4). Using the interpretive approach to investigate BPR will also allow for a critical analysis to unfold, to enable the reader of this thesis to view the notion of BPR

from a multi-diversified and systemic perspective. The ultimatum here is to reveal what is happening in the BPR literature which will enable this author to suggest ways (guidelines) of improving what is there.

Figure 2.2 is simply the way I have visualised the logic of this thesis. Ragin (1994 : 57) sketches a simple model of Social Research which I believe reinforces and further justifies the above preliminary conceptual designed framework of this particular thesis. Figure 2.3 shows the understanding of the process of social research that guides most of the researchers in this field.

Figure 2.3 A simple model of social research



(Ragin 1994 : 57)

The word *evidence*, according to Ragin, is the everyday term for what social scientists mean when they use the term 'data' (1994 : 57). *Ideas*, as seen, are at the top of the model and this is what social scientists call 'social theory' (1994 : 58). Researchers here draw on the pool of ideas when they decide on conducting a research, to help them make sense of the fields of their study. *Images* are seen to be built up from

evidence. These images suggest data collecting paths (1994 : 58/59). When the analytic frames part is enacted is

‘when most researchers approach the pool of ideas known as social theory and they have a specific research question or problem in hand. For example, a researcher might be interested in understanding why it is that people vote the way they do. What theoretical ideas (that is, ideas from the pool known as social theory) might help? Different ideas lead to different ways of framing and using evidence. Thus, analytic frames are fundamental to social research because they constitute ways of seeing’ (Ragin 1994 : 60-61).

By referring to this model (Figure 2.3) the reader of this thesis can see that ideas and evidence are everywhere and that different people construct representations of social life in different ways which require different kinds of regimen. I would like to see this thesis of mine as a unique piece of research which acquires and uses a special combination of methodological techniques and approaches, to achieve its objectives. From this, it should be apparent to the reader what a challenge this researcher is undertaking within the social sciences field.

For Ragin (1994 : 76) this challenge ‘can be met by building a dialogue of ideas and evidence -analytic frames and evidence - based images- into the process of social research’. As a result of this, and also because of the fact that the regimen of social research, the above author also argues, ‘demands both clear specification of the ideas that guide research and systemic examination of the evidence used to build images and representations’ (1994 : 76), this research’s proposed structure/text will start with an explanation and characterisation of BPR which will lead to the redefinition of BPR. It will then proceed with a presentation and evaluation of the founders of the literature under consideration on elements emerging from the redefinition of the notion. This evaluation will go to discuss its contribution to the social sciences and, in particular, to the management field, by reflecting on a number of cases which illustrate that what is suggested by this thesis is plausible.

This way of uncovering what BPR is was also chosen because it will be an opportunity to ‘tease out’ in a subjective manner what these writers have to say about BPR and to discover what the BPR process is all about. It will enable me as a researcher to review documents, see others’ critiques on these documents and identify the strengths and weaknesses of those references, along with any gaps that might exist

and need to be filled in.

I will seek to show whether a particular intervention should be called 'Business Process Reengineering' or whether it has simply been labelled as such in the usual management way of using buzz words that make our world more appealing.

For the present, though, the sub-parts that follow will concentrate on the methodological techniques used to accomplish that.

- *Comparative Analysis Technique*

The author of this thesis is very well aware of the existence of the range of methods that can be found in the social research field. Just to name a few, we can recall the official statistics, the use and design of questionnaires, the interviewing methods and processes, the method of participant observation (May 1993 : 51/65/91/111) which can be used to collect data. Despite the fact that all these are of great use to the social researcher (Strauss and Corbin 1990), it is my belief that for the third line of investigation of this thesis (described in the next part) and for carrying out this research's objectives, the most suitable methodology is a combination of the techniques mentioned above. These, as mentioned earlier, fall under the documentary research approach (May 1993 : 133) and the comparative research technique (1993 : 152) methodological categories of collecting and analysing data. Along with those, the reader of this thesis can also see that for the further support of the earlier methodological categories I have adopted a descriptive, explanatory and exploratory approach when dealing with the overall notion of BPR. This was because I felt that this combination could give this research the best possible and most subjective mode for presenting, analysing and exploring the aspects of BPR in depth, with the aim of advancing the understanding of the notion while redefining and providing a number of suggestions/guidelines that could improve the existing BPR literature and practice.

Mostly, though, I have used the comparative technique because of what Ragin (1994) has said about 'the goals' of the comparative type of research; a type of research that emphasises diversity, interpretation of cultural or historical significance, and for advancing the theory (1994 : 108)- something which is also reflected in a number of

elements that this research stresses. Ragin's (1994) reading was mostly used here to justify the use of such a technique and also to emphasise its importance to this research. It was also used because Ragin is one of the few social scientists that I found to cover this technique extensively in such a depth. To support what has just been said, let us recall May's (1993) reading in which, at chapter nine of his book he discusses the comparative research technique, its potential and problems and he states that,

'comparative research is an evolving topic, and despite the fact that relevant materials are often contained in journals and works on comparative politics, sociology and social policy, its place in social research rarely appears in introductory texts' (May 1993 : 152).

Prior to further reference to the above stated goals, let us see what the comparative analysis mode does and how this thesis identifies and incorporates its writings with this technique.

'Comparative researchers examine patterns of similarities and differences across a number of cases. Like qualitative researchers, comparative researchers consider how the different parts of each case -those aspects that are relevant to the investigation- fit together; they try to make sense of each case. Thus, knowledge of cases is considered as an important goal of comparative research, independent of any other goal' (Ragin 1994 : 105).

If I was to correlate the above with what this thesis will be doing throughout its analysis I would say that the 'number of cases' described above reflect on number of core publications that I present and examine. Following that, we see the way the aspects of those cases (in my case the publications - relevant documents) investigated fit together and interact to provide knowledge to the reader. This can be in line with how I examined and analysed the elements of this thesis - presented in Figure 2.4. This is where a number of publications are shown that will be used for this thesis' critical analysis (why these were chosen will be discussed at a later stage of this analysis-see also chapter 3) and on what aspects these will be examined (e.g., Timing, HR element etc.).

Figure 2.4 Graphical representation for constructing a field of comparative analysis with the ultimate objective the identification of similarities and differences amongst the major BPR contributors

	Hammer, Hammer & Champy (1990, 93)	Davenport, Davenport & Short (1993, 95, 90)	Johansson et al. (1993)	Morris & Brandon (1993)	Jacobson (1995)	Armistead & Rowland (1996)
CRITICAL FACTORS						
Process Thinking						
Radical Thinking						
Role of Information Technology						
Role of Humans In the process						
Principles & Methodological Guidance						
Culture						

- *Subject to any changes while the research is in progress*
- *The empty box indicates the link (if there is any) of the factors I believe have great impact in identifying the common ground – differences and similarities of the authors' publications that refer to this specific notion*
- *The authors stated here are not the only ones used but a number of others - this is just an indication how the analysis was constructed*

In structuring the analysis in the way presented in Figure 2.4 and as stated in the definition given by Ragin (1994 : 105) earlier, I will try and *make sense* of what each

of the author's readings examined indicates, always in accordance with the aspects studied (shown in the left column of the figure); to understand further the notion of BPR.

There are many types of comparative research (see Skocpol 1984, Tilly 1984) but what Ragin (1987) states here, I find useful and will be using for the analysis of this research; this is 'the distinctiveness of the comparative approach which is clearest in studies that focus on diversity' (cited in Ragin 1994 : 105). This was mentioned because I believe that when studying the BPR notion, this is exactly what the researcher has to deal with; diversity of opinion of the aspects revealed in the above figure, diversity on the implementation of those, diversity on the conceptual approach of the notion found in the readings examined. To explain this diversity, a comparative researcher would first group the cases that reflect on the same topic. Next, the investigator would look for patterns of similarities and differences amongst those cases and that is to receive an outcome (Ragin 1994). This is exactly how this thesis has been structured to do (refer to Figure 2.4).

In order for this thesis to achieve the above, though, I have also reflected on the goals that comparative research offers to the researcher and I have identified the initial objectives of this thesis mostly with the first goal of comparative research which, as seen above, has to do with the exploration of diversity on a particular matter (BPR). Explaining the above a bit further, the three goals seen in Ragin's (1994 : 108-102) reading, have to do with (i) exploring diversity - the comparative approach is better suited for addressing patterns that separate cases into different subgroups (1994 : 108) (refer also to Figure 2.4). The same author also states that this goal is important because people, social scientists included, sometimes have trouble seeing the trees for the forest (1994 : 109). And, if I may add, this is one of the reasons why I was intrigued to carry out this specific BPR investigation. (ii) The second goal of this comparative technique is to interpret the significance of the area studied within the field which is studied; the same author here sees comparative researches 'to focus explicitly on patterns of similarities and differences across a range of cases' (1994 : 109). This type of goal category makes the comparative strategy well suited for the goal of interpreting significant phenomena and also presents a 'revolution' to the status-quo (1994 : 110).

'Some revolutions simply change those who are in power or alter other political arrangements without implementing any major changes in society (e.g., Marcos Ferdinand of Philippines was overthrown), other revolutions, by contrast bring with them regimes that seek to alter society fundamentally (e.g., Kings are beheaded). By differentiating social revolutions (massive upheavals of society) from all other forms, researchers provide important tools for understanding and interpreting these massive social transformations' (Ragin 1994 : 10/11).

I would like to believe that my thesis simply will at least influence (not to say alter completely) the way future BPR supporters (whether in literature terms - reading, writing or in application terms) will think, write and use the BPR framework because at the present, it seems that it has a greater degree of failure than success (Hammer and Champy 1993, Jones 1996). I would also like to consider that this thesis could be the tool for understanding what is currently written in the major publications of BPR and how this tool can be of use towards the benefit of the future BPR reader/writer/practitioner.

The above leads us to the third goal of this type of technique and that is (iii) for advancing theory. 'Several basic features of the comparative approach make it a good strategy for advancing theory. These features include its use of flexible frames, its explicit focus on the causes of diversity, and its emphasis on the systematic analysis of similarities and differences in the effort to specify how diversity is patterned' (Ragin 1994 : 111). For this purpose I will be adding my own definition for advancing the current BPR status. I also see the above goal as a future opportunity for a follow-up of this current thesis (maybe for a number of other PhDs). I believe that in what will follow in the next chapters in the process of making sense while exploring the BPR notion, the reader will see a setting of different interlinked aspects each of which, in their own right, could make other individual PhDs; but due to the word limitations of this research, the elements revealed could not have been discussed in the depth this author might have wanted but, due to the above limitation, were kept as precise and as close to the objectives of this research as possible. As said above, this thesis' chapters, I believe can be used separately to make the basis for new research topics that could be further explored and could further advance the current BPR literature. Take, for instance, the element of 'Humans in relation to the activities of

the BPR initiative and how that affects the participants and vice-versa'. By taking into consideration the suggestions this thesis makes in the human element chapter, the future researcher can expand on those and overall take the BPR notion a step further by contributing further on this matter. Thus, I would like to agree with what Ragin says when he states that 'in comparative research investigators usually initiate research with specific analytic frame, but these initial frames are open to revision' (1994 : 111). To further illustrate the above statement the reader can recall the Figures 2.4 and 3.4 of this thesis which indicate exactly that (the idea that are open to additional aspects to consider and also for modifications to the bettering of the overall BPR notion).

Therefore, based on the above three explained goals of the comparative technique, I believe that my decision to utilise the comparative technique to carry out this thesis objectives can be justified, despite the fact that this analysis does not refer to the sort of quantitative figures and cross-national statistical resources that are usually regarded as the basic tools for this technique (for further reference see Ragin's 1994 reading).

Prior to moving to the next sub part it would also be beneficial to acknowledge the fact that when using documentary data there is a need to evaluate it. Jupp (1996 : 303) suggests four key questions in doing so: its authenticity (whether it is original and genuine), its credibility (whether it is accurate), its representativeness (whether it is representative of totality of documents of its class and its meaning (what it is intended to say). Regarding the first two points, I would say that all the material this analysis is using is published in different forms (to name a few: books, articles, Internet sourcing etc.) to satisfy their authenticity and credibility. Now, based on the overall aim of this thesis, which is for BPR to be holistic, the documents (by this I mean all secondary sources used for the construction of the analysis in this thesis) I refer to, intend to relate to that. With reference to Figure 2.4 the reader can see the areas that are covered. Thus, in thinking along those lines I have created the right prerequisites for the satisfaction of the 'meaning' criterion.

As far as the 'representativeness' of the sources used is concerned, I have carried out a small-scale empirical research that justifies my decision to draw heavily on 6-7 major BPR authors' publications. Practically, I was looking for publications that had

BPR original thoughts expressed in them. Therefore my list become shorter and more specific in those terms, as I examined the material of the proponents of BPR. These are Hammer (1990), Davenport and Short (1990), Hammer and Champy (1993), Johansson et al. (1993), Davenport (1993), Morris and Brandon (1993), Davenport (1995), Armistead and Rowland (1996). For achieving my goal, I used the BIDS ISI Data Services for Citation Display (BIDS Citation Index, 1998). The results showed that Hammer (1990) was cited 225 times; Hammer and Champy (1993) were cited 420 times; Johansson et al. (1993) cited 39 times; Davenport and Short (1990) 126 times; Davenport (1993) was cited 166 times and Davenport (1995) 23 times. Other authors' publications were cited to a lesser degree, for instance Morris and Brandon (1993) were cited 10 times and Armistead and Rowland (1996) 6 times.

The next sub-part refers to the enabling multi-approach to this comparative methodological technique, which has been adopted to carry out this thesis' major objectives. This is the descriptive, explanatory and exploratory approach to research.

- *Descriptive, Explanatory and Exploratory Approach*

If I were to compare this process of critical evaluation of a number of documents for this thesis with the process of understanding a scenario and then building subsequent theory, I would say the two are identical in many respects, apart from the end product.

As Dubin (1978 : 87) suggests, for a solid theoretical background to be build, adequate description is needed. The same is true in my case. A good way of achieving that is by applying a descriptive strategy regarding the review of the existing literature. One might also challenge Dubin's application approach here in relation to my work; and that is by wondering whether Dubin's proposal refers to the observation of practice rather to a description of published work (or vice-versa). To clarify things, I shall mention that Dubin does not specify this particular point but he explicitly refers to the idea of 'every discipline' and the idea of the 'stuff of which the mind of man, the theorist develops' (Dubin 1978). Therefore I take it as applicable to any type of research which can reveal information (whether that is directly or indirectly linked with practical application) that is 'adequate for description' and can be used further as means of comparison in this BPR concept analysis.

Dubin further argues that in every discipline, but particularly in its early stages of development,

‘purely descriptive research is indispensable. Descriptive research is the stuff out of which the mind of man, the theorist, develops the units that compose his theories. The very essence of description is to name the properties of less and still have description. [In other words to simplify and still have an adequate descriptive scenario]. The more adequate the description, the greater is the likelihood that the units derived from the description will be useful in subsequent theory building’ (Dubin 1978 : 87).

In the reengineering scenario - yes this is a necessity, if we, the researchers want a deeper understanding of the principles underlining this field of study.

Although Dubin places great emphasis on adequate description and initiates a critique of the scenario on which the research is built, he does not provide the element of comparing the several authors reviewed. Therefore, Golembiewski’s technique (1969) will be implemented to carry out that task. To reach that stage, though, where the research is able to present, explore, analyse and compare the material of the relevant documents, I have drawn upon Burrell and Morgan’s (1979) classification of sociological paradigms (shown in the first part of this chapter).

This part aimed to present to the reader the research methodology and techniques adapted for collecting data for the completion of this thesis. A documentary review approach and a comparative analysis were the methodological combination chosen to carry out the objectives of this thesis. The presentation of the reasoning, by which these were chosen, fulfils the first objective of this chapter.

This part is followed by a discussion of the lines of investigation that I have considered for the completion of this thesis.

2.3 How to achieve my thesis objective [Saunders and Lewis (1997) framework of techniques] / Lines of Investigation - Exploring Research Avenues

In order to illustrate the possible routes for further research, the framework of Saunders and Lewis (1997) will be used. Since this section deals with an essentially ‘*personal research journey*’, it is written in the first person.

Although my preliminary aim was to show that a reengineering activity needs to be holistic when changing the organisation, I will use Saunders and Lewis framework (1997) to help to explain why I reached the decision to pursue an analysis of the major literature regarding the BPR notion (which does not preclude the possibility of achieving the aim of generating guidelines).

Saunders and Lewis argued that for 'novice researchers who have not been given an initial problem it is important that general research methods textbooks provide accounts which contain sufficient detail to enable techniques to be understood and applied' (1997 : 286). In order to solve this significant problem they provide us with a framework which they constructed through their analysis of a number of general management and business research oriented textbooks. Some contributions to Saunders' and Lewis' findings emerged from the work of Bryman (1988), Gill and Johnson (1991), Jankowicz (1995), Raimond (1993), Smith (1991) and Smith and Dainty (1991).

According to Saunders and Lewis (1997) there is a range of techniques that would enable a researcher to select a research idea. These can be categorised as logical or intuitive²⁰ techniques. The first category, the logical category, 'includes more established methods of finding and selecting a research idea' (1997 : 287). Here researchers are looking at their own strengths - e.g., assignment marks and past projects - to visualise their ideas. It could also be the case that researchers search for themes from published articles and other journals. Extensive discussion with their tutor/s about their perception of ideas and also discussion with their colleagues is another fruitful suggested route, which incidentally proved to be of great significance to my own identification and selection of a research idea.

Alternatively, if the researcher decides to get involved in a real life project, it is suggested that he/she should beforehand make sure that he/she talks to practitioners - the professionals or even recipients (clients) of such activity for obtaining any ideas. This was a second line of enquiry for my own research.

Moving to the second category, the *intuitive category* of techniques, by definition we

see that the relevant techniques under this heading are possessed of immediate insights which allow researchers to use them in conjunction with the more logical techniques in order to gain as much as possible in the *idea selection path* (Saunders and Lewis 1997) they are in. This category reveals techniques such as the exploring of likes and dislikes, using past projects, brainstorming, personal records of ideas, professional relationships, attributes, listing of past events etc.

In my preliminary investigations of BPR I combined the two groups of techniques. And of course to do that, the researcher's heart, as well as head, should be in the project (Raimond 1993). Using Saunders and Lewis' framework of techniques, it is possible to set out the avenues already explored in trying to find out what BPR is, and to provide a critical commentary on the experiences gained in pursuing the various lines of inquiry (see Table 2.1).

Table 2.1

Logical and intuitive techniques for finding and selecting a research idea

<u>Logical Techniques</u>	<u>Athanasίου</u>
Looking at own strengths (e.g. assignment marks)	Y
Looking at past projects	Y/(y)
Searching for themes from articles in journals	Y
Discussion with tutor	Y
Pursuing a nascent idea	Y
Talking to practitioners/professionals/clients	Y
Discussion with colleagues	(y)
<u>Intuitive Techniques</u>	
Exploring likes and dislikes using past projects	Y
Brainstorming	Y
Triads	-
I Ching	-
The pendulum	-
Keeping a notebook of ideas	Y
Relevance trees	(y)
Morphological analysis	(y)
Forced relationships	(y)
Attribute listing	Y

Y: - technique discussed in sufficient detail to use it.

(y) : - technique just mentioned in context of topic identification.

(Adopted from Saunders and Lewis 1997 : 286)

Whilst revealing the path that I followed, it would be an omission not to mention and consider along the same lines, the notion of *political psychology*²¹, which played a tremendous role in surfacing my research direction. It has been said that ‘in important social problems, psychological and political phenomena are viewed as interacting’ (Hermann 1986 : 3). Since BPR seeks to address key organisational problems, it should not be surprising to reveal that efforts to get involved in real BPR projects were met with political manoeuvres.

2.3.1 Applying Saunders and Lewis

My interest in BPR was stimulated while studying for my MBA at Hull University. One of the modules I took was called ‘Creative Problem Solving’ and this is where I heard about Reengineering for the first time. Since then I have been pursuing research to find out more about this theme. As stated earlier, it intrigued me because of the creativity element it contains as a notion. These personal experiences fall into Saunders’ and Lewis’ categories of ‘looking at own strengths (e.g., assignments), looking at and exploring likes and dislikes using past projects’.

Following the initial stimulus, I had a few *brainstorming* sessions with my tutor and I visited Hull after the completion of my MBA to discuss further possibilities for a PhD with relevance to this issue. All the time I was consulting any publications I could, in order to enlighten my reengineering paradigm. Here, my thinking/activities reflect Saunders’ and Lewis’ categories of ‘discussions with tutor/s, searching for themes from articles and journals, and brainstorming’.

The exploratory techniques I was using included secondary data analysis and informal discussions with people with personal experience and knowledge in the field, which often may not be ‘much more’ than conversations as Zikmund (1993 : 79) has pointed out.

Once I commenced my PhD registration, I started to pursue a number of other lines of inquiry. I talked to a number of practitioners and conducted a more detailed literature and secondary data analysis (see App 2 - Table 3). With my supervisor’s agreement, I decided to proceed with developing the preliminary research idea that I had had,

which was to conduct a BPR intervention based on a model of BPR that I had constructed.

There were three main investigation options that I pursued. These were (i) a real life project intervention ('do it myself'), (ii) to evaluate interventions that have already been conducted and (iii) to evaluate critically what is being said about BPR by looking at core BPR contributors' publications.

2.3.2 'Do it myself' - Real Life Project Intervention

Reflecting on the first line of investigation I looked at my strengths, discussed my idea with colleagues, talked to a number of professionals and tried to create a network of relationships that would enable me to bring my idea into the pragmatic field.

As mentioned earlier, I had to involve others who might have been interested in undertaking a BPR intervention using the process I had previously devised. In January 1997 I attended a conference with a core theme - the BPR notion. It was a three-day conference, with numerous guests - academics from different universities in the UK, company representatives, and self-employed consultants. During my stay there I approached a number of interesting parties - amongst them a number of companies' BPR representatives. I discussed my idea with them and the representatives were not enthusiastic about it. The response of one company (if I can rephrase) was that due to the existing network, the individual to whom I was speaking would need to get permission to talk about what the company's plans were on that (I still cannot understand this; I was not asking for anything in particular but he seemed so scared to talk about anything). He kindly requested me to call him for a more definite answer after he had talked to his superiors; (I called him twice - he never replied and I also sent a letter in May - negative response). This alone suggests that BPR is some sort of 'political'²² process. *What politics is, with what does it relate and why is it occurring now*, were some of the questions governing my state of thinking at this time of the research.

Other companies' representatives, I noticed, were not willing to help me for two main reasons: (a) they were not fully trained or aware of what BPR is all about (lack of

knowledge); that was also why they had been sent to the conference by their companies and (b) they were not relaxed talking about the issue and its elements to a student like me, as evidenced by their hiding behind the standard label of confidentiality²³ - otherwise, a nice way of saying to me 'sorry, we cannot help you'.

The reader might well wonder why BPR was such a *sensitive* issue to talk about. I would say that this is due to the risk involved in engaging in such activity - a transformation which could turn around (or could send the organisation in the opposite direction?) an organisation based on uncertainty. I believe this sensitivity to talk about a BPR initiative illustrates what Andrew Pettigrew (1987) sees as a 'business strategy for creating a competitive advantage' (Pettigrew 1987 : 136). When analysing the impact of business strategy on a firm's performance, he suggests that we should have in mind three central issues:

- a. whether some strategies are generally more successful than others;
- b. whether the effectiveness of different strategies varies according to the competitive conditions in individual industry segments (strategy - environment fit);
- c. whether certain strategies may be more effective for some firms than for others (strategy resource fit) (Pettigrew 1987 : 136).

Since there is no guarantee of the success of any of the BPR ongoing projects, this may be an element discouraging people from even talking about it. There are also many other factors that the companies look at, like new technological advancements, the more general market competition and their people and they hope that this group of resources will back their strategic initiatives and make them happen. This organisational fit between strategy and competitive environment - company resources creates a 'cloud' of contrast, and antagonism in the market arena. And obviously, if a company is creating an environment where it has high expectations regarding its '*strategic intents*'²⁴ (Watson 1994 : 94) then it is not easy to give away and share its moves with its competitors (or even with a novice researcher like myself).

Another reason (these are my own speculations and answers to this secrecy around BPR) is related to the status and market share of the company involved in such a transformation activity. If the company is a leader in its own market field, a BPR

might be a movement of strategic intent (Watson 1994) for further market share establishment. On the other hand if it is a market follower, BPR might be the last option for survival. The companies involved can only give the answer to my questions, and the companies do not seem to be keen to reveal this type of information. Clearly, in these sorts of situations, secrecy and financial interests seem to be governing the field.

This problem of getting around a BPR project, or even collecting relevant information is a matter of political concern, which dominates today's organisational activities. This was a discovery for me. These 'political processes, which at this point are translated into economic values and organisational self-interest (shareholders and other parties) are the primary stimulus' (Chanlat 1996 : 713) for the prevention of information being given to outsiders about the organisation.

Taking into account the events of my *journey* and relating those to the idea of political psychology we can see that what I had discovered so far reflected how political phenomena interact with the psychology of someone or a group of people in the organisation. Hermann (1986) specifically says that:

'there is a growing recognition that such contextual factors help not only to shape what an individual is like but also to limit what an individual can do politically [e.g., in my BPR scenario the management and its decisions about strategies]. Thus individuals appear to be shaped and constrained differently in turbulent times [severe competition - fight for organisational survival] than in stable times, in autocratic regimes than in democratic regimes, in Japanese culture than in the American culture'²⁵ (Hermann 1986 : 3).

On the other hand, when I started talking to the academics attending the conference I received support for my idea. There were a number of professors with whom I had extensive discussions and who promised to facilitate my initiative. During that period I attended and gave a series of seminars on the BPR issue organised by Winchester College but, again, peoples' reaction was strange. To cut a long story short, the result was not that encouraging.

To conclude on the conference matter, I collected 20-25 business cards from the people attending and when I called them their answer was disappointing. Everyone was, in other words, saying that since I was a student, the confidentiality element was

an issue. I could not argue with that, despite my mentioning that it was possible to make my PhD thesis 'restricted' which meant the information contained in would not be accessible for a period of time, which would make it obsolete by the time it was available.

We reflected on the event and decided sometime in early May 1997 to write a letter to several major consultancy agencies who are practising BPR to see whether the line of investigation I was proposing could still be a fruitful one. Briefly, the letter set out my objectives and requested the possibility of getting involved in one of their BPR projects. A CV was also sent along with a letter from my supervisor (see Appendix 3, which also lists the companies approached). Prior to the arrival of my letter, I called those companies to ensure that the person to whom I addressed the letter would receive it and also to get a feeling of how they dealt with matters such as this one. After the replies came through, a profound feeling of depression marked my thinking. As Saunders and Lewis (1997) indicate, the typical immediate reaction is to abandon the idea. I was rather annoyed that I was receiving negative answers to my letter, but promises that when I finished this degree, it might be possible for me to join those companies' networking.

And here I am again trying to reflect on my actions and relate those to the answers I was receiving from the different directions from which I was asking for contribution to my work. Why isn't the notion of BPR something that people can freely talk about? Why is it considered a 'hot subject' and why are people so distanced when listening to others referring to it? What is hidden behind this concept? How could I explain the type of reaction I was getting? I am sure that in time I will be able to answer these questions and many more.

In contrast to the practitioners, the academics were eager and sharp concerning their thinking about BPR, but again, the only benefit I could get from them was their knowledge, published material, and other relevant references but not what I was after - my goal of pursuing a real life intervention. I realised it could not be a reality.

At this time I was trying to understand why I was facing such obstacles in getting involved in a project intervention. I now could say that a BPR programme for an

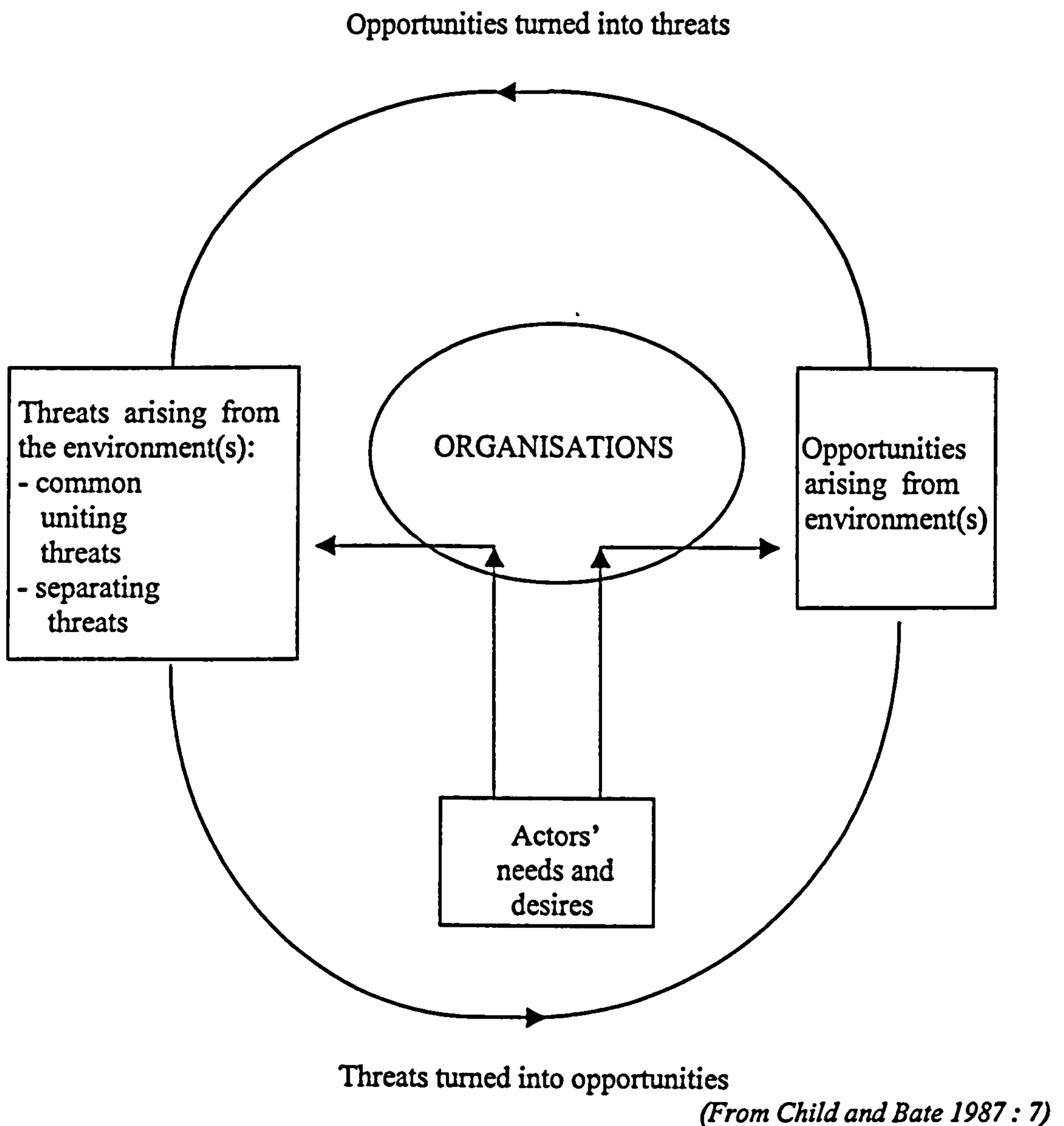
organisation to undertake could be largely an opportunity to solve any problems the organisation faces, or even better its market positioning. Unfortunately, though, for a great number of people that I had talked to, it seems that this opportunity in their minds was turned into a *threat*. Child and Bate (1987) when analysing in their book, *Organisation of Innovation*, the common problems caused by using the opportunities arising from the environment, further explain this.

Child and Bate (1987) see *knowledge*, especially in industrial societies, as the initiator that mobilises resources and reduces commodities (see Figure 2.5). This is what they say about it:

‘Knowledge as a commodity has a character, which creates an unending circle of innovation - competition. On the one hand, when actors exchange knowledge, the actor who gives does not lose his or her knowledge; thus the general knowledge - base enlarges quickly. On the other hand, new knowledge deriving from innovation, is very quickly communicated all over the world - all actors come to the same starting line again, and the unending circle goes on and on. The problem of innovation and diffusion of knowledge is thus a core concern for the temporary world’ (Child and Bate 1987 : 8).

Closely examining the Figure (2.5) below I could not agree more that this lack of awareness is one of the problems I faced in my selection idea process (Saunders and Lewis 1997). The lack of such knowledge as BPR at this stage seems to be a huge obstacle²⁶ in the dialogue process with the parties I conducted. Even after trying to analyse and explain the political and conceptual - educational phenomena I was faced with, someone could see that these factors had a heightening effect on my dialogue with these parties these two factors hardly gave any cause for optimism, but I kept trying.

Figure 2.5 Common problems and threats arising from organising



- *Methodological Implications*

If this line of investigation was going to be followed, then a special methodology needed to be adopted as well. A real life project intervention is driven and supported by a strong element of practicality and functionalism (Burrell and Morgan, 1979).

Also driven from the objectivity dimension of looking and examining social phenomena the functionalist paradigm has the most appropriate justification of such an intervention. This is because it is characterised by *order*²⁷, *consensus*²⁸, *social integration*²⁹, *solidarity*³⁰, *need satisfaction and actuality*³¹ (following Burrell and

Morgan 1979).

These can also be called the 'special' attributes that govern the functionalist paradigm. It is indeed relevant to mention and emphasise these because they are directed by the core assumptions of this paradigm. These are the lines of special features that will distinguish this particular paradigm from the rest (e.g., positivistic thinking, nomothetic actions).

- *Critical Evaluation of this line of investigation*

My experience here raises the question of the extent to which my revised research idea met the attributes required for a good research problem. In Table 4 (see App 4) an extensive analysis of general management and business research textbooks in print in 1994, provided to us by Saunders and Lewis (1997 : 294), it can be seen that a researcher can reflect and further consider the attributes of a good research problem and in the final analysis critically judge what went wrong in this 'idea research process'.

Pursuing a nascent idea - (unclear because of lack of vital information)

Now, talking from my research idea standpoint I see that feasible data access and acquisition were not available. At this point, I knew that I could not go on pursuing this line of investigation because it was not productive - it needed to be changed.

2.3.3 'Evaluating Interventions that have already been conducted'

Following the first line of investigation, another research line was to gather numerous BPR interventions (real life cases) that have been conducted and analyse those based on my model's principles. It was proposed that this be completed by a series of formal interviews with the parties involved. The same process was adopted as in the first line of investigation regarding my research idea. Again, this situation can also be translated into political terms: a 'political relation that serves the *company - client* financial link of interest' (Chanlat 1996 : 711). In other words, the required case-study material appears to have had political interest for the consultants/companies who were approached.

Not long ago I was introduced to a person who was the project manager of such an

intervention in UK. More specifically I am referring to the Leicester Royal Infirmary (LRI) case which was initiated six years ago. It seemed possible that this contact would help to provide a case for me to analyse. However I was sent an information package which did not reveal the actual work and most of the references of that work were located in the internal files of the organisation – to which I could have no access - or were meeting minutes and other strategic plans that were not for external use. Here I am referring to a published paper by the Henley Management School – which was part of the information package I was sent - which specifically explained the situation created at the LRI. When I looked at the reference section, I realised that most of the data utilised for the construction of that paper came from the hospital's internal files, minutes of meetings of the project participants, or records related to the ongoing project - which were not for the 'public eye'.

Adding to the above, I shall say, that there were two major reasons why this second line of investigation was not successful. Those are: (i) the issue of interest involvement which did not allow access to the data that the researcher was aiming at and wished to present, capitalise on and analyse trends from; (ii) the element of secrecy and justification of a research to fit the organisation's needs which is also linked to the previous issue.

Once more, *politics* and one of its products - *confidentiality*, were governing my identification and selection of a research idea. Power, time, cost, secrecy, downsizing effects, fear of the unknown - regarding the security of their jobs - managers' dilemmas, financial gains, image and risk were, I believe, most of the major concerns of the people involved in such BPR programmes. The relationship of a *consultant and his/her client*, *the link between employee and employer*, and *the relationship between the company and its external customer(s)* were the major sources of information gathering in order for me to discover that the political process situation in these organisations was the main barrier in achieving the first and now the second line of investigation I was thinking to follow.

The revelation that political processes would govern my research possibilities can be further understood if we quote Pettigrew (1987) on the matter. He notes that 'a preliminary understanding of the connections between management and

competitiveness needs to be analysed' (Pettigrew 1987 : 17) in order for researchers to capture the motives behind such a process as the political one. He continues by reflecting on the fact that strategic change 'should be best considered as a jointly analytical educational/learning and political process' (Pettigrew 1987 : 17).

By incorporating the BPR strategic movement of an organisation and what Pettigrew (1987) suggests, I can now explain the reality I faced when dealing with the first and now with the second line of investigation. This is what he says about the issue:

'at the heart of these analytical and political processes of strategic change are those dominating ideas and frames of thought which provide systems of meaning and interpretation, which in turn filter both intra -organisational and environmental signals. Therefore, the way in which businesses perceive their competitive position, and the decisions they take to adjust their competitive position, must perforce be inextricably, linked to those dominating frames of thought which inform an organisation's analytical and political processes of strategic change. We are especially concerned with the combined relevance of those rational/objective and political/subjective aspects of strategic change processes to competitive performance' (Pettigrew 1987 : 17).

I believe, that, now the reader can see the major reason why I was not able to pursue any type of personal involvement in a real life BPR programme. The dynamic force of political relations (Chanlat 1996) and strategic intents (Watson 1994) are remarkably well linked, where BPR is being practised.

The relationships I mentioned earlier regarding a *consultant and its client, the employees and employers, and the relationship between the company and its external customer(s)* can also be further analysed, this time from another angle, the *politics* angle. Under the *Conflict* Ideology people would like to refer to the latter as the most obvious expression of the political realm (Chanlat 1996 : 712). This is another way of looking at politics - via the notion of conflict - which for the BPR scenario is quite clear. There are three major types of conflict that reflect to the above stated relationships and these are: (i) conflicts of interest, (ii) conflicts in values and (iii) psychological conflicts (Chanlat 1996 : 712).

Relating those causes to my BPR scenario, I can say that, yes, when I started talking to people about it, the general reaction I was getting, I believe, was emerging from this specific point. BPR is a new topic, people are afraid of it because of several of its

attributes like radicality and downsizing. People do not have the necessary knowledge to handle a case such as a BPR one, and that is why this entire negative wave is transmitted.

More specifically when it comes to a BPR strategic decision and implementation *the consultant - client relationship*, from my findings I can see that it is driven by the *conflict of values* politics mode. One example here is the confidentiality between the two which is 'ruled and inspired largely by economic values' (Chanlat 1996 : 712).

As seen in the first line of investigation that I tried to follow, the case was as above. Protection of interest paid in economic terms regarding any strategic movement in the market was prevailing.

Talking about the *management and the employee relationship* it was clear for me that *personal ambitions* and the *vulnerability* of these peoples' jobs (at both levels - managerial and shop-floor) was causing a barrier to carrying out any type of investigation.

'For some particular economists, personal interest or individual advantage is the basis for all action. It is the driving force behind all calculating, rational beings. Conflict arises when individual or group interests within an organisation contradict one another. Shareholders seek to maximise their dividends; management seeks to maintain control (via strategies) and its post; employees pursue higher salaries and consumers want better products. These interests are magnified during periods of economic crisis/ competitive and survival environments' (Chanlat 1996 : 712).

Based on this type of psychology, this is how people are expected to react in whatever relationship they are in, when it comes to any change in the organisation, and even towards the idea of change or even towards a BPR programme.

When it comes to the last type of relationship - *company and its external customers* the management tries to balance its strategic intentions and the psychological conflicts that might be created within any inter-organisational relationships and the relationships with other entities in the market. The management's attributes and actions are on trial and this is where it is decided that any risky decision taken should

be 'carefully discussed' and then marketed.

A final comment, here is, the observation that things seem to work very slowly due to the bureaucratic system that exists in organisations. Consequently, the *time element* restricted me further from following this approach which suggested the collection and examination of real life BPR scenarios.

- *Methodological Implications and Critique*

The most favourable social paradigm to work in, in justifying this line of investigation would be the Interpretive paradigm. This is a subjective approach to understanding and explaining what is happening in the social world (Weber 1968) as opposed to the previous line of investigation methodology.

This paradigm 'seeks explanation within the realm of individual consciousness and subjectivity, within the frame of reference of the participant as opposed to the observer of action' (Burrell and Morgan 1979 : 28).

Indeed this lens in viewing social reality could have revealed for the purpose of this research enormous information on how this BPR notion is treated in real intervention surgeries and what its participants value most in such processes. Well, most of the time, as my personal experience has shown, things do not develop as smoothly as one would like them to.

These particular methodological guidelines under the interpretivistic paradigm will be further discussed in the section that follows, since I will be still proposing to use this methodological thinking for the completion of this thesis.

2.3.4 'Critically Evaluating what has been said about BPR by looking at the strengths and weaknesses of the core contributors' publications'

By looking at the two previous lines of approaching the ultimate objective of the thesis, it is clear that my attempts to meet my research aims were not successful. In reaching such a decision, I looked at my own strengths again, I reflected on my previous conversations with the practitioners and professionals I met, I explored the

likes and dislikes of the past two lines of investigation, I went back to the available literature and met my tutors in order to reflect on those phenomena (Saunders and Lewis 1997).

We particularly focused on the reasons why the two first lines of investigation were not fruitful to follow. Barriers to my information gathering or further acquisition of knowledge were the confidentiality concept, timing factors, lack of knowledge regarding this notion from the participants and, most of all, the political processes that were prevailing in the organisations which prevented my involvement in any ongoing BPR programme, or gaining helpful access to relevant information.

Reflecting on those findings and discussing the outcomes of my efforts, we concluded that I should follow this third line of investigation. It proposes an integrative - documentary review (Price 1965) for the completion of my thesis.

By referring, presenting, analysing and by critically evaluating the work of major contributors to the BPR notion I believe this thesis will conclude with a range of insights like, what a BPR is believed to be, even the strengths and weaknesses/similarities and differences regarding the concept in those major authors' publications. This could further help the researcher, student and practitioner to crystallise in his/her mind the basic concepts to which one should refer when talking about this concept.

The thesis structure/text will start with an explanation and characterisation of the notion. It will then proceed with a presentation and evaluation of the founders of the literature under consideration. This evaluation goes on to discuss its contribution to the social sciences and in particular to the management field.

This path of approaching this notion was also chosen because it will be an opportunity to 'tease out' in a subjective manner what these writers have to say about BPR and to discover what the BPR process is all about. It will enable me as a researcher to review documents, see other's critiques on these documents and even identify strengths and weaknesses of those references along with any gaps that might exist and need to be filled in.

‘Is there a good reasoning for calling this action Business Process Reengineering? or ‘is it just another buzz word that we, social scientists gave to it in order to make our little world more appealing and interesting?’. Well, this is what this thesis will find out.

- *Methodological Implications and Critique*

This approach of describing, exploring and explaining (Dubin 1978) the BPR phenomenon provides the flexibility to work in a special social paradigm called ‘the Interpretivist Paradigm’ (Burrell and Morgan 1979).

Its subjectivity element suggests that one can work based on several orientations to analyse social phenomena. Based on these thesis terms, I need to work by adopting the Interpretive approach which will allow me to look at different expressions from different sources regarding BPR.

This orientation, as seen earlier, is very much influenced by Dilthey (1976) and is based on the analytical method of ‘*Verstehen - this is where the investigator could seek to understand human beings, their inner minds, and their feelings, their expressions in their outwards actions and achievements*’ (Burrell and Morgan 1979 : 229).

Another positive outcome in following this path in dealing with my research objective, is the fact that I will have a range of independent opinions and judgements based on BPR initiatives which will allow me to work in a field of contrast, comparison and constructivism something which will lead to diversity (Flood and Romm 1996, Ragsdell 1997) and challenge for discovery at the same time. Furthermore, by describing (Dubin 1978) the stand these writers are taking (other viewpoints), a useful and subsequent critique will emerge.

2.4 Conclusion

This chapter aimed to satisfy two objectives. Firstly, to present the research methodology utilised for bringing better results of this particular research and that was

achieved by indicating that a documentary review, along with numerous approaches, were applied in achieving the overall aims of this thesis.

Secondly, the three lines of investigation which were considered for the research methodology of this thesis were presented and the reasons for choosing the third line of all were outlined. This third line was to evaluate critically what is been said about BPR by looking at the work of the core contributors' publications in the BPR field.

The next chapter aims to define the notion of BPR and reveal whether there are any common principles and methodological guidance surrounding the concept.

*Here and elsewhere we shall not obtain the
best insight into things until we actually see them
growing from the beginning*
(Cited in Kast and Rosenzweig, 1970 : 50)

Aristotelis

3.0 Introduction

The objectives of this chapter are to explain why BPR needs redefining as a holistic activity, to give a new definition for BPR and to reveal whether there are any common BPR principles and methodological guidance surround the notion. To demonstrate the above, reference is made to a number of authors who are considered to be the proponents of the notion (these include Hammer 1990, Hammer and Champy 1993, Johansson et al. 1993, etc.) in order to show to the reader that there is lack of clarity on the baseline of BPR.

Thus, in the first part of this chapter I present and comment on a collection of definitions of BPR given by authors like Hammer and Champy (1993), Johansson et al. (1993), Davenport (1993), Jacobson et al. (1995), Armistead and Rowland (1996), etc. These are further discussed in order to show to the reader that

- there is no clarity on the issue [some authors, e.g., Davenport (1993) are influenced by TQM when defining BPR]; and
- there is a tendency among some others to focus on specific elements [e.g., Johansson et al. (1993) are process-oriented] when defining BPR.

This is followed by the reasons why I believe BPR needs redefining as a holistic approach. This reasoning also leads me to adopt my own definition for BPR, a BPR definition which takes account not only of a single element needed for BPR's activities, but of a number of others which can be easily teased out and integrated into a systemic BPR approach to change. It is from this definition of BPR that the conceptual framework of this thesis emerges (see Figure 3.4).

The second part reflects on whether there are any principles or any type of guiding methodology available for the user when reengineering. The analysis and exploration of the above core BPR readings will show that again this is something that has not been the centre of attention by the BPR authors. Thus, in acknowledging the deficiency and lack of clarity in what already exists regarding these two issues, I proceed by suggesting a way, which advances the readings of Hammer (1990) and Davenport and Short (1990) on the matter (since they are the only authors from the

examined BPR literature who talk openly about principles and methodology of BPR). This is achieved by incorporating issues like the human element and culture and suggesting that these could become individual principle(s)/step(s) to complement what already exists in these specific readings.

The Collective Reflection part takes the above remark into consideration and suggests that a number of other elements need to be incorporated in the current readings of principles and methodological guidance for BPR in order for those to be improved. The lack of clarity on the baseline of the notion, which I found to exist, needs to be brought into light and we, as BPR researchers/users, need to refer to it and try to improve it in the best possible way we can, to achieve an enriched BPR intervention with strong foundations. Therefore this 'bettering of the BPR baseline' idea led me to the design of a conceptual framework (see Figure 3.4) which shows what other elements can be integrated, and how, in order to achieve an enriched and holistic BPR change intervention. This framework also acted as a map for further investigation of the BPR territory in subsequent chapters, enabling me to identify the weaknesses BPR currently has and provide suggestions and guidelines for resolving them.

The chapter concludes with a summary.

3.1 Defining the BPR Concept and explaining why that is necessary

It is not only me who thinks that there is no universal definition of what is BPR but as was noted by ESRC (1996) there *is no commonly agreed definition of what is and what is not 'BPR'*. Nevertheless, many published examples³² of dramatic benefits from 'radical BPR' initiatives have helped to give BPR impetus as a popular approach.

BPR has been described as the 'hottest management concept since the quality movement and as one of the key management concepts of the 1990s' (Jones 1996 : 4277). Its origins are usually traced to an article by Michael Hammer, a former professor of Computer Science at the Massachusetts Institute of Technology (Hammer 1990). This article argued that firms needed to 'obliterate' existing work processes rather than automate them, if they wished to achieve the performance improvements

needed to survive in increasingly competitive global markets.

‘The concept rapidly attracted immense interest and spawned a massive consultancy market [all the major companies were quick to launch a reengineering product]. Despite or perhaps because of this attention, however, the concept is suprisingly ill – defined and open to conflicting interpretations’ (Jones 1996 : 4277).

This concept’s application, which has been called business process reengineering by various authors, has the greatest initial effect on any business, and it is therefore the most frequently discussed in business development literature. Everyone talks about it, everyone has his or her own interpretation of what it means, and everyone claims to be doing it.

Business reengineering implies that you take a comprehensive view of the entire existing business and think through why you do what you do, how to do it, and so on. Thus, you question the entire existing business - or at least its most important processes - and try to find completely new ways of reconstructing them, ‘new ways that use the new person in a better way’ (Carlzon 1987). ‘New ways, that seek to use new technical gains (for example, modern information technology), to serve its customers better’ (Jacobson et al. 1995 : 14). This is what Hammer and Champy (1993), Jacobson et al. (1995) call business reengineering. Others, including Johansson et al. (1993) and Willoch (1994) call it business process reengineering. Davenport (1993) calls it *process innovation, major reduction in process cost or time, or major improvements in quality, flexibility, service levels or other business objectives*. Carlzon (1985, 1987) called it ‘flattening the pyramid’.

Following Hammer’s initial coining of the term ‘reengineering’ in 1990, he then went on to develop the concept further in a book (*Reengineering the Corporation*), written jointly with James Champy. They provided the following definition:

‘Reengineering is the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed’ (Hammer and Champy 1993 : 32).

There are four key words that are emphasised here: *fundamental, radical, processes,*

and *dramatic*. The term *fundamental* is important for Hammer and Champy (1993) because when undergoing such an activity people should ask '*why do they do what they do - and why do they do it the way they do*'. This questioning is supposed to clear people's minds of previous inappropriate hesitations or barriers to change, and even to challenge assumptions that are taken for granted.

The next key word is the term *radical*;

'Deriving from the Latin word *radix* - root, radical redesign means getting to the root of things: superficial changes and fiddling with what is already in place should not be made. Radical redesign means disregarding all existing structures and procedures and inventing completely new ways of accomplishing work' (Hammer and Champy 1993 : 33).

Reengineering for Hammer and Champy (1993) is about business reinvention - not business improvement, business enhancement, or business modification. That leads us to the third word, the word *dramatic*. Reengineering is

'not about making marginal or incremental improvements but about achieving quantum leaps in performance. Reengineering should be brought in only when a need exists for heavy blasting. Marginal improvement requires fine - tuning; dramatic improvement demands blowing up the old and replacing it with something new' (1993 : 33-34).

The last key word, of equal importance to the other three, has to do with the notion of *processes*. It is defined as 'the collection of activities that takes one or more kinds of input and creates an output that is of value to the customer' (Hammer and Champy 1993 : 35). The authors' practical experience taught them that most business people are not 'process- oriented' but task oriented, job or sometimes people oriented. They suggest that this should not be the case anymore and people should focus on their processes, simply because of the possibility of greater efficiency levels being achieved (Hammer and Champy 1993).

In a similar view to Hammer and Champy (1993), Davenport (1993) describes reengineering as the

'stepping back from a *process* to inquire into its overall business objective, and then effecting creative and *radical* change to realise *orders-of-magnitude* improvements in the way that objective is accomplished' (emphasis added) - (Davenport 1993 : 10).

Johansson et al. (1993) note that BPR is, by definition,

‘the means by which an organisation can achieve radical change in performance as measured by cost, cycle time, service, and quality, by the application of a variety of tools and techniques that focus on the business as a set of related customer - oriented core business *processes* rather than a set of organisational processes’ (emphasis added) - (Johansson et al. 1993 : 16).

They especially distinguish the notion of ‘*core*’ business processes (CBP’s) from any other processes. They define CBP as ‘a set of linked activities that both crosses functional boundaries and, when carried out in concert, addresses the needs and expectations of the marketplace and drives the organisation’s capabilities’ (Johansson et al. 1993 : 16). It might be asked what difference that makes. I suppose that what they try to say here is that they want to focus on the most important processes while reengineering. They also argue that the renovation of these core business processes can only occur when ‘operational, technical, and business knowledge are used in a unified way for the ultimate objective of achieving sustainable competitive advantage’ (1993 : 16).

Jacobson, Erricsson, and Jacobson (1995) simply refer to BPR ‘as the set of techniques a company uses to design its business according to specific goals’ (1995 : 2). They place more emphasis on the ‘set of techniques’ which includes:

‘step by step procedures to design the business, notations that describe the previous design activity, and lastly it should be based on pragmatic [realistic] solutions in order to find the right design, measured in terms of the particular goals the company wishes to set up’ (1995 : 2-3).

This set of authors believes that if they focus on a set of techniques it will enable them to do what they do better. In addition, we can see that they wish to enhance³³ the usage of ‘*modern engineering principles* - principles based on streamlined processes - in order for the company’s design to be a radical one’ (with the objective of transforming the company’s operational system), (1995 : 3).

Other authors, in order to define BPR, *split the concept into two: the reengineering part and the business processes part*. A business process for some is

‘a series of tasks undertaken by a business in pursuit of its goal. A reengineering activity is all about changing anything which provides a block to improving today’s business performance, even if it means going back to the drawing board’ (Obeng and Crainer 1994 : 18).

For others, reengineering is

‘an approach to planning and controlling change. Business reengineering means redesigning business processes and then implementing the new processes. If the full measure of repositioning has been done beforehand, reengineering will have its goals set and its environment prepared’ (Morris and Brandon 1993 : 10).

It is possible to detect that Hammer and Champy’s (1993) formal definition of BPR had a great impact on other BPR authors. For example, Teng, Grover, Yeong and Kettinger (1995) see BPR as ‘the critical analysis and radical redesign of existing business processes to achieve breakthrough improvements in performance measures’. A further definition views BPR as a ‘cross - functional initiative, focused on business processes, requiring simultaneous change to organisation design, culture and information technology, that enables radical performance improvements’ (Stoddard, Jarvenpaa and Littlejohn, 1998).

For Armistead and Rowland (1996) to reengineer means ‘to improve performance by stripping out of the processes of every action that do not add value to corporate performance and rethinking those that do so’ (1996 : 3-4). It is also argued that reengineering is one approach to bring about step changes in performance but it should not act against a culture of continuous improvement. Indeed, they note ‘it should seek to foster it where it was not previously in place’ (1996 : 4), a view that, as it will be shown later, is shared by Davenport (1993) as well.

Just by looking at the above definitions, an outsider might see little difference governing the field. For example, all the writers refer to radical thinking, they all suggest that we need to concentrate on core processes, and so on. By studying those authors’ publications in greater depth, though, it is possible to see differences in the way they translate/view radical change and the way they suggest it should be applied. This, for example, is the major difference between Hammer and Champy (1993) and Davenport (1993). The latter (as will be shown later) perceives the level of change that should occur in a BPR in an incremental way, despite the fact that his BPR definition argues in favour of the radicality element. Amongst other things he notes, ‘improvement and innovation of processes should be carried out within the context of

a single quality program' (1993 : 15). This also shows that Davenport (1993) seems to be more incremental than Hammer and Champy (1993), who appear to believe in a pure radical form of change –

'starting over – reengineering is about beginning again with a clean sheet of paper – is about inventing new approaches to process structure *that bear little or no resemblance* to those of previous eras' (Hammer and Champy 1993 : 49).

As regards the rest of the definitions given earlier concerning BPR (Johansson et al. 1993, Jacobson et al. 1995, Armistead and Rowland 1996, etc.) it is my belief that they are influenced by Hammer and Champy's (1993) definition of BPR. I do not think that what they do is abnormal, since the latter set of authors are viewed to be the 'fathers' of the notion. What I do find surprising, however, from the further examination of these authors' readings, is that they seemed to have a tendency either like Davenport (1993), to achieve change via quality programs or to use engineering principles to change an organisation (e.g., Morris and Brandon 1993 – see also Figure 4.3). This will be further shown in the analysis of chapters 4-8, which arises from the framework that will be presented in the following section.

In summarising the definitions of the above mentioned BPR authors I have identified the following key differences between them:

- they all agree on the importance of the radicality issue (Hammer and Champy 1993, Davenport 1993, Johansson et al. 1993, Jacobson et al. 1995 etc.) but their understanding differs. Most of them (e.g., Davenport 1993, Johansson et al. 1993) translate/see it in improvement terms (this is also something which will be discussed in detail in chapter 4).
- despite the fact that they agree on the idea that a certain type of change will take place in the organisation (which they all call BPR) a number of them take extreme positionings to carry out these organisational changes. For instance Johansson et al. (1993) are process driven reengineers who heavily emphasise processes. As chapter 5 will further show, following processes only can be counter productive for a BPR initiative and can also attract negative criticism (Case 1999).
- The third issue that arises is inconsistency on the part of individual authors. This takes two forms: (i) a discrepancy between their espoused theory and actual practice; (ii) the expression of different views on certain BPR issues in different

publications. For the first point I would refer to Hammer and Champy (1993) who give a BPR definition which indirectly refers to the people factor. A close examination of their book, however, reveals that out of the four case examples they present which they also call 'successful', only one indicates that they actually considered the human factor. On the second point I will refer to Davenport (1985, 1993, 1995) as an example that in all cases contradicts his writings (this is further discussed in chapter 7).

These are the points which led me to conclude that the BPR authors I referred to in this thesis (and whose BPR definitions were presented above)

- a. do not agree with each other and
- b. do not agree with themselves - in other words they are not internally consistent.

So, as a result of all the above I would also say that when closely exploring these readings and definitions given for BPR, not only process and radicality emerge as major factors in such a change activity but many other factors could be teased out including competitive advantage, new product development, time, human element, IT, organisational culture. Discussion of these factors and an analysis of why the last four are the most important factors to BPR form a crucial part of this thesis (also see Figure 3.4). I personally view these as additional principal factors to the process element, which govern a BPR initiative. Since these factors can be identified, why do not we, as BPR thinkers and practitioners, make them work towards an integrated and successful future change initiative? Why not make them part of the definition of BPR? (see also my definition for BPR given at a later stage in this part).

In the next few chapters I will be discussing these factors but prior to that I will give a number of examples (see below) which show that indeed what I am referring to as time, human element, IT, and organisational culture can be teased out from the current BPR literature.

For instance for Hammer and Champy (1993) the emerging *time factor* seems to play a major role, although this is another factor on which writers differ. Hammer and Champy (1993) argue that 12 to 18 months for a BPR programme to take place is the

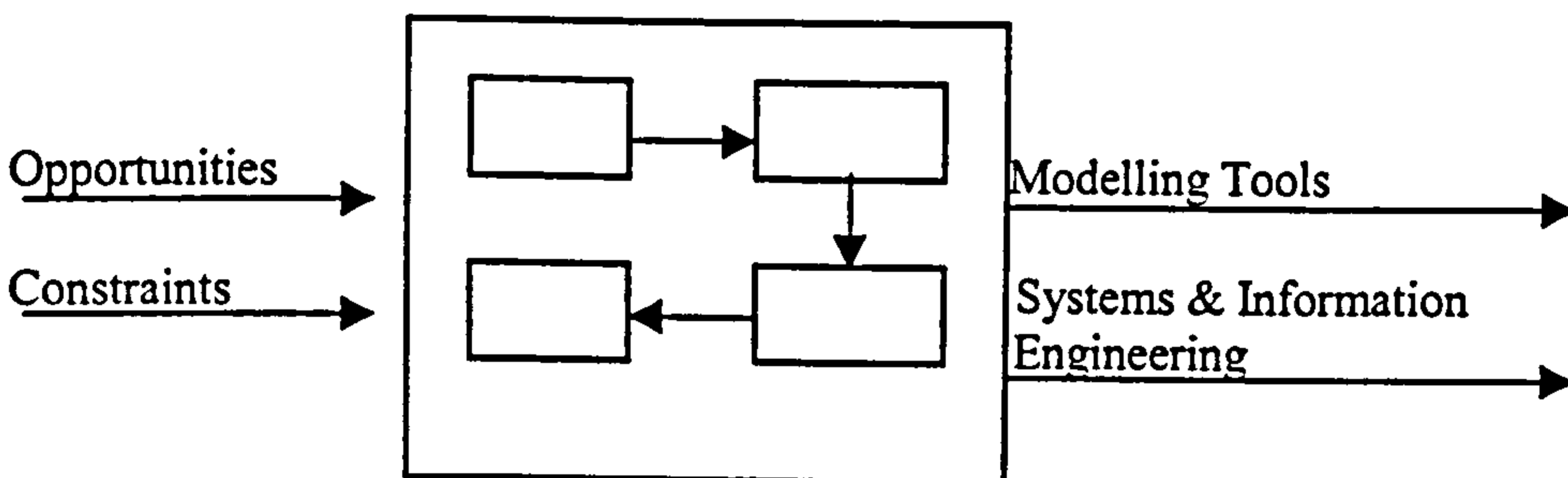
most they can give for a company to turn around. Davenport (1993), though, suggests that this may not be the case since ‘the pace of change depends on how well a quality program does, as a post activity [in the organisation], before the process reaches its full potential’ (Davenport 1993 : 14). Despite these authors’ difference of opinion here, I will show that time is a factor which contributes greatly to the radicality element of a BPR initiative undertaken (see chapter 4). Therefore it is important to consider it further, and even include it in the definition of BPR.

In addition Davenport (1993) is an *Information Technology* believer. He can also be further criticised for suggesting that for any process innovation programme, the primary enabler is or should be *Information Technology* (1993 : 17). Even the title of his book (1993) ‘Process Innovation, Reengineering work though IT’, indicates this tendency to view IT as the primary enabler for reengineering. The following diagram (Figure 3.1) illustrates the role Davenport perceives for IT in BPR.

Figure 3.1 The role of IT in process innovation

IT as an Enabler

IT as an Implementer



(From Davenport 1993 : 49)

Thus, although Davenport can be criticised for his extreme orientation, he shows to the reader the power of using IT in an initiative as BPR, something which also needs to be acknowledged and considered further by the future BPR user.

I will proceed, though, by challenging Davenport’s (1993) extreme IT orientations by recalling a case study which shows that not only IT counts as an imperative factor in a BPR activity, but so do the human element and culture factors as well. In doing so I would like to show to the reader that other factors can be teased out while reengineering; therefore, they should be considered as important to the overall

initiative and be integrated in the definition of the notion as well. The following case study example will illustrate that the *people and cultural factors* can also be significant elements when reengineering.

While this may not appear to be a BPR in terms of the classical/traditional BPR, nevertheless, I would ask the reader to simply consider it as a case study which as stated earlier, shows that IT is not always a primary enabler. This case will also be discussed in detail in chapter 9 where I will conclude that it forms one class of a BPR known as a medium term BPR.

GTO's Reengineering

GTO Inc. (Pralhad and Hamel 1994) is a small company, which manufactures automatic gate openers based in Tallahassee, Florida. When the founder died suddenly, the company was in the type of dire straits that would appear to have made it an ideal candidate for reengineering: GTO was losing money on a monthly basis, it lacked a line of credit and suppliers shipped only on cash on delivery basis. Employees were required to work twenty four-hour shifts to fill important orders and the salesmen were reduced to writing up minuscule orders to supplement their incomes. The new CEO, Chuck Mitchell adopted '... a strategy made up of small gestures rather than sweeping moves' (Pralhad and Hamel 1994 : 122). These gestures consisted of creating an atmosphere of trust and optimism among GTO's harassed employees; by listening to and adopting their suggestions, improving their health and disability insurance, and when things started to turn around, increasing their pay and distributing bonuses from a profit sharing plan. The salesmen were put on salary with incentives. Acts such as fixing the leaky roof, allowing ten-minute breaks, and keeping the coffee machine stocked convinced the employees that Mitchell was *genuine*. The following year, GTO witnessed a cultural and company turnaround. Net profits moved from being in the red to nearly \$500,000. This was accomplished by a 9% increase in gross sales along with a 33% decrease in total operating and administrative costs. Employee turnover decreased equally dramatically. As employees began to seek outside education and were promoted from within, the number of returned goods fell (Pralhad and Hamel 1994).

(Taken from Weicher et al. 1995)

Cases like the one above can illustrate that IT is not always a necessary 'primary enabler' in a reengineering activity, therefore extreme orientations may be narrow

minded and can cause harm to the reengineering programme. This can also be a point of criticism towards Hammer and Champy (1993), who mostly focus on processes rather than human resources. This is not to say that Hammer and Champy do not recognise the importance of human resources as they state that 'companies are not asset portfolios, but people working together to invest sell and provide service' (1993 : 25). However they fail to demonstrate how to reengineer people in conjunction with reengineering processes. Of the four cases presented in their book, only the case of Capital Holdings addresses this area. Capital Holdings performed a 'cultural audit' which revealed that an unwritten code of conduct encouraged information hoarding and barely acknowledged the customer. In order to combat these tendencies, senior management provided a constant flow of information throughout the company regarding reengineering expectations and successes, and revised the performance appraisal system to emphasise the new values of teamwork and cooperation (1993 : 182-192).

Furthermore, and in order to add more value to the above made point, I will recall a statement by Boje (1996 : 3) which criticises BPR in terms of how it affects the socio-technical change in organisations. In his editorial he calls for papers and at the same time he challenges people by saying that 'reengineering does the technical but not the social change' when implemented. I would argue that this might seem to be the case but it should not have to be like this; nor should the notion of reengineering be 'one element oriented'.

Thus, since all these important factors can be teased out when reengineering and they can also act as determinants for this initiative's success or failure, why not make the case and include them in the definition of BPR? Having referred to a number of so called BPR definitions, I believe I can now say that what is already there needs further improvements, to avoid the overemphasis on certain elements and/or the underemphasising of others, which indeed can prove to be of imperative importance to the future BPR initiatives.

The above discussion provides four reasons why BPR needs redefining. I would therefore say that BPR needs redefining:

- because at the moment authors tend to overemphasise certain elements over

others and/or also underemphasise others (e.g., Davenport's IT orientation - 1993 Vs Johansson's processes orientation - 1993) which indeed can be counter productive for the success of such a holistic activity as BPR (chapters 4 and 5 will further illustrate the examples used here to justify this point).

- in order to become clearer on what its readings are trying to pursue. That is because at present my encounters with the users of BPR (refer also to chapter 2) do not clarify this point. Is it a quality management initiative they are doing or something else? What are the guidelines they follow to reengineer? What is their vision while reengineering? Personally, I do not see any of my questions answered, either when I read the definitions of this notion or when I study the practices of the authors involved in such change programmes, or even in discussion with a number of consultants who claim to practise reengineering;
- because the major BPR proponents' readings show inconsistency between what they say they are doing and the actual practice of BPR. For instance Hammer and Champy (1993) refer to the human element in their writings (they even acknowledge that in their BPR definition – in the term 'fundamental') but in practice a mechanistic BPR takes place as revealed from the cases they present in their book. In simple terms, their definition of BPR differs from what they actually practice;
- because of the indication by the authors themselves (e.g., Hammer and Champy 1993 : 200) and others (e.g., Jones 1996, Kehoe 1994) that most of their efforts lead to failure, it seems to me that there must be something wrong with the existing definitions of BPR. In other words it seems to me that what they provide the reader in their definitions is not enough and it needs redefining, in terms of making clear what a BPR is (definition) and explaining to the reader what to consider when practising (guidelines – these will be listed in chapter 9, but justified in chapters 4-8) BPR. Such an improved definition would make sure that theory and practice are consistent, which in future will avoid confusion about BPR and minimise its failures.

These are the main reasons why I believe BPR at the moment fails to provide its readers with sufficient information on how to define the notion and, as will also be shown in the following part of this chapter, it also fails to provide guidelines on how

to approach such a change as BPR.

Before I present my definition for BPR, let me go back and reflect on those BPR definitions once again with the aim to show to the reader with which one I find myself mostly identifying, and why. I find myself mostly identifying with what Hammer and Champy (1993) define as BPR. This is because I find their definition differs from the ordinary way of looking and changing organisations - different from the so called 'norm'. I would like, though, to take this definition a bit further and add that the fundamental redesign and thinking of the participants in a BPR should not only focus on the company's processes but also on 'the redesign of a number of interacting forces (e.g., the culture, human element, time and IT) that affect the initiative while achieving dramatic improvements...'. I also see the term 'radical' as being very vague and open to criticism; therefore, I would like to see more of that breakthrough taking place based on a realistic time boundary. I would add to the above definition that radicality should also be seen in the amount of time which is pre specified for the initiative to take place and not only based on how much change is achieved.

Let me explain. All authors' definitions referred to radicality. They might seem to agree on the terminology of this element but I find them disagreeing on how to apply it. People like Davenport (1993) see it as part of a TQM initiative, which I believe, should not be the case and that is the reason why I am saying that conflict of opinion on the matter exists. It is my suggestion (as can also be seen in more detail in chapter 4) that if there will be a major breakthrough within a company then it also needs to be time bounded. This idea I also find contrary to what Johansson et al. (1993) argue on the matter. I agree with them on the identification of core processes but what they then argue is that those processes are used in relation to tactical tools in order to match or beat the competition, and this is where the 'china breaks' for them (1993 : 59). I believe this is not a BPR but a form of continuous improvement, which includes features of BPR at a certain stage of their initiative (see also chapter 5, which deals with this extensively).

This 'time boundary', I suggest, should be a pre specified period of time, indicated by the intervention's participants, for the initiative to know where its destination is. It will also be a factor for distinguishing the BPR notion from other tactical initiatives. I

consider this as a very important issue and in chapter 4 a detailed case will be made concerning this element. To brief the reader on what I suggest in this particular chapter I would say that I will show that different chronological categories can be applied for a BPR initiative. For instance, within a period of 12 months we can have a short term BPR initiative. Within a period of 1-3 years this can be classified as a medium term type of BPR, and if the initiative is for more than 3 years, then it is a long term BPR initiative. If the company pre specifies where its plans lie in the above categories and it completes a major breakthrough within the pre specified by them period of time, then, the initiative can be called radical and BPR initiative the same time.

It might be suggested that what I am suggesting does not differ from a TQM initiative. I would disagree with that, for many reasons. Just to name a few: a TQM initiative, I believe, is a journey where the participants do not know at the outset what the destination is, which is not the case with BPR. Secondly, a TQM activity does not start with a 'clean sheet', as BPR should do. A quality programme might be used to follow up a BPR initiative, I agree, but that, I believe, is a different matter.

One more reason why I believe my definition (given below) differs from the rest of the ones presented in this analysis is the fact that I make explicit that a BPR initiative should not focus only on the rethinking of its process [as indicated by Hammer and Champy (1993), Davenport (1993) and Johansson et al. (1993) and the rest]. Rather, elements like processes need to be used to develop and establish relationships with a number of forces that will enable the BPR initiative to act in a contextual way. My type of thinking will also minimise the critique that a BPR initiative receives on the ground that its current focus on processes is a mechanistic one for bringing change about. Also by clarifying in the definition that radicality is something that can be used, I proceed to provide BPR users with suggestions on how to apply and measure whether their initiative reflects the pre specified time and amount of change they set to achieve beforehand and whether they were able to meet those goals (see suggestion and guideline in chapter 4). The right time frame I see as not being pre specified by the consultant or the manager of the project, but derived from a number of collective estimations given by the people involved in certain activities affected by the change, and which will obviously be passed on to the project leader for further planning.

Thus, with these additional points to Hammer and Champy's (1993) definition, I believe simplicity and clarity can emerge in order to provide the reader with what I believe a BPR is. I therefore see *BPR* as,

'the fundamental rethinking and radical redesign of a company's processes taking into account their relationships with four interacting forces: the human element, culture, time and IT, for achieving dramatic improvements in critical contemporary measures of performance, such as cost, quality, service and speed. Radicality, though, should not be translated only in terms of the amount of change carried out but also in conjunction with the terms of a pre specified amount of time for the initiative's completion'.

This is what I believe BPR is and this is the way I will show that a successful job can be done: a BPR should be an initiative undertaken by both the management and employees of an institution which is also guided by specialised external consultants with the aim to change systemically (in breakthrough terms) and integrate the elements of human element, processes, culture, IT and time within their organisation, to achieve successful transformation in a period of time specified by them. This is how I believe can be done because remember 70 per cent of BPR fails (Hammer and Champy 1993, Jones 1996). Therefore many people who do reengineering do not do a very sensible job. Maybe they just do not know what they are talking about and in fact they are doing something very different from a BPR but, on the other hand common sense says that some of them must be talking about BPR since they get it right 30% of the time.

Thus, my intention here was to redefine BPR and indeed by chapter 9 I will prove that the above given definition is indeed different and holistic compared to the current definitions given by other BPR authors referred to earlier. At this stage, I will simply present this definition, the rationale for which was given above, and also with the premise that these elements will be justified in detail in forthcoming chapters.

The reader will have noticed that the above discussion revolved mainly around the definitions given by Hammer and Champy (1993), Davenport (1993) and Johansson et al. (1993). I felt that was necessary for two reasons. Firstly most of the rest of the definitions presented in this part really reflect and support either one or the other of those three definitions, mostly that of Hammer and Champy (1993). Therefore there

was no point in duplicating the material discussed. Secondly, these three BPR definitions were the basis for constructing and supporting my definition of BPR.

Redefining BPR in such a way, I believe makes the notion a holistic approach to change, which is a path which BPR writers do not seem to have followed before. I argue that BPR needs to be redefined as a holistic approach because in this way it will enable its users to acquire broad knowledge of various, vital to their initiatives, influences, which could prove to be great contributors to the success of such a change programme as BPR. I am saying that BPR is not holistic at the moment and that is because of the different extreme orientations its authors seem to take, which I also believe confuse the reader. These can also be seen to derive from the several BPR definitions given earlier. For instance Davenport (1993) is an IT extremist, Johansson et al. (1993) see processes as the only core factor when reengineering, and the list can go on. Because of this happening I believe this suggestion for a holistic approach to change can help BPR to fight its current weak baseline (and that is by clarifying BPR's definition, and as will be seen in the following part, provide guidelines that show how to achieve that).

As I mentioned earlier I am not arguing that holism is the answer to all organisational problems but in this case it is my belief that if the future BPR user were to think in systemic and holistic terms then the following could be achieved:

- further improvement of the current BPR definition (complementing it with issues like time, culture which could also act as of great importance contributing factors to the initiative which could also determine the initiatives success or failure). In doing so I believe the establishment of a clearer orientation for this notion, which will help to distinguish BPR from other tactical managerial tools, is achieved;
- this type of approach can also aid BPR in the minimisation of the critique the notion receives, regarding the issues of being, for example, mechanistic, technocratic etc. (Harrington et al. 1998, Case 1999 etc.). In other words the overemphasis and underemphasis of primary individual elements will be avoided;
- if practitioners seriously consider taking into account and indeed involve in

practice other elements apart from processes and IT in the 'making' of BPR change then a reduction of the current 70 % failure rates (Hammer and Champy 1993, Kehoe 1994, etc.) in the overall BPR initiatives can be achieved as well.

Therefore in redefining BPR as a holistic change approach, not only the above could be achieved, but the whole perception towards BPR could be changed as well. In other words, the acknowledgement of a number of other elements influencing a reengineering activity would be extremely valuable if further considered. A suggested way to do so is via a conceptual model (see Figure 3.4) which I will use as an aid to redefining BPR as a holistic change approach.

Having made a BPR profound statement, I shall summarise what I have demonstrated to the reader so far. I have explained the current situation of BPR, I have given the reader some idea of the methodology I followed and here I am explaining the rationale for doing what I am doing. The answer is that I have presented a considerable amount of material about the problems of BPR and am now suggesting a new definition. I will, in the remainder of the thesis demonstrate to the reader the value of this definition, showing that I have not merely added a few words to Hammer and Champy's (1993) definition but have profoundly altered the approach to BPR and furthermore, I am suggesting that this is a sufficient change to BPR to make it work in many more circumstances.

3.2 Are there any Principles and Methodological Guidance governing BPR?

Are there any commonly used and universally accepted principles³⁴ and methodological³⁵ guidance concerning BPR? As the exploration and analysis of this part of the chapter will show, there is not such a thing as universally accepted principles and methodological guidance for the BPR notion. Amongst the core BPR publications (including Hammer and Champy 1993, Johansson et al. 1993, Davenport 1993, etc.) the reader does not see any reference to these issues. It is therefore my belief that the inadequate form/status of such guidance is a deficiency in the currently examined BPR readings, since the reader cannot rely on them for help while undertaking a reengineering change initiative. For this reason, later in this section, I will be giving several suggestions on how to improve what is currently there in the

literature (given to us by Hammer, 1990 and Davenport and Short, 1990). But it should be fully understood that this is a field which, in order to be more effective and efficient in use, deserves more research.

Normally, if a company wants to improve its production or quality of service, then it approaches a consultant (internal/external) specialising in the field for advice and expertise. If the company goes ahead with a quality programme for example, then it has to follow and implement specific guidelines and fulfil certain preconditional requirements in order to receive a quality certificate from the Quality Standards Association³⁶ (e.g., ISO 9000). Winning this award or accreditation will represent the efforts the company has made to improve its quality in a specific area in the organisation (or the whole organisation). The guidelines that are provided are presumably the means of identifying the factors that will contribute to the success of a quality programme. 'These standards are general models that propose a set of clauses to follow. The clauses are guidelines about what needs to be done to win accreditation' (Flood 1993 : 50).

As a researcher I would expect that, when analysing the notion of BPR, the same thing would apply; the main principles would emerge. On the contrary, though, I find that from all the core BPR readings examined, only two authors (Hammer 1990, Davenport and Short 1990) that have talked extensively about BPR, refer to principles and methodological guidance; and even they, as unreasonable as it seems, do not consider it as fundamental to the BPR activity. I believe this should not have been the case. I came to this conclusion because it seems to me that the authors who make reference to it do so very briefly (what they say, is given below), and, as also will be shown, they are more interested for instance in the *process* or the *IT* element; something which shows that the basis or foundation of their actions is neglected. What causes this resistance to put things down, this attribute that 'I will tell you a little bit but not much of how things are done?' Perhaps they are not aware of it themselves - might it be that every time, things differ to a certain extent? Or, are they scared of the fact that their actions might lead to a downsizing activity in the organisation and do not want to put that as a principle forward, in case the market avoids their offered services (competition and confidentiality issues)? Or is it because it is too time consuming for all these authors - practitioners to deal with the theoretical

base of BPR (e.g., establishing this notion's priorities or principles)? But again, will reengineering be the action that 'breaks the norm' and really something new, if everything is planned before hand? - Is that what they really want to transmit but are unable to do so?

- Principles

Hammer (1990) is the only author in the BPR literature who talks about principles of reengineering. He says that,

'Creating new rules tailored to the modern environment ultimately requires a new conceptualisation of the business processes - which comes down to someone having a great idea. But reengineering need not to be haphazard. In fact, some of the principles that companies have already discovered while reengineering their business processes can help jump start the effort of others' (Hammer 1990 : 108).

Having said that, we see that he presents seven principles for reengineering, a generic set of principles that one could say, derives from Hammer's practical experience. Rather than describe how to reengineer, for instance, Hammer (1990) presents, or better, outlines seven principles (these are discussed further below) of reengineering:

- organise around outcomes, not tasks
- capture information once and at the source
- treat geographically dispersed resources as if they were centralised
- have those who use the output of the process perform the process
- put the decision point where the work is performed and build control into the process
- link parallel activities instead of integrating tasks
- subsume information-processing work into the real work that produces the information (1990 : 108-111).

With the application of the above, Hammer also suggests that reengineering leads to widespread organisational changes, and gives another list of events (e.g., organisational structure changes, job preparation changes etc.) which happen when he reengineers an organisation; changes which follow after the above principles are implemented.

Personally I find it a good set of ideas to start with; though of course it needs further elaboration and additional concepts [e.g., productivity, downsizing, the importance of the human element in the process in relation to cultural issues in the organisation, even the principle of competitive advantage - quantum leaps will be worth commenting on] to make it accessible to the reader and the user of the notion. I do not think that what Hammer gives us is enough for a theory, or for BPR to be based on. Jones (1996) criticises Hammer (1990) – (the only article that explicitly makes a reference to any sort of *principles* regarding BPR) and he notes that,

‘as befitted an approach which was said to be derived from practical consultancy experience rather than theoretical speculation, Hammer’s discussion of reengineering was strong on illustrative examples and inspiring rhetoric and *comparatively weak on specific guidance*’ (emphasis added) - (1996 : 4278).

Thus, what has been presented by Hammer in 1990, I would like to think, are his experiences and reflections on this matter or even his words of caution when someone decides to do what is labelled as *reengineering*. Furthermore a paper by Weicher, Chu, Lin, Le and Yu (1995) questions the above points as well; ‘if BPR is not a theory, but a technique, then Hammer and Champy are surprisingly vague about the details’ (Weicher et al., 1998). Let us, though, explore what Hammer (1990) proposes and then comment on it.

To organise around outcomes, and not tasks suggests that an organisation have one person performing all the steps in a process. A person’s job needs to be designed around an objective or outcome instead of a single task. The redesign at Mutual Benefit Life, where individual managers perform the entire application approval process, as argued by Hammer is ‘the quintessential example’ of the above principle (1990 : 108). I see a couple of other issues of equal importance missing, however, one being the motivation of the people (the human element) and how they are trained (educated) to adapt to this change, and the other is the cultural factor which is another crucial point to this transformational period for any organisation. Those two could easily form two extra principles in Hammer’s initial set. We will come back to this later, though.

The second principle, indicates that companies *need to have those who use the output of the process perform the process*. Until now, many organisations, in an effort to capitalise on the benefits of specialisation and scale, have established specialised departments to handle specialised processes. The process works, but it is slow and bureaucratic. Now that computer - based data and expertise are more readily available, departments, units, and individuals can do more for themselves. Another example suggested by Hammer is the use of expert systems and databases in the departments, which will enable them to make their own purchases without sacrificing the benefits of specialised purchasers. From a finance point of view it is also argued that when people are closer to the process that they perform, there is less overhead cost associated with managing it (1990 :109).

Organisations should subsume information - processing work into the real work that produces the information. As shown above, the first two principles are in favour of compressing linear processes. This one suggests that companies should move work from one person or department to another. Furthermore, it requires the production of information and also its processing, so everybody in the organisation has access to it and acts accordingly. Here the Ford case is given as an example to justify this principle. Hammer (1990) sees Ford's redesigned accounts payable process to embody this principle. The new system, based on a computer data client system, can easily compare the delivery with the order and trigger the appropriate action. In reality the *receiving* act produces the information about the goods received and it processes this information instead of sending it to accounts payable (1990 : 110).

The next principle encourages organisations to *treat their dispersed resources geographically as though they were centralised*. Hammer (1990) argues that nowadays the use of databases, telecommunications networks, and standardised processing systems by companies can provide them with the benefits of scale and co-ordination while maintaining the benefits of flexibility and service. Therefore companies should forget the classic conflict between centralisation and decentralisation and employ the above techniques to help them out (1990 : 110).

The fifth principle notes that in a company *a linkage of parallel activities should take place instead of the integration of those activities' results*. A common kind of parallel

processing is when separate units perform different activities that must eventually come together. Product development typically operates this way. Hammer (1990) presents here the example of the 'development of a photocopier' where independent units develop the various subsystems of the copier. Having people *do development work simultaneously* saves time, but at the dreaded integration and testing phase, he notes that the pieces often fail to work together. This principle's ideology is to forge links between parallel functions and to co-ordinate them while their activities are in process rather after they are completed (tools that can make it happen could include shared data - bases) (1990 : 110-111).

Put the decision point where the work is performed, and build control into the process. In most organisations, those who do the work are distinguished from those who monitor the work and make decisions about it. Hammer's argument claims that the people who do the work should make the decisions and that the process itself can have built-in controls. Pyramidal management layers can therefore be compressed and the organisation flattened (1990 : 111).

Information needs to be captured once and at the source. By using IT (bar coding, relational databases, and electronic data interchange - EDI), once more, Hammer (1990) sees this principle flourishing and that is in terms of integration and support of the different functional processes in the organisation (based on minimisation of errors) (1990 : 112).

Reflecting and summarising on the above principles, given to us by Hammer (1990), I would say that they form a good starting-point for viewing what is going on in an organisation that is in difficulty. He believes that any new concept needs conceptualisation but my belief is that after exploring his writings on the matter, he fails to some extent to give one. There are other principles that need to be drawn from an activity such as BPR (earlier, the human and cultural elements were mentioned) and not only the processes and the IT based ones. More specifically we see the first, the second, the fifth and sixth principles directly related to solving problems of processes and that was done by the introduction of IT. The basis of the third, fourth and seventh principles, as shown, is purely related to IT. I would like to believe that a conceptualisation of any notion should make reference to a number of issues apart

from the ones stated by Hammer (1990) (issues that are not strictly oriented to processes and IT). Would it not be much easier for the reader/user/researcher of the BPR notion to have those principles all in place and so that, when it comes to practice, they can be aware of the dangers and opportunities these might hold, instead of searching in the dark?

An additional point and a critique of Hammer's (1990) sixth principle could be the fact that there is little mentioned about management and how that flattening procedure could take place. He avoids mentioning that a downsizing effect might occur when an activity such as BPR reorganisation of the organisational structure takes place. I think it would be a good idea if that point were categorised as a principle on its own, to explain the reasoning underlying the efficiency element and how that might cause an effect such as downsizing. That would prepare the management to face that possibility instead of avoiding dealing with it. How will managers get their employees motivated if they know they may get dismissed at the end of the day? What other routes exist to compensate for this negative effect of restructuring the organisation? (most of these questions will be dealt with in the human and culture chapters).

Another factor I see missing from here is the radicality element related to the timing factor. There is so much confusion and dispute on the timing of any transformational activity involving the notion of BPR (see also chapter 4)- up to the point where the authors avoid mentioning it - and this I believe could be solved if a principle was introduced regarding this element. For instance, a BPR in order to be considered as a BPR project (in radical terms) should take place in a period of time pre specified by the BPR participants', for instance, for its further distinction from other tactical change programmes like TQM.

The people factor is also hardly mentioned either. Indeed, this is a factor that BPR literature in general says little about. I believe it is a multi-dimensional one because in order to have a good workforce in an organisation, the institution has to create an environment which people like working in - an organisational culture, which is obviously missing from the BPR literature. The importance of the human element needs to be addressed and measured for actions to be undertaken. As mentioned earlier, a principle should be introduced to reinforce this forgotten element - an

element that people are afraid to talk about. Educating, training, stimulating of peoples' competencies, promoting, compensating, accepting new ideas and being honest with the workforce about the organisational objectives will be respected and appreciated by the workforce (Beardwell and Holden 1994). This type of open communication and sustainable commitment and leadership from the management, I believe, are critical in leading changes of this kind. This will also advance the competitive advantage of an organisation (Pettigrew 1987) (the reader can see related suggestions in the human element and culture chapters of this thesis). What has just been mentioned can be further justified by recalling what the ESRC (1996) noted concerning the reasons why BPR fails. One of them was argued to be the 'inadequate managerial understanding, and the insufficient attention to human issues'. Also, in implementation they see 'the best people not being seconded to the BPR design team' and in addition, they found that people have 'difficulties of moving from processes-oriented thinking and analysis' to any other orientation. Thus, I do not think what Hammer (1990) has given us is enough to conceptualise BPR. There are elements and issues that need to be drawn and elaborated further for the above principles to be complemented.

Likewise, Harrison and Pratt (1993) adopt what they call, 'the new analytical framework' which proposes new ways to organise work. 'The new analytic framework is helping to challenge traditional thinking on how business operate and inspiring management teams to find new ways to organise work' (1993 : 7). They place emphasis on concepts like *extended enterprise issues* (e.g., manufacturers are forming supplier alliances to shorten manufacturing times), *concurrency procedures* (for instance, teams working concurrently in a production line), *displacement of IT and software* for the reduction of costs and improvement of cycle times (e.g., quality certification) and *simplification ideas* (finding efficient ways of conducting business - the Ford example is given here to illustrate how an elimination of the parts ordering created enormous cost reductions) (Harrison and Pratt 1993 : 7-8).

If these ways of organising the work are closely examined, it might be suggested that this latter set of authors adopted Hammer's (1990) principles in order to produce what they call the 'methodology for structured change' (Harrison and Pratt 1993). They also talk about *cross functional perspectives* of the business, the elimination of red

tape within the departments (they do not, however, indicate how that is to be achieved) and taking charge of overall process performance. The *rapid improvement of computer economics* is also heavily emphasised and the more flexible data communications along with electronic models and data bases are considered as the 'creative and innovative ways of streamlining new product development' (1993 : 7).

A further statement *on quality function deployment* is the only difference between Hammer's (1990) principles and those of Harrison and Pratt (1993). As far as the rest of the justification is concerned it is obvious that their initiatives are influenced by Hammer's initial principles. A difference that brings these authors under the spot light because their way of approaching 'breakthroughs in performance' is achieved through TQM. On this point Harrison and Pratt (1993) note,

'In a new vision of enterprise performance, companies are designing underlying business processes to create simultaneous improvement in quality, cycle times, service and productivity - often by orders of magnitude. From another point if our aim is to shorten cycle times, we invariably have to start with quality improvement by 'doing it right the first time' (1993 : 8).

This is a view, that, as seen earlier is totally rejected by Hammer (1990) and Hammer and Champy (1993). It is also one with which I disagree because, as they present things, it makes the BPR intervention look like little more than a TQM initiative which mostly focuses on processes (see also chapter 4). That is despite the fact that others like Davenport (1993) use IT as a driving force while reengineering, which this time makes the BPR intervention look like little more than the introduction of new management information systems in an organisation (see chapter 6). In contrast, I see the need for a BPR initiative that focuses on more elements, instead of giving primacy to one.

- *Methodological Guidance*

Now the question of methodology arises. *Is there a BPR methodology or not?* Some people (e.g., Cohen and Ewyk 1996) say there are no methodological guidelines to follow, and others (e.g., Davenport and Short 1990) provide their expertise as a shield and vaguely refer to what they think those guidelines are. This I believe is a 'black box' for the BPR notion and it needs to be opened. Do the authors writing about BPR refer to any specific guidelines that need to be followed in case of such event? As disappointing as it might sounds, from a range of books and a great number of articles

explored for the purpose of this research, very little was found concerning this issue. In one of a series of articles written by Phil Cohen and Onnovan Ewyk, (HCI Consulting, Sydney 1996) it is emphatically indicated that,

‘BPR is accomplished by setting up a reengineering team, comprising a number of people who know the process to be reengineered, and a number who don’t. There is no formal methodology for running a reengineering session but Hammer cites a number of recurring themes [principles] of reengineering processes...’ (Cohen and Ewyk 1996).

As revealed from this BPR literature exploration, Davenport and Short (1990) are the only authors that make a reference to something so specific as a ‘BPR methodology’, along with Harrison and Pratt (1993). Others (e.g., Cohen and Ewyk 1996) as seen above, just accept Davenport and Short (1993) ideas and ‘take things as they come along’.

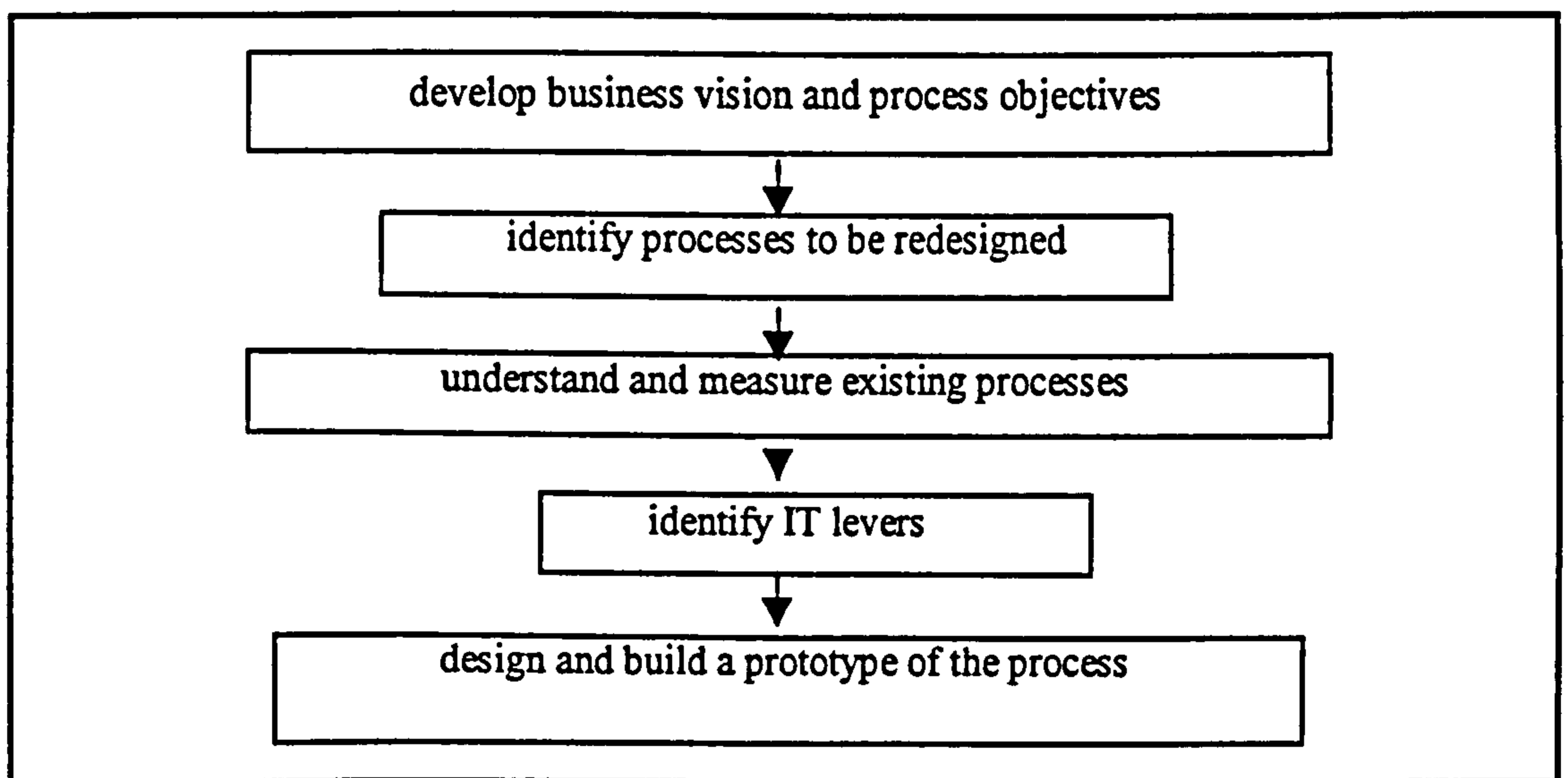
Davenport and Short (1990) believe that when a company has decided that its processes are inefficient or ineffective and therefore in need of redesign, it should proceed with a ‘straightforward’ activity, which involves *five steps* (see Figure 3.2). The first step is to develop the business vision and process objectives; then an identification of processes that need to be redesigned should take place; thirdly, the company should understand and measure the existing processes in order for current problems to be identified; this step is followed by the identification of IT levels; and lastly, there is the suggestion of designing and building a prototype of the process identified (Davenport and Short 1990 : 13-17). Davenport, on the other hand, does not make any reference to any BPR principles in his 1993 publication – neither do Hammer and Champy (1993), or Johansson et al. (1993) in any explicit way. In 1990 though, Davenport and Short briefly described what they called ‘a five step approach to BPR’ which again lacks elements that could have been mentioned and further explained or analysed. Yogesh Malhotra (1998) makes a reference to those five steps and explains them:

- develop the business vision and process objectives – BPR is driven by a business vision which implies specific objectives such as cost reduction, time reduction, output quality improvement, learning;
- identify the processes to be redesigned – most firms use a ‘high-impact’ approach, which focuses on the most important processes, or those that

conflict most with the business vision. A smaller number of firms use the 'exhaustive' approach that attempts to identify all the processes within an organisation and then prioritise them in order of redesign urgency;

- understand and measure the existing processes – this is to avoid repeating old mistakes and to provide a baseline for future improvements;
- identify IT levers – awareness of IT capabilities can and should influence the process design;
- design and build a prototype of the new process – the actual design should not be viewed as the end of the BPR process, rather it should be viewed as a prototype, with successive iterations. The metaphor of prototype aligns the BPR approach with quick delivery of results, and the involvement and satisfaction of customers (Malhotra 1998) – (see also the Figure below).

Figure 3.2 Five steps in process redesign



(From Davenport and Short 1990 : 14)

What has just been described is an example of the provision to the BPR reader of process and IT oriented methodological guidelines while reengineering. Before I present and comment on the above, I would say that just from looking at the figure for the first time I see the need for additional methodological steps to cover the role played by issues like IT, the people factor, the cultural factor, the timing of a BPR intervention in such a change programme as BPR.

Let us, then, take a look at what these authors say about the above. For Davenport and Short (1990) BPR is *driven by a business vision which implies specific business objectives such as cost reductions, time reductions, output quality, quality of work life-learning*. Thus, they believe that prioritising companies' objectives, setting stretch targets and visualising their future realisation, may lead to a more efficient overall process. Also, this activity of clarifying the organisational objectives, it is argued, 'provides inspiration, which stimulates creative thinking'. The Ford example is given by these authors as well to justify their argument (1990 : 14).

The identification of processes that need to be redesigned follows. According to Davenport and Short (1990) there are two approaches firms use when attempting to identify the important processes within an organisation, the *exhaustive approach* and the *high-impact approach*. The first one identifies all processes within an organisation and then prioritises them in order of redesign urgency. The high-impact approach attempts to identify only the most important processes or those most in conflict with the business vision and process objectives. The exhaustive approach is often associated with *information engineering* (developed by James Martin in the early 1980's), in which an organisation's use of data dictates the processes to be redesigned³⁷ (Davenport and Short 1990 : 15). An example here involved Xerox Inc. where the information engineering methods were employed at several divisions in the company to identify business activities and the data they required derived while using a data-activity matrix. For Xerox that activity took as little as three months. Other companies, according to the same authors, may find this very time consuming (1990 : 15).

The alternative to this approach is to focus quickly on high-impact processes. Extensive interviewing is used to identify such processes or senior management workshops can point those out. At IBM, for instance, the sales force was surveyed to determine the relative importance of various customers support processes; the generation of special bids emerged as the highest priority and was the first process to be redesigned. Davenport and Short's (1990) practical experience on that, has shown that the companies that employed the high-impact approach generally considered it sufficient. Companies using the exhaustive approach, though, have not had the resources to address all the identified processes; 'Why identify them if they can not be

addressed? (Davenport and Short 1990 : 15). Overall, companies choose and decide what is best for them according to the circumstances given.

As a third step, *companies are required to understand and measure their existing processes*. There are two reasons for that. Firstly, problems must be understood, so that they are not repeated and secondly it is noted that accurate measurement can serve as a baseline for future improvements (Davenport and Short 1990 : 16).

‘The role of IT in a process should be considered in the early stages of its redesign’ (Henderson and Venkatraman 1989). Davenport and Short use this quotation to emphasise *that identification and awareness of IT levers and capabilities can - and should influence process design*. They further justify this by indicating that companies prefer and insist on this. IT, they say, *is so powerful as a tool and because of that it deserves its own step in process redesign - IT capabilities can reshape processes* (1990 : 16). In addition to that, we see them putting forward the challenge that IT can actually create new process design options, rather than simply provide support for the existing ones. This step can be accomplished by using brainstorming sessions to exploit existing processes or/and it is certainly useful, according to the above authors, for a list of IT’s generic capabilities in improving business processes to be generated (Davenport and Short 1990 : 16).

The last element of Davenport and Short’s (1990) five-step approach to BPR introduces the idea *of the design and build of a prototype of the new process*. The actual design should not be viewed as the end of the BPR process. Rather, it should be viewed as a prototype, with successive iterations. The metaphor of prototype aligns the BPR approach with quick delivery of results, and the involvement and satisfaction of customers. Davenport and Short (1990) here, consider that success will be highly ensured if key factors and tactics are taken into account in process design and prototype creation. These include *IT as a design tool*³⁸, *the importance to understand the generic design criteria* when evaluating alternative designs and *finally the design of organisational prototypes* (1990 : 17).

On this matter, as mentioned by these authors, companies need also to evaluate alternative designs; thus various criteria are used to achieve that. The important thing,

though, is for those criteria to satisfy the chosen design objectives. Davenport and Short (1990) list a number that we can refer to: 'the simplicity of the design, the lack of buffers or intermediaries, the degree of control by a single individual or department, the balance of process resources etc.' (1990 : 17). Furthermore, for these authors, the organisational prototype factor illustrates a final and an important point about process design. This might involve a pilot project, which may yield the necessary experience for further implementation, this time after agreement has been obtained from the owners and stakeholders. This might be examined regularly for problems and objective achievement, and modified as necessary.

'Those aspiring to improve the way work is done must begin to apply the capabilities of IT to redesign business processes. Business process design and IT are natural partners, yet industrial engineers have never fully exploited their relationship [the authors argue, in fact that it has barely been exploited at all]. But the organisations that have used IT to redesign boundary - crossing, customer - driven processes have benefited enormously' (Davenport and Short 1990 : 11).

I could not agree more, especially on the last point they make here and the fact that there is no exploitation of the relationship of the above elements. I am quite reluctant, though, to accept that this five-step model can be proposed as the methodological guidance for any BPR activity since their orientation is process driven. Having in mind the rate of failure of BPR activities - 70% of BPR projects fail (Malhotra 1996) - makes me think that the correlation of the two is not so straightforward as the authors want us to believe. The model provided, I believe, is a very good one to start with, because it covers a range of issues that I see as fundamental to any company's redesign. However, emphasis is given primarily to processes and to a lesser degree to IT. I wonder, though, what else can be done, to improve this five-step model? After exploring the current BPR literature I have found that there are a number of issues arising which are not taken advantage of, as can be shown if we consider the reasons why others like Bashein et al. (1994) believe BPR projects fail (these are briefly mentioned below but will be further discussed at a later stage of this thesis).

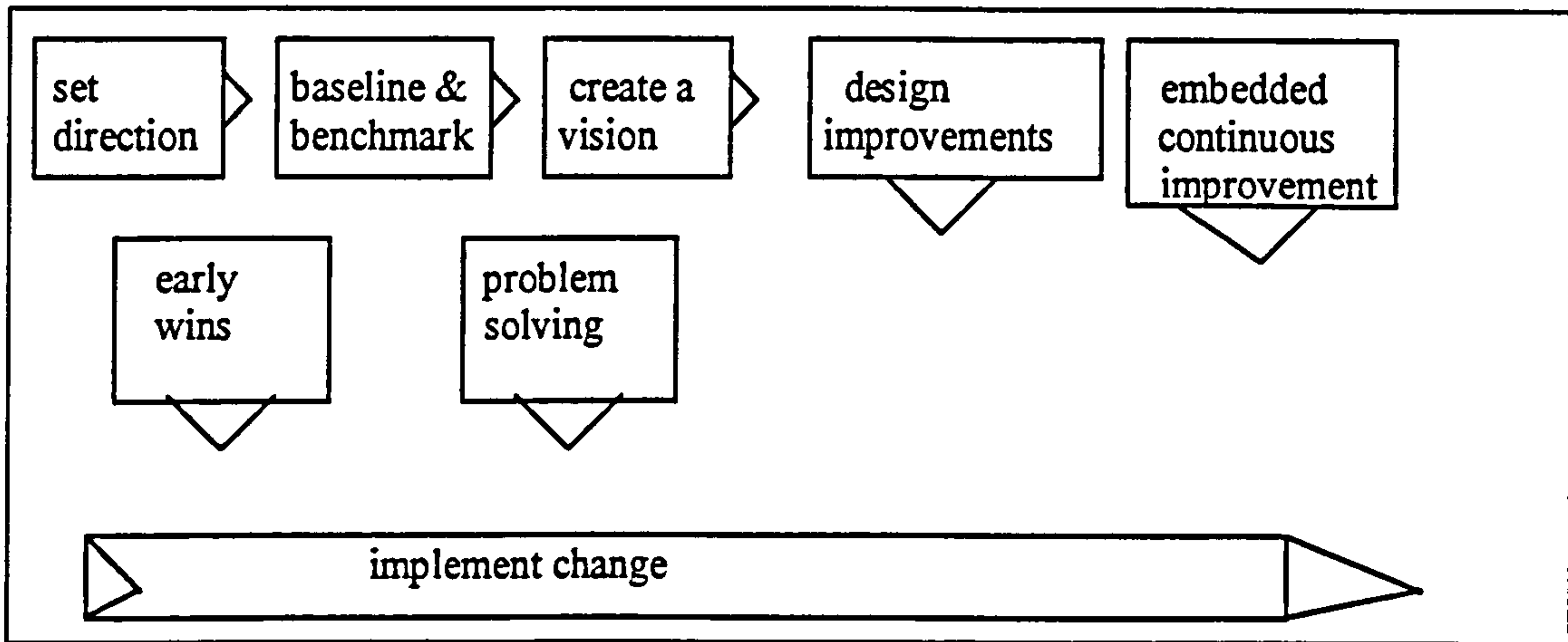
To start with, I see the *human resource element* (Bennis 1997) not mentioned in this model at all. Nor is the *time factor*, which I consider as very important because it contributes to the radicality element - how quickly things are accomplished. The

identification of new product and market opportunities is obviously not there [a strategic SWOT Analysis (Johnson and Scholes 1993) can easily determine that] and overall I cannot detect any signs of recognition *that the organisational culture has to change* (Clark et al. 1994, Martin 1998) in order for the transformation to take place. Thus, it could be said that for this model to fit today's dynamic environment, it needs to be further advanced with the issues indicated above. The human and the cultural factors will be explored in depth in the following chapters of this thesis, and also criticised in the BPR context, but now let us take a look at the reasons why, according to Bashein et al. (1994) BPR fails.

Based on BPR consultants' interviews, they outline several negative preconditions relating to the organisation, which include: *Not Getting the Human Resource involved* and *Fear and Lack of Optimism*. No wonder this is happening. How do companies or consultants expect their workforce or their clients' workforce to react when they do not prioritise their labour element and its needs as one of the fundamental elements that need to be redesigned? Why can for example, the human factor not be of an equal importance to the processes or IT elements? All the above points mentioned could make their own contribution to the success of a BPR intervention since I clearly see them overlapping with IT and Processes elements. This overlapping will be further illustrated in the following chapters that deal with these elements extensively. Even though at the moment we can prematurely detect little overlapping of those factors, the current BPR literature should not ignore but encourage such overlapping.

There is not much to say about Harrison and Pratt (1993) indications of a BPR methodology, since after revealing Davenport and Short's (1990) disposition and Hammer's (1990) principles on the matter, it can now be said that the initial set of authors borrowed almost all the ideas of the others when they introduced their model. As stated earlier, though, they differ on the 'clean sheet' approach and they emphasise the fact that the quality improvement (e.g. TQM) approach will, for them, govern any reengineering initiative - 'reengineering starts with the existing framework and focuses on improving it' (Harrison and Pratt 1993 : 8). This methodology of supporting this type of change can also be seen in Figure 3.3, as given to us by these authors.

Figure 3.3 A structured methodology for process change



(From Harrison and Pratt 1993 : 11)

As argued by the authors, this methodology does not have an end point - the change process for them is ongoing. The process performance is regularly monitored, emerging best practices are benchmarked, and continuing recommendations for process improvement are made. They specifically note that,

‘after the line organisation has been trained and coached in teamwork behaviours, continuous improvement becomes an ongoing feature of the day - to - day management of the company’ (Harrison and Pratt 1993 : 11).

This is an approach which carries the quality movement attributes that are found in such a change programme, an approach which deals with people’s skills and development in the workplace, cycle times and ‘getting it right first time’ (Flood, 1993). There is no indication, though, of time of completion for all the activities stated above (is the phrase ‘this will take forever and is an ongoing process’ an indication that the company that undertakes the initiative will be on a programme for its life term? - there is no explanation given on what these authors mean by that). Also the possibility of releasing employees as a result of undertaking such an initiative is not considered at any of the stages of this particular model. Having said that, the question arises, *how* the BPR methodology they present to us differs from any other quality approach for changing organisations. This thesis argues that nothing new is provided by the above authors to indicate that what they present is indeed a BPR methodology (also see the human element chapter which gives a number of suggestions on how the BPR literature and its users could remedy BPR weakness on issues involving this element).

I find the idea that there is no formal methodology for BPR to be further justified if I refer to a more recent study conducted in 1997 by the Stockholm School of Economics of Sweden. This study reflected on the function of methods of management consultancy within five big consultancy firms (amongst them Ernst & Young, McKinsey of Sweden, etc.) when they are reengineering. The following Table summarises these companies' approaches to such change.

Table 3.1 The main phases in process improvement projects in the consultancies studies

<u>McKinsey</u>	<u>E&Y</u>	<u>ABB-MAC</u>	<u>Andersen</u>	<u>BCG</u>
1. prepare the programme	1. improvement portfolio analysis	1. project definition	1. shared vision (of strategy in organisation)	1. preparation and prestructuring (of change process and target)
2. launch first wave of microcosms	2. future state definition	2. 'is' analysis	2. assess/align (map, benchmark, identify, improvement programmes)	2. gain understanding (map and measure)
3. launch additional waves	3. pilot	3. 'should be' analysis	3. master plan (plan improvement initiatives)	3. develop alternatives (model system, assess alternatives, develop action plan)
4. move into continuous improvement modus operandi	4. implementation	4. implementation planning	4. design (of improvement initiatives)	4. take action
	5. infrastructure definition		5. pilot	5. realise benefits
			6. implement	
			7. operate	

(From Werr et al. 1997 : 291)

[According to the authors of this study, 'it is also important to underline that the use of interviews for data collection confines out data to what the consultants say they do rather than what they actually do' (Werr et al. 1997 : 290)].

The above Table once more proves that a formal BPR methodology does not seem to exist and that the practitioners in the field give an overall structure to tackle this change process. There is no harm done in doing so. I believe that the secret of success here lies in the full integration of the steps involved while incorporating the five

imperative contributing factors (IT, human element, processes, culture, time), which, I suggest, could make a successful BPR intervention.

Thus, from the above we can conclude that in the BPR literature we find very little regarding any universally given and accepted principles or a specific methodology guiding a BPR activity. This, I believe, is not a concern of this thesis alone, but of a number of others (consultants, practitioners and researchers). During an ESRC Forum (1996) for BPR, many summaries and scattered guidelines were provided identifying factors that contribute to the success of BPR projects (of course all these were based on these peoples' experiences). These will be listed below but that does not mean to say that this thesis agrees or disagrees with those. They are presented as a further contribution to this thesis' primary objective of trying to present *what is around and is called BPR*. It also supports the claim that people are in *search of what is called BPR!* For this thesis, these identified key characteristics of future successful BPR activities indicate that people worry about this notion. A reason for that, as this research identified, is perhaps the non-existence of any methodology around BPR, which makes them try to 'hang on from somewhere'. It seems to me that, that 'somewhere' is *others' experiences - bad and good - and their need to become aware* of those in order to avoid any future mistakes and to strengthen their ideas and knowledge about the BPR notion. My concern, though, is this: if we accept what has been given as 'guidelines for best BPR practice' by ESRC (1996), how do we endorse them in future BPR literature and practice and how do we incorporate them in our future BPR thinking? Before I answer these questions, I will present to the reader what this Forum referred to:

Companies should,

- sustain high priority to human and organisational issues, including effective HRM and training policies to support planned changes and ameliorate the 'pain of change'
- target dramatic improvements as well as relentlessly pursuing ongoing incremental change and improvement plans, including the setting and monitoring of performance measures in all key activities
- promote open communication with all stakeholders
- sustain commitment and leadership from top management as the values of senior

managers are critical in leading changes of this kind

- be quick with completion of projects, while acknowledging the need to go slow at times, in order to go faster in the long term
- choose the best people for their design teams, with sufficient time away from everyday responsibilities to think creatively about improving processes
- encourage participation from all stakeholders (employees and customers)
- focus on improving key business processes, not mending relatively unimportant processes that do not work well
- have strong customer orientation
- systematically and closely monitor TQM and continuous improvement approaches to sustain change
- empower their staff and local autonomy
- open and have regular communication inside the organisation and externally
- encourage a multi-skilled team work (ESRC 1996).

An examination of the above guidelines shows that they have as their major concern the human element, one of the elements that we have discussed and seen as missing from Hammer's (1990) proposed guidelines and Davenport and Short's (1990) five-step model. On the other hand, if we accept those (ESRC 1996) guidelines as they are, I believe, are of no use to the BPR readers unless they are placed in some sort of context within the BPR literature. A suggestion could be that all these could make a good and multi-dimensional human resource principle/guideline, which is endorsed in Hammer's (1990) list and Davenport and Short's (1990) five-step model, as an additional principle and additional step in order to advance these existing frameworks. I believe that could improve and make these two frameworks more flexible to cope with today's dynamic organisational contexts. This is also a suggestion which answers the question I posed earlier on how these pointers from ESRC (1996) can be incorporated to advance what Hammer (1990) and Davenport and Short (1990) give us as principles and BPR methodology.

Simply,

- The human element can be placed as a principle/step in its own right. This would allow the element to be more efficient and productive in its contribution to the overall BPR initiative. It would also be useful if this principle/step represented two

categories of employees as well: the employees that could face the possibility of being released from duty and the group of employees that will stay on board and aid the company to go through this transformational activity (see also chapter 7 and Figure 7.6). In doing so the downsizing and productivity factors could be tackled. The integration and further training of employees will allow for changes in the organisation to take place with less resistance from the recipients, new objectives will be set and employees will know that their future (work-wise) at least is at no risk (of course as further stated in chapter 7, other factors also need to be considered here, for the appropriate action to be taken).

- The Cultural Sensitivity related to the human element, could be another principle/step added to the existing list of principles and steps Hammer (1990) and Davenport and Short (1990) give us. Creating a good and communicative human element environment is indirectly related with how people are and how they perceive and value the environment they work in and its dynamics. Therefore after the company establishes a good relationship with its work force (the means to achieve that and an extensive analysis on the matter are provided in the Culture and human element chapters) it has to start working more intensively on the cultural issue within the organisation. In chapter 8 the reader can see a retrospective analysis on what culture is and how BPR managers can deal with it. A suggestion is for the future BPR thinker to familiarise him/herself with the notion and then direct its users on how to perceive this notion. Thus, for this suggestion here it would be beneficial to talk about the cultural sensitivity³⁹ that exists in organisations and how BPR managers can deal with it as part of the effectiveness of this suggested principle/step.

Therefore the reader might say that what exists in the BPR literature as principles and methodological guidelines

- is very little; there is no reference to these issues by authors like Johansson et al. (1993), Davenport (1993), Jacobson et al. (1995), Armistead and Rowland (1996), etc. Only two articles written by Hammer (1990) and Davenport and Short (1990) make reference to such issues
- is weak and insufficient in infrastructure and that is because
- what these authors are giving us, I believe does not represent the needs of an

organisation operating in a dynamic environment like the contemporary one (examples of these can be found in chapters 7 and 8).

I would therefore conclude that the currently examined BPR literature fails to provide its readers with sufficient material for clarifying this notion's principles and methodological guidance foundations. The phrase 'we decide on it as we go along', shows once more that there is not enough material covering this topic and whatever is already there lacks direction and clarity as far as the BPR baseline is concerned. This is something which this thesis has identified and by giving a definition (in part one of this chapter) and a number of suggestions (in the second part) I hope BPR's baselines will be made clearer and more sufficient for the future BPR user to rely on, for the accomplishment of successful reengineering interventions. I suggest, though, that further development of this part of the notion can be subject to future research.

3.3 A collective reflection part which leads to the construction of a conceptual framework for this thesis

This chapter sought to give a new definition for BPR and explain why that is necessary. A second objective was to find out whether there are any principles or any specific methodological guidance for this notion.

To achieve the above objectives I had firstly to present to the reader what is already there in the BPR literature as a BPR definition. Many readings amongst them Hammer and Champy (1993), Davenport (1993), Johansson et al. (1993), Jacobson et al. (1995) were recalled for that purpose. Analysis of their definitions has shown that there is no commonly accepted definition for BPR and the definitions offered are, I believe, insufficient and lacking in clarity and direction for users. A closer look at those definitions has also shown that writers tend to emphasise elements like processes and IT while either neglecting or not making any reference to other factors (human element, culture, time) which could contribute greatly to such initiative. With several examples I have shown that when reengineering in our contemporary world it is imperative for companies not to focus only on technocratic and mechanistic issues, because most of the times this will not help them change (e.g., the GTO Inc., Prahalad and Hamel 1994) but instead they should consider other factors as well.

I also argued that BPR needs redefining not just for the above reason but also because the BPR authors themselves indicate that what they are currently doing leads in 70% of cases to failure (Hammer and Champy 1993, Jones 1996, Eisenberg 1997, etc.). This also tells me that what they are doing is somehow wrong. In addition, while researching this field I detected that there is inconsistency between what these authors say they do, compared to what they really do when reengineering. For instance Hammer and Champy (1993) talk about teamwork, but they end up applying a mechanistic approach to change (cases like IBM). Other examples would be Davenport (1993) and Johansson et al. (1993) who simply seem to confuse BPR with TQM.

For all these reasons I gave my own BPR definition, which borrows, mainly from Hammer and Champy (1993). At the same time, though, I have added distinctive points like the inclusion of elements such as human element, culture, IT, processes and time to clarify and sufficiently provide the future reader/user with the topics that need to be acknowledged when reengineering in the contemporary organisational environment. I do not provide full explanation of the reasons why these elements are of imperative importance to a BPR change initiative because this will be addressed in the chapters that follow (chapters 4,5,6,7,8 and 10).

It might also be wondered how I arrived to the elements mentioned above. From a preliminary scanning of the literature those themes were identified and I believe they would be central to the research conducted later. The elements of radical thinking/level of change, process thinking and the timing factor, the role of information technology, the role of humans in the process, the principles along with the methodological guidance provided by the BPR concept, and the organisational culture (it is possible that further themes will emerge in more detail when the research is conducted) are ideas that are not necessarily made explicit in the BPR authors that I have studied but may be drawn out with further research. Thus, in order to illustrate the potential for conducting an analysis of the factors that are commonly described as features of the BPR, the idea of 'Radical Change' will be considered in the chapter that follows.

A search for discovering whether there are any principles and methodological guidance governing the BPR notion was undertaken next. The literature search has shown that amongst all major BPR readings examined, only Hammer (1990) talks about specific BPR principles. I pointed out that this is a good starting point but not complete to cover the needs of the today's dynamic organisation. Therefore I suggested that more principles like a human element principle and a cultural principle can be added to advance what is already given to us by this author. Of course I could not expand or even go in greater depth on what else might have been added to these principles, since I believe this could be a subject for further research.

The search continued while I reflected on whether there is any methodological guidance regarding BPR. As disappointing as it might sound, the majority of the BPR authors do not refer to such a thing as BPR methodology. From the core BPR readings examined, only Davenport and Short (1990) mention something specific as methodology and they have called it a 'five-step model to process design'. It is my belief that what they present is not sufficient for a BPR methodology because this model's major concern seems to be processes and to a lesser degree the IT element. This is something that once more undermines the contribution (even the recognition) of other factors to such a change initiative as BPR. Once more, my suggestion was for the future BPR thinker and user to acknowledge the missing factors and attach them to Davenport and Short's 'five-steps model' as extra, additional steps. As a result that would allow for the accumulation of further and collective knowledge on what else might affect the organisation when such a change takes place.

The findings of the two previous parts made me think and come to the conclusion that if we want BPR to be successful in future we have to be really looking for a mechanism that somehow draws more heavily on all the aspects that this thesis considers as contributing factors to a BPR change initiative. In doing so it is my belief that an enriched and holistic BPR will be achieved.

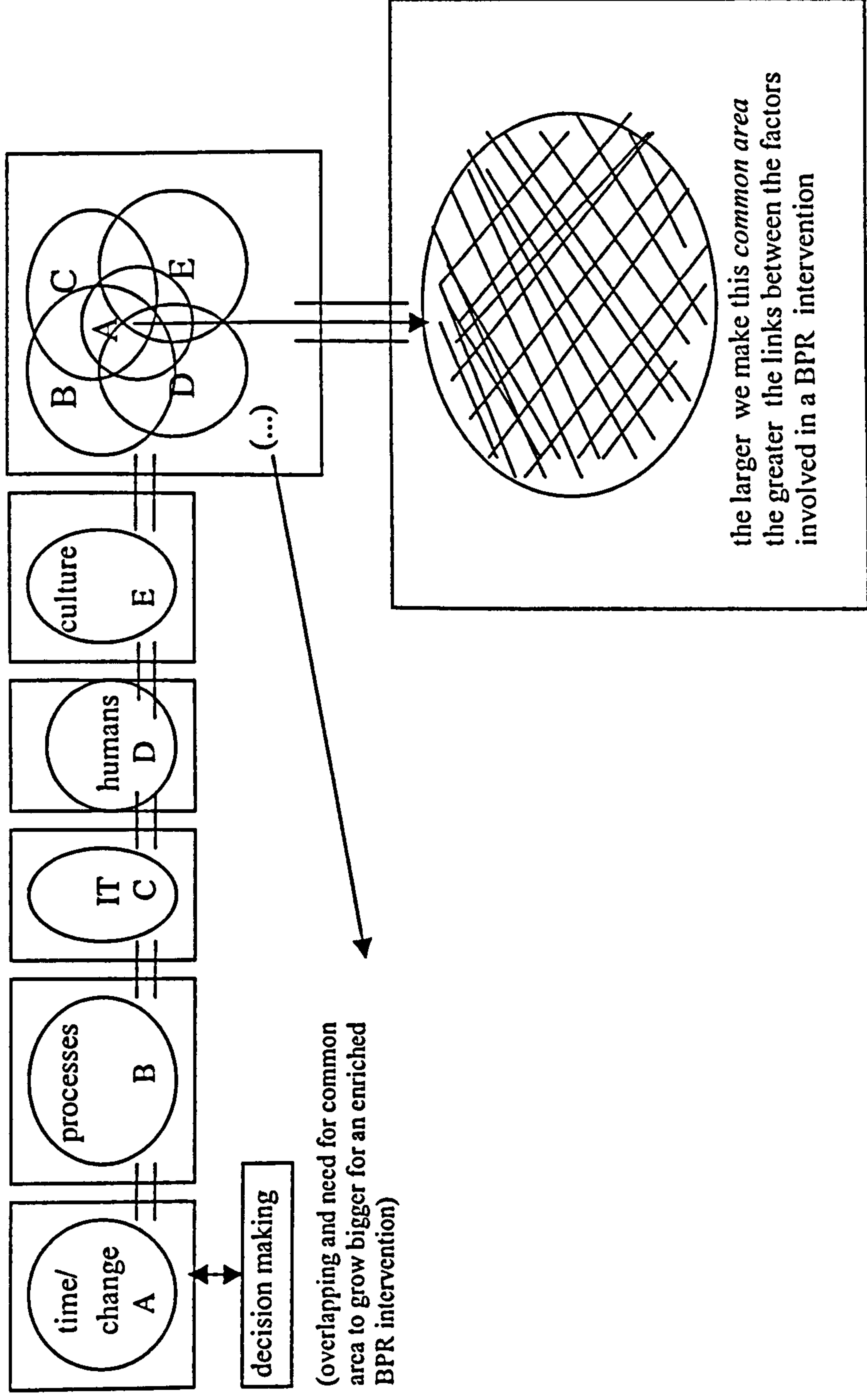
Thus, if we are going to make a successful BPR initiative that is going to be sufficient and holistic, future BPR readers/users, need to consider that the HR, culture, IT, processes, and time elements overlap and a range of insights can be derived for the BPR literature from each one of those areas, if these are considered together. The

larger we make the area those elements overlap, the more enriched intervention we create (see Figure that follows). Failure to do so, I believe, will once more result in (i) giving primacy to one or two of the above mentioned elements, a status quo that this thesis demonstrates is responsible for discouraging critique and failure of the notion, (ii) blurring the distinction between the BPR notion and other tactical management tools for change.

Prior to achieving a larger overlapping though, we need to examine those elements and correlate them with the BPR literature, in order to examine further what the BPR authors say about them (or what they do not say) and suggest ways of trying to improve this multi-dimensional relationship. This will be done in the chapters that follow, where the above elements are discussed individually and in depth.

Let us though go back to the idea of that wanted 'mechanism' for solving these insufficiencies found in the search of principles and methodological guidance in the BPR literature. I believe what I am suggesting could be called a 'conceptual framework' (see Figure 3.4), a conceptual model that can be used to give a different insight into the BPR notion from what has already been written. The framework presented here also governs the organisation of this thesis since, basically, this is the story line that goes all the way through this thesis.

Figure 3.4 A conceptual framework (this thesis' story line)



For Miles and Huberman (1984) a conceptual framework explains, either graphically or in narrative form, the main dimensions to be studied - the key factors, or variables - and the presumed relationships amongst them. Frameworks come in several shapes and sizes. They can be rudimentary or elaborate, theory-driven or commonsensical, descriptive or causal (1984 : 28-29).

I believe what is presented to the reader via this thesis' conceptual model is a number of described elements which, if considered in relation to each other and at the same time in conjunction with the overall notion itself, could lead in the future to an enhanced systemic, enriched and, hence, more successful BPR intervention. This framework can also be viewed as a commonsensical type of framework which gives me the ability as a researcher to view how these are perceived in the authors' readings examined and also to provide suggestions on how they can be shaped in order for their integration with each other to contribute to the overall success of a future BPR initiative.

Furthermore, this conceptual framework was also used because it would also provide a map for me while investigating the BPR territory. I would justify that by referring to what Miles and Huberman (1984) note:

'Conceptual frameworks are simply the current version of the researcher's map of territory being investigated. Without such a map, the search is slipshod; and if several researchers are involved, fruitless empirical anarchy can result. As the explorer's knowledge of the terrain improves, the map becomes correspondingly more differentiated and integrated, and researchers in a multiple-site study can co-ordinate their data collection even more clearly' (1984 : 33).

To sum this part up, I would once more say that BPR is a complicated issue. Not only its authors disagree with each other (as shown while defining the notion, and as will also be shown at later stages in this analysis), but the fact that BPR is often a failing change initiative (Jones 1996) should indicate to the reader that it has weaknesses and these need to be surfaced and tackled at the same time. I believe that the solution to the above would be to take a more holistic approach to change when reengineering. This approach needs to include numerous elements as the new definition suggests not just one or two. Thus the way I propose to deal with it is with the above described conceptual framework (refer to Figure 3.4).

3.4 Conclusion

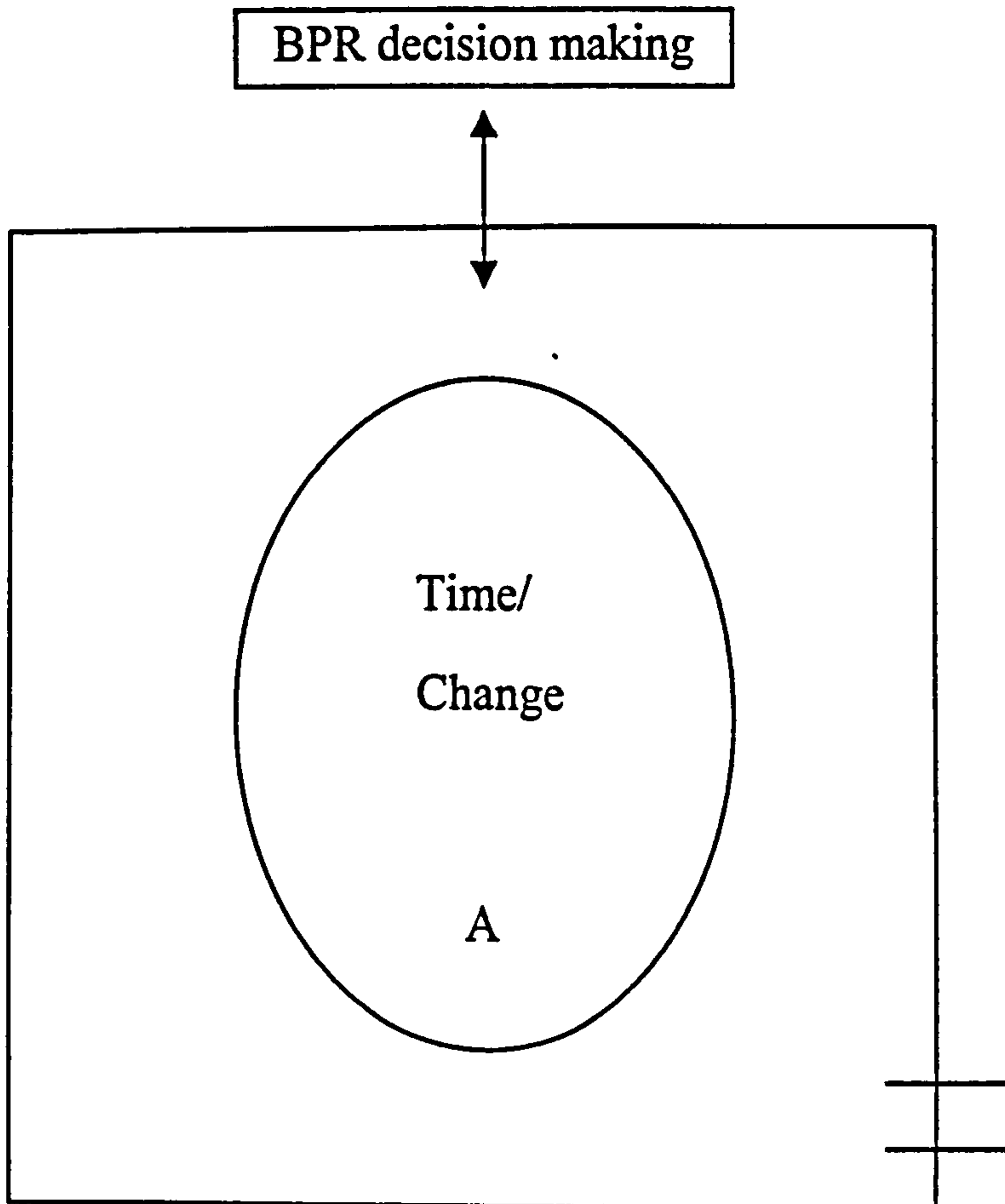
The objectives of this chapter were firstly to explain why BPR needs redefining, to give a new definition for BPR and thirdly to reveal whether the notion of BPR has any guiding principles and methodological baselines.

The first and second objectives were met in the first part of the chapter. I redefined BPR and I explained why it needs to be redefined as a holistic activity, which needs to encapsulate five imperative elements for its future success. I also reflected on the reasons why what I am supporting could make a future successful BPR intervention.

As far as the third objective is concerned I discovered that the currently examined BPR literature fails to provide its readers/users/practitioners with any universally accepted principles or specific methodological guidance when reengineering. I concluded that this results in insufficiency, vagueness and lack of direction for the user when referring to BPR's foundation. I also found a number of factors that were overemphasised, misused or neglected in the BPR literature examined. I concluded that if a BPR is process driven, IT oriented or focus to extremes on any other element, for that matter, it can lead to an outcome that will not meet the criteria of what BPR is, or what it can do as a holistic intervention. It also seems that simply 'scratching the surface' of BPR does little to reveal the nature of its own processes. In order to uncover potential weaknesses, differences and deeper similarities in the major BPR authors readings, it will be necessary to conduct a closer examination of BPR. This will be made feasible with the employment of more detailed analyses of those authors' publications in the section that follows (Section C).

The above also drove me to design a conceptual framework (refer to Figure 3.4) for the recognition and integration of all imperative to BPR elements for a future element-balanced, successful and holistic BPR initiative. This was shown in the last part of the chapter where I collectively reflected on the findings of the chapter and I also suggested that this framework could act as a map for the organisation of this thesis presentation and analysis in this particular field.

Radical Thinking Chapter



Keeping the wheels turning in a direction already set is a relatively simple task, compared to that of directing the introduction of a continuing flow of changes and innovations, and preventing the organisation from flying under the pressure
(Cited in Kast and Rosenzweig, 1970 : 354)

H. Edward Wrapp

Change could be painful; it is also an inevitable by-product of growth and success
(Cited in Hammer and Champy, 1993 : 176)

M. Hammer and J. Champy

Progress is a nice word. But change is its motivator, and change has its enemies
(Cited in Hammer and Champy, 1993 : 173)

Robert Kennedy

CHAPTER 4

4.0 Introduction

In the course of this critical exploration and analysis of what has been labelled as BPR, this chapter will present the reader with the element of radical thinking in relation to organisational change when reengineering. More specifically this chapter's aim is to show that in order for a BPR intervention to be radical and therefore be different and distinctive from other company-wide types of change programmes (e.g., TQM initiatives) that go on in organisations, there is the need to introduce timing constraints to the interventions that are conducted. A subsidiary aim will be to provide a guideline related to the timing factor for the user/thinker/practitioner when reengineering. The reason for doing so is that this is an area of potential focus from which I will argue that if fully integrated with the rest of the elements discussed in this thesis it could make a successful BPR intervention.

It might be asked why I value the timing element as of crucial importance to a BPR initiative. One reason is because I believe that with it the BPR user can distinguish what he/she is doing from any other change initiative the organisation undertakes (e.g., BPR Vs TQM), because if timing is applied, then the group will be heading towards a completion target (unlike a TQM initiative). This time indication will also be reflected in their financial needs like cost control and budgeting (Kerzner 1995 : 802/813) which will be planned and integrated well ahead, along with other pre identified organisational needs (e.g., training of the human element on IT issues, introduction/acquisition of new IT systems) leading to the enhancement of the initiative's success. Moreover the timing element is a great performance tool for setting against the BPR's pre-determined objectives. It is an issue that I find can be very well integrated with the process element (for instance adding the process time scales) to give an estimated pre specified BPR completion time. Project management people have called this integration of time and processes 'Effective Time Management' (e.g., Spinner 1992, Kerzner 1995), something from which future BPR thinkers can learn. Actually in thinking in BPR holistic terms, time can be very well blended, not only with processes but also with IT and the human elements, as later chapters will show. Kerzner notes, 'for most people, time is a resource that, when lost or misplaced, is gone forever' (1995 : 343). Thus, it would be wise for the future BPR

user to think this element through and incorporate it in its BPR practice (the second part of this chapter shows exactly that). As will also be shown in the analysis that follows time is an issue, which has not been specified in the BPR readings, examined by this thesis.

Thus, in order to demonstrate the aims of this chapter, I will be teasing out and questioning the radicality issue as presented in the examined BPR literature (Hammer 1990, Hammer and Champy 1993, Davenport 1993, etc.,) based on two dimensions: *improvement Vs innovation* and *'how to achieve change'*. Via this constructive act I will therefore suggest a way of looking at the matter, which I do not claim to be the only way of providing a solution to the problem identified in this chapter but which I believe will benefit the future BPR literature and practice by making clearer its approaches when dealing with the labyrinth of the radical element. In suggesting that it will also be beneficial for the future BPR user for his/her further understanding on the validity and the difference time can achieve in such an initiative as BPR if properly considered.

More specifically, in the first part, the current concepts and controversies in the currently examined BPR literature concerning the above topic are revealed. The authors' readings I will be referring to, will be examined in two areas: (i) the nature of the change process (improvement Vs innovation) and (ii) on how to achieve change while reengineering. This is done in order to provide the reader with some background on how the radicality element is perceived in a changing BPR environment and also to indicate that this specific element under examination is (i) an element that causes disagreement amongst the authors referring to it, and (ii) as a product of this disagreement, confusion is created. As a result of the above stated gaps in the literature, the BPR reader I believe, does not receive a holistic picture of the reasons why this is happening and, most importantly, the existing literature does not clarify or even justify what can be done about it. This part will conclude by presenting the taxonomy of the radicality element (see Figure 4.3) as found in the BPR readings examined.

The second part stresses once more that the findings of the research on the timing element can only lead to more confusion for the BPR reader. For instance because of

the different beliefs the BPR authors have regarding this element the reader is bound to be confused. Issues like what is radical, who should determine/specify that for a company and on what basis this is decided, as will be later shown, are not clear in the examined BPR literature. I therefore take the initiative to introduce a suggestion, which I believe if considered by the future BPR user/writer could clarify, and further aid their future BPR practice. The above questions are also answered and that is by introducing chronological levels (see Table 4.2) to a BPR activity. Briefly, I will argue that at the moment the length of time a BPR change programme takes does not enable the user/thinker to distinguish for example between a BPR and a TQM. Thus, companies, based on the new definition of BPR (refer to chapter 3) can decide whether what they can do is a short, medium or long term BPR on the basis of their assessment on how long it will take them to deal with the five imperative to BPR elements. For example it can take 3 years as long as a lot of those elements need radical⁴⁰ change. What I am suggesting here is also substantiated by two real life case studies; the Leicester Royal Infirmary and the USA Express Mail Postal Service, which demonstrate that what I am arguing can be feasible as well.

The third part reflects on what has been discussed in the chapter regarding the timing element and BPR and gives a guideline, to satisfy the subsidiary aim set at the beginning of this thesis. This part is followed by a conclusion that summarises the arguments of this chapter.

4.1 BPR and the Radical Thinking (Time factor)/Level of Change Element: Current Positions

This part will be revealing two areas on where the BPR major readings will be examined regarding the timing element: (i) the nature of the change process (improvement Vs innovation) and also (ii) how to achieve change while reengineering. This is done in order to provide the reader with some background on how the radicality element is perceived in a changing BPR environment.

- *Improvement Vs Innovation*

The first factor has to do with the view adopted by the BPR practitioners/writers on the *scope* of processes⁴¹, which is the extent to which they influence the change

involved in a reengineering programme. If, for example the process/es is/are seen to operate within a single unit or department in the organisation, then the scale of change from redesigning it/those is likely to be limited. To be able to analyse the above, an underpinning assumption needs to be considered. This has to do with the *nature* of the change process. What that means could be explained if we think of the 'change notion' in terms of *improvement* and *innovation*.

There appear to be two schools of thought in the reengineering literature on this issue.

The first which appears to be strongly

'influenced by ideas from Total Quality Management⁴² (TQM), ...suggests that change may be incremental. Improvement of existing processes is therefore seen as a valid form of reengineering. The other, however, argues that reengineering must involve fundamental change. Established processes should not be fixed, but must be re-invented' (Jones 1996 : 4280).

Davenport (1993) distinguishes the two (see Table 4.1) but he (as shown in his writings⁴³) is in favour of the prior category, the category of process improvement. The latter - process innovation – is more ambitious, and is broadly speaking equivalent to BPR (Jones 1996 : 4280). Some differences between improvement and innovation are shown in the table below:

Table 4.1 Process improvement vs process innovation

	Improvement	Innovation
Level of Change	Incremental	Radical
Starting Point	Existing Process	Clean Slate
Participation	Bottom-up	Top-down
Scope	Narrow, with Functions	Broad, cross-functional

(From Davenport 1993 : 11)

Hammer (1990) though, insists that reengineering requires radical thinking. 'It is time to stop paving the cow paths', he notes. 'Instead of embedding outdated processes in silicon, we should obliterate them and start over' (Hammer 1990 : 104). The same author, three years later continues to argue that reengineering is completely different from TQM:

'It seeks breakthroughs, not by enhancing existing processes but by discarding them and replacing them with entirely new ones. Reengineering involves a different approach to change management than needed by quality programmes'

(Hammer and Champy 1993 : 49).

Morris and Brandon (1993) suggest that if we want to have a successful reengineering then we should not rely on organisational transformation but we should try to win *performance improvements* from all positive quarters in the organisation. In other words, they tend to see reengineering in quality terms. This is a different position from that of Hammer and Champy (1993). Other authors argue that there is a spectrum of reengineering strategies, ranging from incremental improvement to complete transformation (e.g., Jones 1996 : 4280).

Armistead and Rowland (1996) tend to pursue the view of an incremental approach rather than a radical leap and that is because 'the last one has to do with considerably less risk, albeit the need for subsequent improvements may then lead the organisation to search for more radical solutions of a reengineering kind' (1996 : 4). Why then not call it quality management instead of reengineering? Obviously this view is strongly influenced by the Quality movement which has often been associated with continuous improvement, often of a more incremental kind than process reengineering (Hammer 1990 and Hammer and Champy 1993) advocates. Here we can also detect a similarity of opinion between Armistead and Rowland (1996) and Davenport (1993).

Despite the fact that they take this position (Armistead and Rowland : 1996 : 4/5), however, they seem to accept and not to question the fact that reengineering and a shift to managing processes requires considerably greater change than more incremental improvement methodologies. They do not give any specific definition of the term 'radical' but they try from their own collective experience to explain their perception on it and how managers deal with it in practice.

'Perhaps reengineering's greatest success is in provoking senior management for radically different ways of doing business and considering organisation from scratch many aspects of the existing organisation which have evolved many years look increasingly inappropriate or in some cases downright damaging. While senior management may have felt energised by reengineering's message actually implementing its creed can be very difficult. Management cannot have all the answers ...' (1996 : 5).

An allied area of confusion, which even with *this brief reference to a number of BPR*

readings regarding this dimension, indeed indicates that even the writers' perceptions on this matter are not clear. Thus, a question arises, Whose ideas, then, should the current BPR reader/writer/practitioner adopt and follow? If we were to follow the believers of the improvement orientation, why do we need reengineering? A set of questions that have not been answered by the above authors to clarify the radicality matter for the BPR thinker. Earlier on I highlighted the phrase 'briefly referred to these BPR readings' regarding the *improvement Vs innovation* dimension and that is for a reason. My intention in doing so was to present to the reader the message that the several authors who are writing about BPR see radicality differently from each other. That makes it clear that this divergence between them exists and what they mean by it is further illustrated when we take a look at the next dimension on which these BPR readings are examined, one that explores the radicality element further and complements what has been stated above.

- *How to achieve change*

So far we have briefly considered the '*nature*' dimension of processes in to our major factor radical change for analysis, but in order to have a richer picture, we also need to consider '*how to achieve change*'. This represents the second area of disagreement in the reengineering literature concerning 'radical change'.

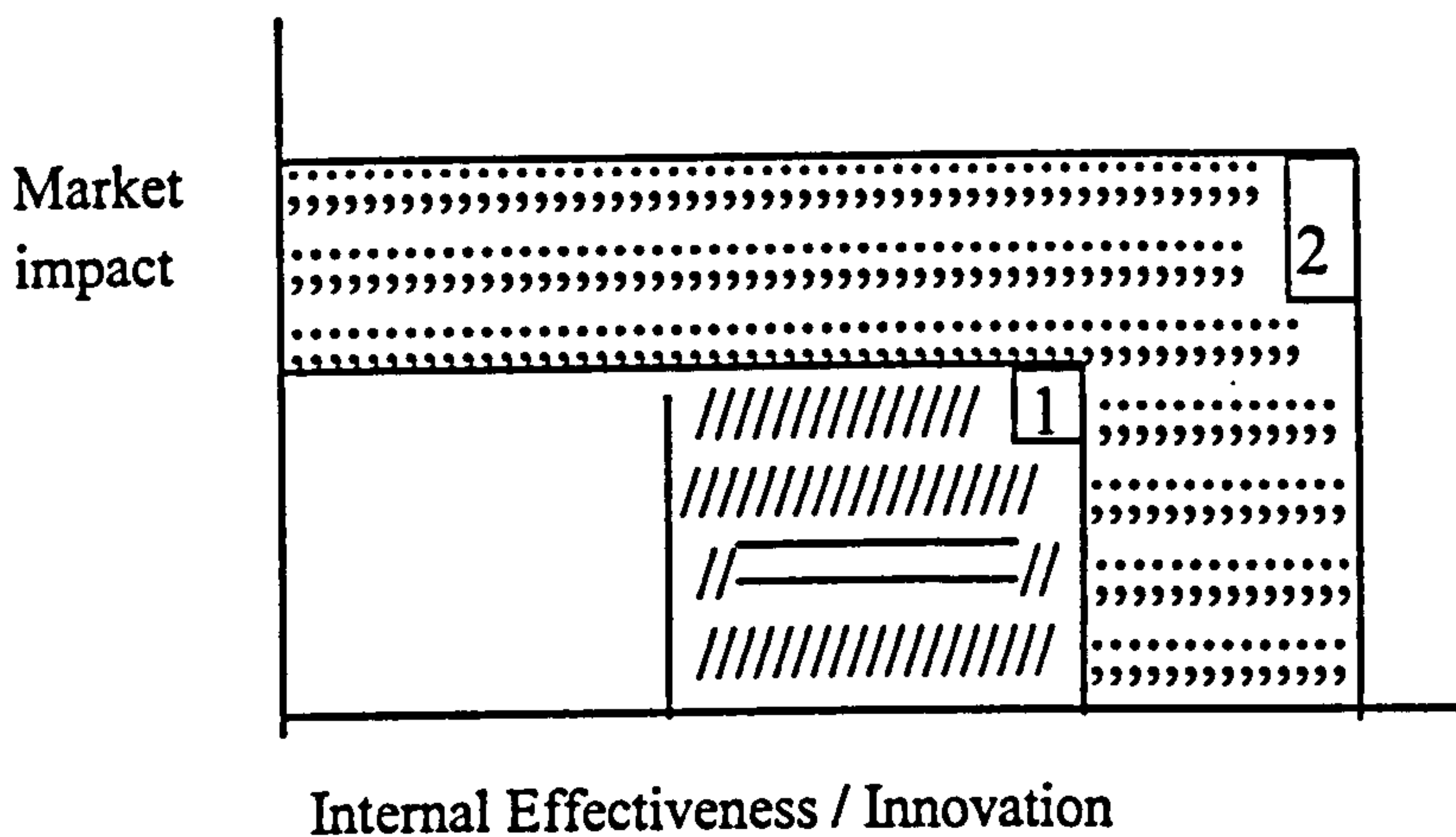
Hammer and Champy (1993) provide a strong argument for a complete rejection of the traditional forms of work organisation. 'Business reengineering is not about fixing anything. Business reengineering means starting all over, starting from scratch' (Hammer and Champy 1993 : 2). They emphasise the need to use creative thinking and suggest that a capable visionary leadership can further enhance this creativity. In contrast, another group of writers [amongst them Davenport and Short (1990), and Morris and Brandon (1993)] view reengineering as *an extension of traditional industrial engineering*⁴⁴ (IE). They refer to a number of *IE techniques*⁴⁵ that make essential components of any undertaken programme (even) for a BPR and suggest that a systematic methodology is required for success⁴⁶. Hammer and Champy (1993) reply to this particular point by explaining once more that this radicality of matters is the fundamental difference between reengineering and quality programmes. They then proceed to give a number of examples like IBM Credit, Ford Motor Co., Hallmark Co. (1993 : 36/39/159) to show that what they suggest is applicable. What really

makes me question this approach, though, is the fact that the authors themselves admit that they succeed in it only 30 per cent of the time (1993 : 200). This suggests that what they say they do in radicality terms, is somehow wrong or that there are some things, which have not been taken into account in their 'starting all over again' ideas. The fact that they can report a number of successful trials means that what they say can be feasible; but their high failure rate (70 per cent) suggests that a number of imperative BPR elements (one of which is the time span of their initiative and how that affects and is affected by the rest like IT, human element, Processes etc.,) have not been given the right attention and that is one good reason why their BPR initiatives fail. I shall return to this idea later.

Clearly here there are links with my earlier analysis (see chapter 3) of the definitions given for BPR influencing the incidence of radical change. A further note could be made in relation to the perceptions of Johansson et al. (1993) on the concept. In contrast to the views of Hammer and Champy (1993) Johansson et al. (1993) in discussing the 'Breaking of the China', see change as driven by forces external to the organisation, in other words, the marketplace. 'For companies to capture and maintain marketplace dominance, a new definition of operational excellence needs to be created, one that allows companies to destroy all of their preconceived paradigms about how business should be done, and begin anew; this is what we mean by breaking the china' (1993 : 7). This new creation, they suggest, must be internally driven but externally focused. At this stage it is argued that every business activity must have a connection upstream and/or downstream so that the customer or supplier, or both, receives an extraordinary degree of *value* from the company's relationship and so a sense of inescapability and/or symbiosis is generated (Johansson et al. 1993).

For Johansson et al. (1993) the achievement of excellence regarding the 'putting of the china back together', is translated in terms of 'breakpoints'. 'A breakpoint is the achievement of excellence in one or more of the *values metrics* - the values the market puts on products and services - to the extent that the market recognises the advantage and where the ensuing result is disproportionate and sustained increase in the market share of the company' (1993 : 16). This is also illustrated in Figure 4.1.

Figure 4.1 Level 2- Breakpoint



(From Johansson et al. 1993 : 17)

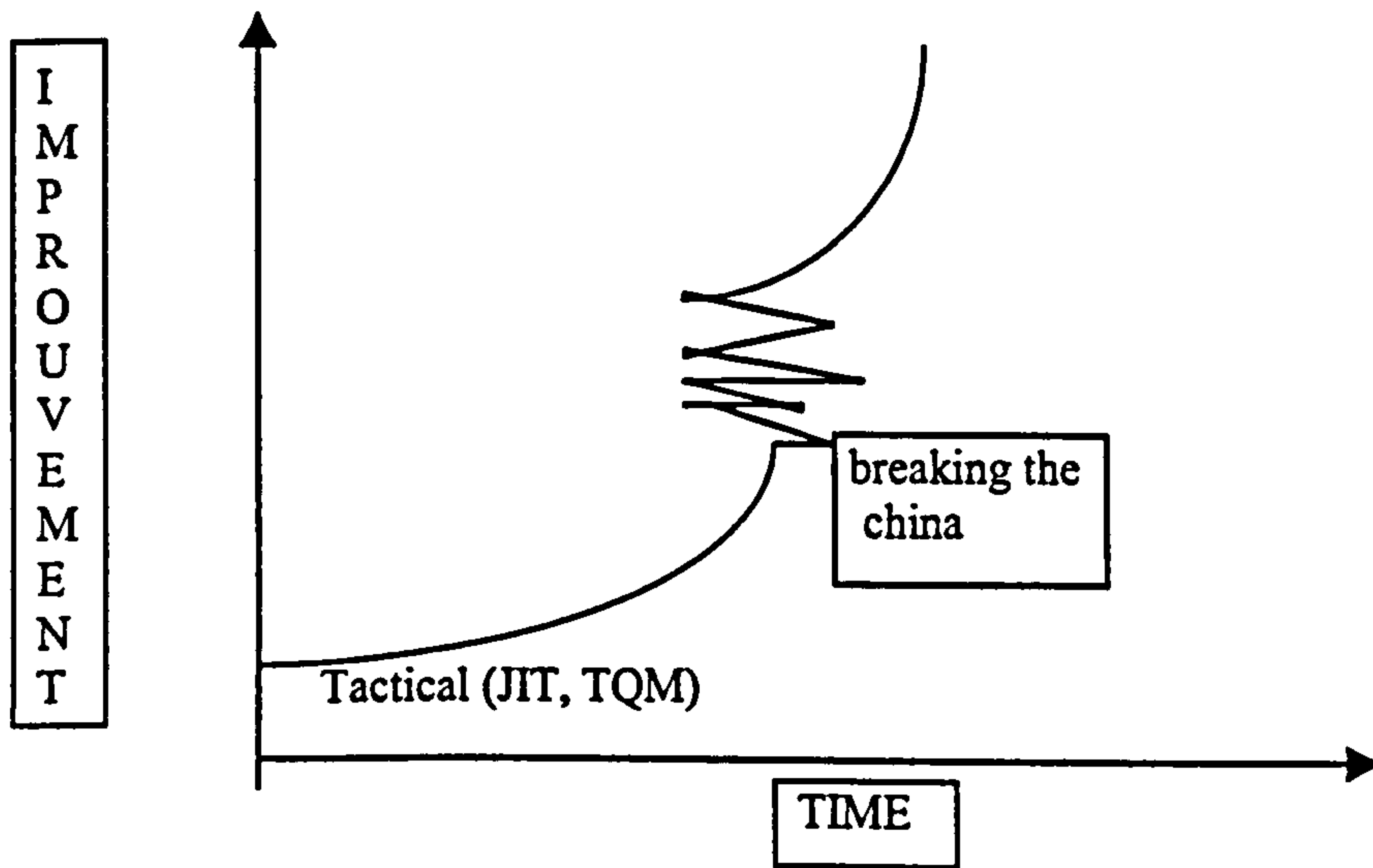
Figure 4.1 shows how the innovative nature of a breakpoint leads not only to ultra - enhanced internal effectiveness, but also to a market impact. By developing a vision of time value - chain excellence that is beyond industry best practice, the internal organisation is stretched to create an action plan of step - by - step improvements that in and of themselves can be potential breakpoints (Johansson et al. 1993). The challenge here though is, how they justify all the above in terms of radical transformation and where do they base their argument.

‘Unfortunately’, they note, ‘it is impossible for companies to implement successful breakpoint business process reengineering without having first undertaken one of the tactical process - oriented techniques (e.g., JIT⁴⁷, TQM)’ (1993 : 14). For Johansson et al. (1993) companies must spend some time thinking about processes and how to improve them before they can be radical and work toward reengineering core business processes (see also Figure 4.2). At this point, I believe, they make it clear that they disagree with Hammer and Champy’s (1993) view of radicality.

They also believe that invaluable lessons are learned from these earlier efforts in the areas of rigorous analysis of operation to eliminate waste and non - value - adding steps, team building and cross - functional team work, doing it right the first time and a host of other activities. Furthermore, they consider the dedication one develops through these efforts to questioning how things are done, and why are done, as a necessary prerequisite for the more intense and rigorous process of ‘breaking the china’ which is needed for a successful BPR breakpoint (1993 : 14-15). This is shown

graphically in Figure 4.2, which shows the journey a company takes toward process-oriented improvement; working on a tactical level, then stopping and ‘breaking the china’ before progressing to the strategic level of operational excellence (1993 : 15).

Figure 4.2 A company’s journey to process oriented improvement



(From Johansson et al. 1993 : 15)

This is a view that, as I argued earlier, is influenced by tactical management methodologies, which do not consider the timing element as important. What happens if a company is on the edge of a crisis and has to act sporadically (ad hoc) in order to avoid any unwanted surprises? What happens if there is no need for tactical programmes? I believe the way the authors support their ideas on this specific matter excludes the possibility of reengineering companies without firstly implementing tactical change programmes, and to this extent is insufficient and narrow minded (because of this exclusion). Take the case of a company that is the leader in its own industry and wants to reengineer. This company’s aim is to increase the competition margins between itself and its followers. Let us also say that this organisation has no problems with its major elements/resources like human element, IT etc., and profit is not a major concern. Personally, in such a case I do not see the need for this organisation ‘losing ground’ over tactical issues (this is not to say that I undermine the benefits received from tactical programmes). This is something that these authors have not considered and commented on, and can be a point of criticism when it comes to the immediate - radical course of action.

Similarly the remark I make above, is also a point for deeper thinking for Paul O'Neil, the chairman of ALCOA, who argues:

'We have made a major mistake [as managers] in our advocacy of the idea of continuous improvement. Let me explain what I mean - continuous improvement is exactly the right idea if you are the world leader in everything you do. It is terrible idea if you are lagging in the world leadership benchmark. It is probably a disastrous idea if you are far behind the world standard... we need rapid, quantum - leap improvement. We cannot be satisfied to lay out a plan that will move us toward the existing world standard over some protracted period of time - say the year 2000 - because if we accept such a plan, we will never be the world leader' (Johansson et al. 1993 : 1).

Thus, being tactically oriented I believe does not make the BPR initiative any different from a TQM activity, for instance. Therefore, I wonder why this set of authors insist on calling what they are doing reengineering.

Jacobson et al. (1995), view radicality in terms of 'change' as in the engineering world. They see companies or businesses as something that can be formed designed or redesigned according to engineering principles. They suggest that 'the notion that you can compete more effectively if you use modern engineering principles - principles - based on streamlined processes - to design your company is a radical one. It will change the way your company operates' (1995 : 3). The risks are great, they note, but the improvements someone can achieve by applying this new way of thinking are quite dramatic. By *dramatic*, they mean that 'on the order of 10 times, more like a 90 - percent increase in quality and customer satisfaction, not 10 percent' (1995 : 3).

Based on what this set of authors suggests, I do not find that they have explained and provided anything new regarding the process of change and, even more, the radicality element in the BPR field. They seem to follow the traditional way of thinking about conducting business and their interpretation of radicality is based on the conservative engineering environment, which sees whatever is brought into the current system, new, as opposed to the way the organisation operated previously. Also detectable here is a tendency towards the quality movement - which can be translated into an incremental way of improving the organisation.

By comparing the above authors' perception on the matter, it is clear that they share the views of Davenport and Short (1990) and Morris and Brandon (1993) and that

they are in partial agreement with the rest of the authors that do not detach their thinking from the quality initiatives (e.g., Johansson et al. 1993).

There is also an additional view regarding this *radical manifesto* as noted by Harrison and Pratt (1993); this time the 'radicality' concept is expressed not in specific or defined terms but very broadly. Here is said to be, their radical manifesto:

- all activity that matters to customers can be described as a set of interrelated business processes [a business process for these particular authors is the sequence of activities that fulfils the needs of an internal or external customer],
- excellence in business processes and their continuous improvement is the secret formula for meeting the customer requirements of the Nineties,
- business process teams will displace functional disciplines as the critical organisational unit of world-class companies (Harrison and Pratt 1993 : 7).

It is also mentioned that business process teams that redesign across a wide range of industries are uncovering new ways to organise work, which, in turn, will create breakthrough improvements. They suggest that this process approach to organisational performance has produced a number of innovations like the 'quick response of logistics systems, the six-sigma quality achievements, the acceleration of new product development cycles and the one - day accounting close' (1993 : 7).

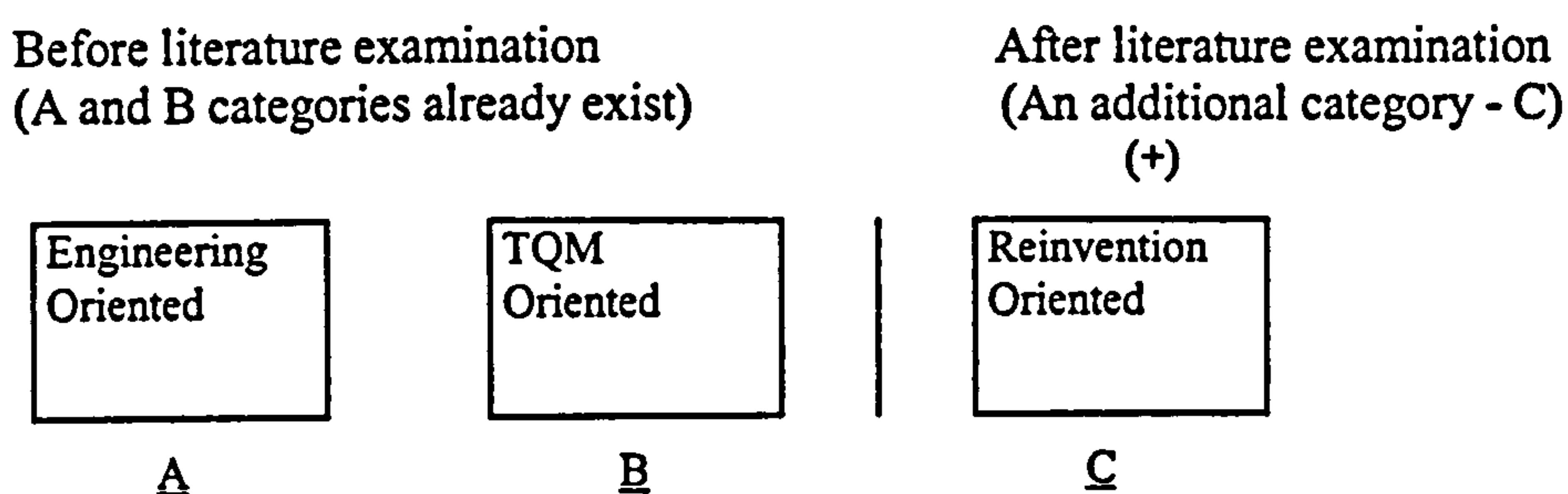
What then can we conclude about the later authors' writings? Firstly, it is clear that they tend to operate and talk from a quality-driven perspective (this will also be discussed in a latter chapter of this thesis). Therefore we can categorise them in the middle of our taxonomy diagram (see Figure 4.3), since they share the view of the rest of the followers of the quality notion. A taxonomy diagram, which will enable us to categorise the different, views found here. Secondly, we see their perception leaning towards a process oriented path when redesigning the organisation, which sometimes can lead to the failure to acknowledge other relevant and important factors in the activity undertaken (e.g., the effect on the human element if a process oriented initiative is undertaken - downsizing). Thirdly, we detect that the radicality factor too, is translated in terms of introducing something new to the old system and not in conjunction with timing terms. This is what they say about this matter, 'is about

finding a new way to organise the work' (Harrison and Pratt 1993 : 7) and about breaking the norm - the bureaucratic way things are done – a view that is also shared by Jacobson et al. (1995).

Thus, it can now be said that the radicality element is a topic of diversified opinion and that the authors referring to it translate that in their own terms. This thesis has identified, as shown above, that there are two major categories that authors refer to when talk about this element. Some see it as something introduced to the old system in order to improve it (the quality oriented believers, e.g., Johansson et al. 1993 and the engineering oriented believers, e.g., Morris and Brandon 1993). Others see it as something that eliminates the old system by removing it and starting from the beginning (e.g., Hammer and Champy 1993). Can, therefore, a common ground be found, for authors to perceive and translate radicality along the same lines? Is this something that needs to be specified in order for BPR to be distinguished from other change programmes? If there is no distinction as such how then does differ from any other change program? A number of questions that will be answered in the next part of this chapter.

Clearly, the issue of 'radicality' contains differences for BPR authors and at this point (after the analysis) I would say there are not only two schools of thought about it, but three, which could be schematically and thematically illustrated as follows (Figure 4.3):

Figure 4.3 Taxonomy of BPR's radicality element

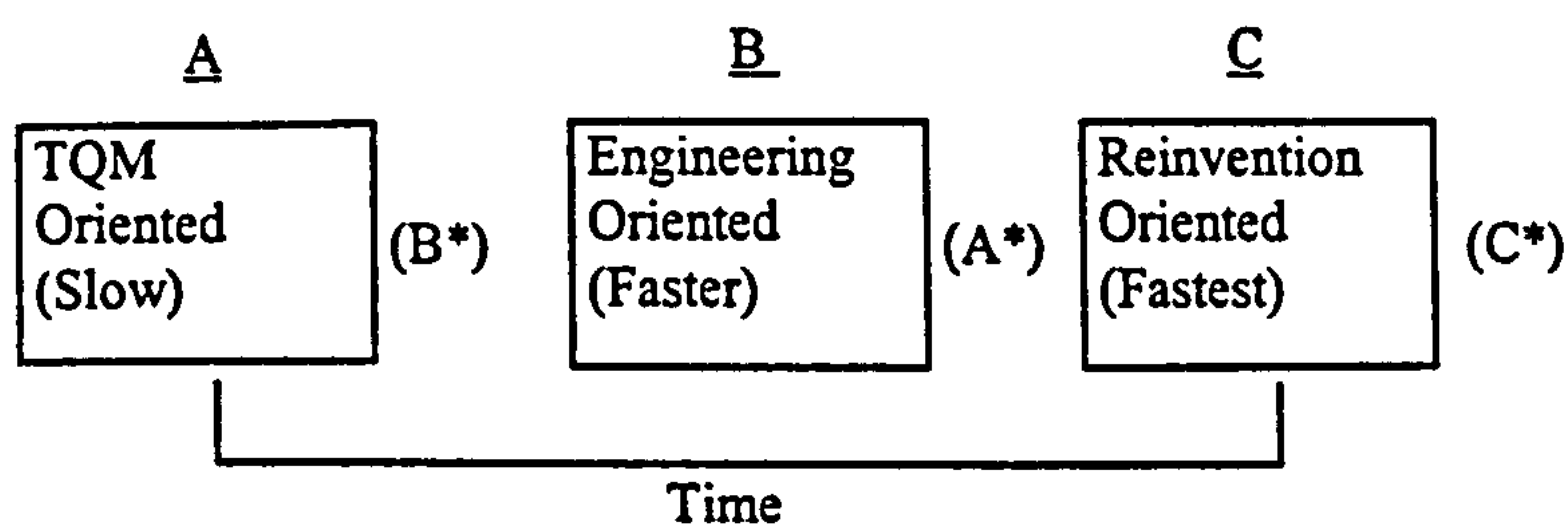


To be more specific, I see the readings of Davenport and Short (1990) and Morris and Brandon (1993) as falling into the engineering oriented category of the figure above. Johansson et al. (1993), Jacobson et al. (1995) and Armistead and Rowland (1995)

seem to support a much more incremental approach to change and I thought it would be proper to place them in the category of Quality based orientation. The last category of authors examined here is represented by Hammer (1990) and Hammer Champy (1993) whom I have placed into a new category under the heading of a 'reinvention orientation' approach.

If I were to incorporate time in the above Figure (4.3) then the above categories could be placed in terms of 'slow-faster-fastest' and their positioning would change into (B) TQM Orientation (slow), (A) Engineering Orientation (faster), and (C) Reengineering Orientation (fastest) – see also the Figure that follows.

Figure 4.4 Taxonomy of BPR's radicality element after incorporating time pace



(*): Former

From the literature exploration until now it can be said that an 'engineering' orientation is faster than a 'TQM' orientation because it is much more mechanistic and technocratic towards change than the latter one. A 'reinvention' orientation seems to be the fastest of the three, but the authors who support it seem not be succeeding when reengineering. The reason being, that their current thinking lacks of a framework on how to achieve that. Therefore, what has this far been offered by this orientation is weak but I see it as a future opportunity which would allow the BPR company user to modify their BPR programme's imperative elements needs based on their organisation own weaknesses and strengths while planning and achieving change. A customised change initiative, I would say. A set of guidelines on how to advance this type of 'reinvention' thinking can also be found in chapter 9. Throughout this research exploration (see at the coming chapters) though, I give further suggestions that support these guidelines. If, then, we think in these terms, I personally believe that a radical 'reinvention' orientation is the best one to use for achieving a successful BPR change initiative. This is because it will not be shadowed

either by a TQM or an engineering orientation. A 'reinvention' orientation which, if complemented with the above suggestions and their subsidiary guidelines and combined with chronology, as will be later shown (Table 4.2), can give the company user the opportunity to define 'what' is radical for it and 'how' radical (based on both time and amount of change) it can achieve its desired BPR change. This suggestion will be explored further in the part that follows.

4.2 Suggesting a categorisation of 'Three Chronological Levels' for BPR interventions' as the means of resolving BPR's problems with the Radicality Element

The previous part of this chapter has introduced the ideas that a number of BPR writers pursue within the examined BPR literature. It was found that:

- the radicality element is translated into many different orientations adopted by these individuals; something which leads to confusion and the non clarification (ambiguity) of its meaning;
- secondly, until now, there has been the idea that there are only two schools of thought regarding this element but after researching and exploring what has been written, a third school could be added (refer to Figure 4.3). If we were to elaborate a bit further on this, I see the readings of Davenport and Short (1990) and Morris and Brandon (1993) to fall into the engineering oriented category of the Taxonomy Figure designed for this purpose (Figure 4.3). Johansson et al. (1993), Jacobson et al. (1995) and Armistead and Rowland (1995) seem to support a much more an incremental approach to change and I thought it would be proper to place them under the Quality based orientation taxonomy of events. The last category of authors examined here is Hammer (1990) and Hammer and Champy (1993) which I have placed into a new category under the heading of a 'reinvention orientation' approach.
- thirdly, there is the need for the introduction of the notion of time in the above related findings and for this factor to be used as the means of measuring their performance upon and also to be used as the means for distinguishing BPR from the rest of the tactical programs managers use for achieving change in organisations.

The above have been identified in order to set the scene for future improvement of

BPR literature and practice and also for the present author to answer to all the questions raised at earliest parts of this chapter. I believe that at the present the BPR literature can not differentiate itself from the rest of the change programmes that have been introduced to social scientists for the last four or five decades.

If I were to answer the question raised earlier on whether there is a way of finding a common ground regarding the radicality element and still make the notion distinct from other tactical management tools for change, I would say yes there is. Based on the BPR definition I have given in chapter 3 and also if I consider the timing element as one of the imperative elements for succeeding when reengineering, I would say that if radicality in the future is translated into both, *timing* and *amount of change* (the amount of change should include change in elements of IT, human element, culture as well as processes) then

- it will stop the current confusion caused by the major BPR readings (Hammer and Champy 1993, Johansson et al. 1993, Morris and Brandon 1993, Davenport 1993, etc.);
- in doing so, it will also enable BPR to distinguish itself from any other tactical tools used to bring change about in organisations.

I arrived at this conclusion because of two things: (i) their admission of 70 per cent BPR failures (Hammer and Champy 1993 : 200) leads me to believe that being incremental when changing organisations while at the same time claiming to be doing a BPR is nothing more than the implementation of quality principles under a different name/heading (e.g., Johansson et al. 1993); (ii) on the other hand when authors claim that they 'start from scratch' (e.g., Hammer 1990, Hammer and Champy 1993) yet their actions show that what they preach is completely different from what is done in practice, it indicates to me that neither of these two positionings are helping the BPR thinker to understand how to achieve radicality in their own organisation.

Thus, I suggest that for a clarification of the term radicality the future BPR thinker/users should

(i) avoid being engineering and TQM oriented because so far this has led reengineering initiatives to failure. I believe that is happening because these

orientations do not provide the user with all he has to know when such change takes place (e.g., the first neglects the human element by being totally mechanistic, and for the second one, time is not an issue. The quality followers argue that improvement can go on forever, but what happens if there is the need for immediate action?);

(ii) concentrate on the 'reinvention' orientation, not simply in its present form but taking on board the guidelines and suggestions this thesis makes for avoiding any unwanted surprises. I say that because, as was also revealed in chapter 3, this 'starting from scratch' orientation currently does not provide any guidance to its readers/users on how to achieve that desirable change;

(iii) consider the timing factor in relation to the amount of change needed for achieving what I have called 'holistic reengineering'. To justify this third point further I would refer to Handfield (1995 : 3) on the matter. He says, 'in concerning ourselves with the study of time, we are really examining the set of attributes that determine whether a system is functioning efficiently'. I would say that since I am arguing for a systemic BPR then the element of Time should be an imperative resource to the overall initiative undertaken and nothing else but that.

I also consider the above points as the reasons that drove me to the creation of 'three chronological categorisation levels' (see Table 4.2) for a BPR initiative, which incorporates the time and amount of change relationship, needed in such activity. I believe this is a good way of distinguishing BPR from other management change initiatives. This chronological model also provides time categorisation combined with the amount of change which, if applied, can act as a simple way for evaluating/measuring a company's performance in a BPR assignment. For instance, companies can evaluate whether they have achieved what they have set out to achieve within the pre-specified time span. This could be done, for example, via an appraisal sheet which may include elements like technical judgement, work planning, communications, attitude, cooperation, work habits (elements extracted from Figure 8-2 on Project work assignment appraisal in Kerzner 1995 : 443) compared to the time allocated and the amount of the work achieved for each individual involved in the change programme. That will help the company and employees to understand better what they did right and what if anything went wrong in their BPR radical element, something which I have identified as missing from the examined BPR literature. A more detailed analysis of this suggestion follows.

Therefore my *suggestion* for improvement and clarity on the matter would be to introduce to the future BPR user a 'three chronological levels categorisation' for the BPR initiative (see Table 4.2). This incorporates (i) *the element of time* to specify chronologically what radical could be and also (ii) depending on how the companies see themselves, they can decide whether the *amount of change* they would need will be large or small. The reason for doing that is to show to the reader that a common ground (answers once more to the questions raised earlier on) on the radicality element can be found; also to show that the element of time can be very well linked and integrated into the BPR activities. Can it be also the means of measuring peoples' performance? Can this be something to distinguish a BPR from a TQM initiative? I believe it can. According to what I mentioned above and according to Butler (1995), time is important in organisational analysis. He asserts that time can be viewed as an independent variable as it aids understanding of organisational processes, including those of decision making and learning. Decision-makers attempt (at present) to connect past with future. Learning involves changing conceptions about the past and their relevance to the future. I agree with that but I shall add that in the BPR case, this understanding should not only be gained but also further considered and integrated with the rest of the elements, which I suggest are imperative for a successful initiative. Therefore, depending on which of the three suggested time categorisations the company sees itself belonging to, it can specify whether it wants to start all over by rearranging its processes, human element, IT factors etc., or just modify certain parts of them. In this way I believe the confusion the reader faces at present is minimised and also, companies are left to use their discretion to decide on what is best for them to do in relation to the timing category they chose to work in.

I got the idea for a 'short, medium and long duration' of BPR activity periods from the strategic management discipline. Hickson et al. (1986), Johnson and Scholes (1993) discuss this categorisation extensively in their publications. For example Hickson et al. (1986 : 102-104) refer to a short type, a medium length, and as a long length duration activities. The period specified as 'chronologically drastic' could also be correlated with what strategic analysts call 'immediate action' (short type). If the duration of activity is between 1-3 years then it is translated into mid-period for strategic decision for action to be taken (medium-length) and if it exceeds that, then it

comes into the category of long term objectives and action to be undertaken.

Thus, my suggestion to the future BPR user is to accommodate those time horizons in his/her future BPR practice because of the benefits they can provide to the change initiative. One of these benefits is the fact that it enables the BPR user to give time estimations for the completion of the change initiative. The advantages gained while using such a categorisation will be further discussed later. I would suggest, then, that when a company decides to undertake such an initiative as BPR, it should, place itself in one of the above categorisations and depending on that, it can measure its performance accordingly; the placement of a company in one of these chronological categorisations should be based on its needs on the five imperative elements: human element, culture, processes, IT and time. In doing so I believe companies can challenge themselves and at the same time strive to meet the timing requirements of the category in which they have placed themselves. The closer they get to their previously set objectives, the more they can move forward, towards spending less time to accomplish their work; therefore the more radical (in both time and amount of change) they can be. This suggestion can be further complemented in terms of integrated thinking, if the above mentioned BPR categories initiate a link between the time factor and other elements which have an effect on the initiative as a whole. An example could be the human element in relation to time. Human element training activities for instance could be adjusted to the time given in order for the initiative to respond to the time limits the whole initiative is set up to take place.

This is not to say that when integrating time with one of the other imperative to BPR elements, problems will not be created. Realistically that is always a possibility. One example of such a problem would be to get people to realise that time management is an issue and that they have to arrange their activities to comply with the minimum (time of change) but effective (amount of change) for the company time limits. Kerzner (1995 : 346) notes that for an organisation to time its activities effectively there is 'the need to ask its people a range of questions' from which the manager will be able to collect information and arrange time specifications for the whole change programme. Such questions include:

- Do you have trouble completing work within the allocated deadlines?

- How long can you work at your desk before being interrupted?
- How do you approach detail work?
- Do you make a list of things to do? If yes, is the list prioritised?
- Do you have established procedures for routine work?
- Does your schedule have some degree of flexibility? (Kerzner 1995 : 345/346).

This is a small number of simple questions from which the future BPR user can learn when thinking in 'Time Management' terms; questions that can also enable the future BPR user to specify its BPR activity time scales based his/her company's needs and overall to determine the possible future duration of his/her change programme. Then the BPR user will place his/her company in one of the three chronological levels found in Table 4.2 and work towards meeting those time scales.

In addition, Kerzner (1995) argues that 'it might not be possible to cope with all these questions [something which I agree on] but the more one can deal with, the greater the opportunity for a manager to convert time from being a constraint to becoming a resource' (1995 : 346). This is not the only example I can give to the future BPR thinker on where to look for timing clues, but I will also recall a range of other issues to which the timing aspect relates. For example *the time robbers* which include issues like a job poorly that must be done over; poor communication channels; lack of sufficient clerical work; work load; *the stress* people involved in such an initiative are experiencing, which involves issues like being unhappy with the work or troubled, physically exhausted, or even depressed with what they do (further reference can be made to Kerzner 1995 : 346-355). If these are not acknowledged, there is always the possibility of problematic situations arising and for that reason it would be wise for the BPR thinker to consider and be prepared to tackle those. Therefore it is my belief that when the BPR users are aware of the possibility that such problems as those listed above could create barriers to the overall initiative, they can take proactive action and make 'time' work towards for benefit and not to their disadvantage.

Table 4.2 Three suggested chronological levels for BPR

Short Term BPR	Medium Term BPR	Long Term BPR
Based on the Company's needs (deriving from the five suggested imperative elements to BPR) arrange the <i>amount</i> of change necessary	Based on the company's needs (deriving from the five suggested imperative elements to BPR) arrange the <i>amount</i> of change necessary	Based on the company's needs (deriving from the five suggested imperative elements to BPR) arrange the <i>amount</i> of change necessary
1 Year approx.	Betw. 1-3 Years	Betw.3 &#of Years

It might be asked what difference the time element/time scales make/s to a BPR initiative. Let me start by saying that what I am arguing in this chapter is for the future BPR user to consider not only the amount of change when reengineering but also the time scales of that change as well (as illustrated in Table 4.2). I argue this because of the benefits this combination can offer to a BPR initiative. These are presented below.

Considering time, enables companies that want to reengineer to set up their own time scales from which they will further define how radical their change initiative will be (as shown in the table above). This is important because of the different needs each company has (see also the LRI and USA Express Mail Postal Service cases that follow);

- (i) Time can also be used to differentiate/distinguish a BPR initiative from any other type of tactical change programmes (e.g., TQM);
- (ii) A BPR company can also use it as an incentive and as a performance tool to measure whether it met its previously set objectives or not;
- (iii) A BPR manager can also use it to:
 - co-ordinate and integrate the effort of resources involved to the maximum. In other words a manager would ask the question 'what is the input of the involved resources' and try and find ways of identifying, simplifying it and financially supporting it. For instance for the human factor he/she would 'identify the training needs of the company's staff, develop training material, conduct courses, transfer of staff to new posts and many more' (Turner 1993 : 215). The same procedure can be followed for the elements of IT, culture, processes as will also be shown in

later chapters in this thesis;

- predict and estimate⁴⁸ the levels of money and resources required at different times so that priorities can be assigned between the reengineering teams;
- ensure that the benefits are obtained on the time scale they were pre specified and that the expenditure is in accordance to the budget.

Thus, for a BPR user to consider time along with the amount of change involved in such initiative can be very beneficial indeed.

In categorising BPR initiatives in such a way as Table 4.2 presents, it is my belief that the non clarity/ambiguity and disagreement on the radicality issue (within the examined BPR readings) has been redressed and an alternative provided - a common ground to work on. I also believe that if a BPR initiative stresses the imperative importance this element has to offer to its activities then there is greater opportunity for further integration of this factor with the rest. To support and evaluate the above I would like to use two examples which I believe can illustrate my hypothetical approach to the point made in this part and also show the reasons why I believe what I am suggesting can work in the real world.

Prior to that, though, I would like to state that I am also fully aware of the fact that when including the timing factor in my BPR framework there might be a potential tension between this element and others. As seen earlier, there might be tension between the human element (reluctance to adopt and/or accept changes) and the changes introduced. If I argue that the company is going to do something quickly, then people might not be taken into account as the company might have wanted, so there is a trade off. But this can be solved if the company goes for a short, medium or long term BPR. If the company believes beforehand that it can achieve what it set out to do within a pre specified period of time then the clash between the five elements that I see as constituting a successful BPR (IT, processes, timing, human element, culture) will not be a major problem. In other words, the company itself and not the consultants (they should be used to guide the activity, not to direct it) will place its change activities in one of those chronological categories suggested in Table 4.2. That is after the company has identified its elements needs and decided what to do

with them and based on that, how long it estimates those will take to be implemented and change. Actually what I can demonstrate here is that which of those three types of BPR you go for as a company, depends on the nature of the five elements I am looking at. And I explain myself.

For example, suppose that you go in an organisation which has processes that are not well defined (or not defined at all), it has low IT, it has is a very bureaucratic culture and the company knows they will have to lay off people as a result of this intervention then, this will affect them significantly. Then I can say yes, in that situation, BPR needs to be a long term BPR because it has to deal with each one of those five issues (including time) that are at the wrong end of the continuum as far as the BPR is concerned. An example⁴⁹ of that could be the Leicester Royal Infirmary⁵⁰ (LRI) BPR intervention in UK.

On the other hand, if the company you go to as a reengineer, is in a situation where its processes are already clear and defined, which is IT conscious and is using IT significantly, it has an innovative, flexible and adaptive culture and they are already working with a very lean force, maybe then the company has all the prerequisites to go for a short sharp BPR. A case⁵¹ here to illustrate my points is the one of United States Express Mail Postal Service⁵². In chronologically categorising BPR I also believe it will enable the reader/user of the notion to think of it in terms of those five elements they can use, why it is that their BPR falls into those categories and use it as a tool to identify the different approaches that exist in handling the problems of the BPR category in which they locate themselves (e.g., if a company has a mixture of some good and bad then it should go for a medium term BPR, etc.). This is a method of deciding whether their BPR can be radical and successful at the same time. This is a way of distinguishing the notion from other tactical managerial tools for organisational change. This is a way of minimising the non-clarity/ambiguity that I found to exist in the examined BPR readings. After the reader was exposed to details of the two cases referred above by the author it is time to reflect on those.

A number of changes were noted concerning the factors involved in the LRI BPR intervention. Whether those were satisfied to the maximum or not should be for the companies to consider and for BPR readers to learn by their mistakes. What was

stated by the hospital itself however, is that 'via the internal evaluation of the LRI reengineering programme it was suggested to be successful⁵³' (Bevan 1996 : 51), eventhough 'many of the risks identified at the start of the LRI reengineering journey have not materialised, and that many of the issues and concerns, related to the contradictions and ambiguities created by the programme which have arisen along the way, were not initially anticipated' (1996 : 51). In addition it was found that the implementation and delivery of benefits occurred at a significantly slower pace than originally envisaged due to the prevailing 'cultural and political climate' of the organisation (1996 : 53). This illustrates the importance of a company performing within a pre specified BPR period of time based on its own capability levels. Obviously, due to the weaknesses of such an organisation as LRI, we see that it really needs more time to adjust to this type of intervention. Therefore it is logical that it would take longer to achieving its BPR aims and objectives.

In terms of the model presented earlier, I would say that LRI belongs in the long term BPR categorisation as given in Table 4.2, simply because this organisation, in order to achieve change and be radical at the same time, had to 'reinvent' (Figure 4.3) itself because of its weak infrastructure regarding the elements of IT, people, time, processes and culture.

Reflecting on the USA Express Mail Postal Service case, it can be seen as the organisation that can do a BPR within a short term period of time. As revealed from the case, its processes were well set out, IT had been used in all the activities performed for a long time now, the cultural element has been enhanced by bringing in a new CEO and that was to set the climate for a short change. In addition the human element situation in America is suggesting that there are more jobs than from the people they actually do them. Therefore the greater the integration of the timing element with the rest of the elements contributing to a BPR initiative creates a situation where a company of this shape is mitigating to do a BPR within a short term period. Thus, I see this company belonging to a short term BPR categorisation (see Table 4.2) because of the fact that its elements are not as weak as the ones found in the LRI case, therefore they do not need so much time to be adjusted and change.

I have to also say that this second case gives us a completely opposite BPR scenario

compared to the LRI case when they decided on undertaking a BPR. LRI⁵⁴ is proven to have a bureaucratic type of culture, the human element is problematic (requires training, and if laid off ethical issues are raised - trade unions involvement, and in UK it seems not to be as easy to get a job as in America due to the number of jobs available in the market), the processes are not set out properly - something which takes as seen months to sort out, and IT has not been used in all levels in the Health Trust so is something that might take time to adjust to and also the company has to face with the reluctance of people in accepting it either. Not only BPR here will be fighting against the elements but also BPR would have to fight against the elements themselves. Therefore it is sensible for a BPR to take so many years till it can reach its goals. A case, which I believe, covers the other end of the BPR continuum.

In presenting these two real life examples I have illustrated to the reader that my hypothetical approach which combines the *time* and *the amount of change* in a BPR initiative, it can actually be plausible. I also made it clear that a company's choice of a short, medium or long term chronological horizon for its activities, depends on its individual needs (as seen from the LRI and USA Express Mail Postal Service cases) that are drawn from its five BPR imperative elements (time, processes, human element, culture, IT). These needs can only be revealed if the company sets to find out, via questioning, what its current status is and how that can be adjusted for its own BPR initiative to go ahead and be successful (see for instance Turner 1993). Would such a chronological categorisation make a difference to a BPR programme? I believe it would. As mentioned earlier, if 'radicality' is defined and specified by the people involved in such change programme then I see it working as an incentive mechanism for the people who want to complete their work in the pre specified time allocated (see also the rest of the benefits time can yield).

To sum up, in this part of the chapter I argued that in order to differentiate BPR from any other change initiative there is a need not only for the amount of change to be specified but also for timing constraints to be introduced when reengineering. The suggestion given indicates that chronological levels are necessary in a BPR programme, for measuring performance, distinguishing BPR from any other change initiatives, and for dissolving the currently identified confusion and disagreement on the radicality issue in the BPR readings. I further validated the above suggestion while

referring to a continuum of case studies to illustrate my point.

Some overall reflections on the issues raised throughout this chapter are presented next.

4.3 Collective Reflections

In this chapter it was shown that in the BPR literature examined, the element of radical thinking is seen differently by different authors (e.g., Hammer and Champy Vs Morris and Brandon 1993). I therefore concluded that this element needs to be clarified within the BPR literature and practice since different BPR authors (e.g., Johansson et al. 1993, Davenport 1993, etc.) approach this element from different perspectives.

After establishing the need for a common ground to be found regarding the above confusion caused by the variation of opinion amongst the several major BPR readings concerning the radicality element, I suggested 'a three chronological BPR level categorisation' as the means to solve this problem. This was also done to satisfy the main objective of the chapter which was to show that in order for a BPR intervention to be radical and therefore be different and distinctive from other company-wide types of change programmes (e.g., TQM initiatives) that go on in organisations, it needs to introduce timing constraints to the interventions that are conducted. For this reason I created a simple model (Table 4.2) which combines the amount of change and the time span of the changes needed and I argued that with this combination, the radicality element is left to be decided by the company which reengineers and nobody else. To illustrate and further justify that what I am suggesting is plausible I have used case study material (LRI, Bevan 1996 and US Express Mail Postal Service, Carr and Johansson 1995).

By presenting the cases of LRI and US Express Mail Postal Service I have managed to show that:

- Radical BPR can be achieved if the initiative's major elements (time, processes, human element, IT, culture – the last four come in later chapters) are well integrated (and that is after the company clarifies what its weaknesses and

strengths are, based on these imperative elements),

- Time in terms of *time span* and of *the amount of change*, can work together, to indicate to the company which is undertaking the initiative *how* 'radical' they can be/are, based on their own pre set criteria and expectations.

Thus, a suggested guideline for people who will engage in BPR in the future, would be to stress the element of time as an important one to the overall initiative because

- (i) it can act as the means of measuring their performance (appraisals) and
- (ii) if fully integrated in the initiative (by using Table 4.2) it can act as the mechanism for locating their initiative in the most appropriate for them type of reengineering (short, medium, long term) in order to approach and handle the whole situation as realistically as possibly.

Conclusion is next.

4.4 Conclusion

The main objective in this chapter was to show that in order for a BPR intervention to be radical and therefore be different and distinctive from other company-wide types of change programmes (e.g., TQM initiatives) that go on in organisations, it needs to introduce timing constraints to the interventions that are conducted. This objective was satisfied while I demonstrated the link the timing element can have with the general notion of radicality in a BPR intervention.

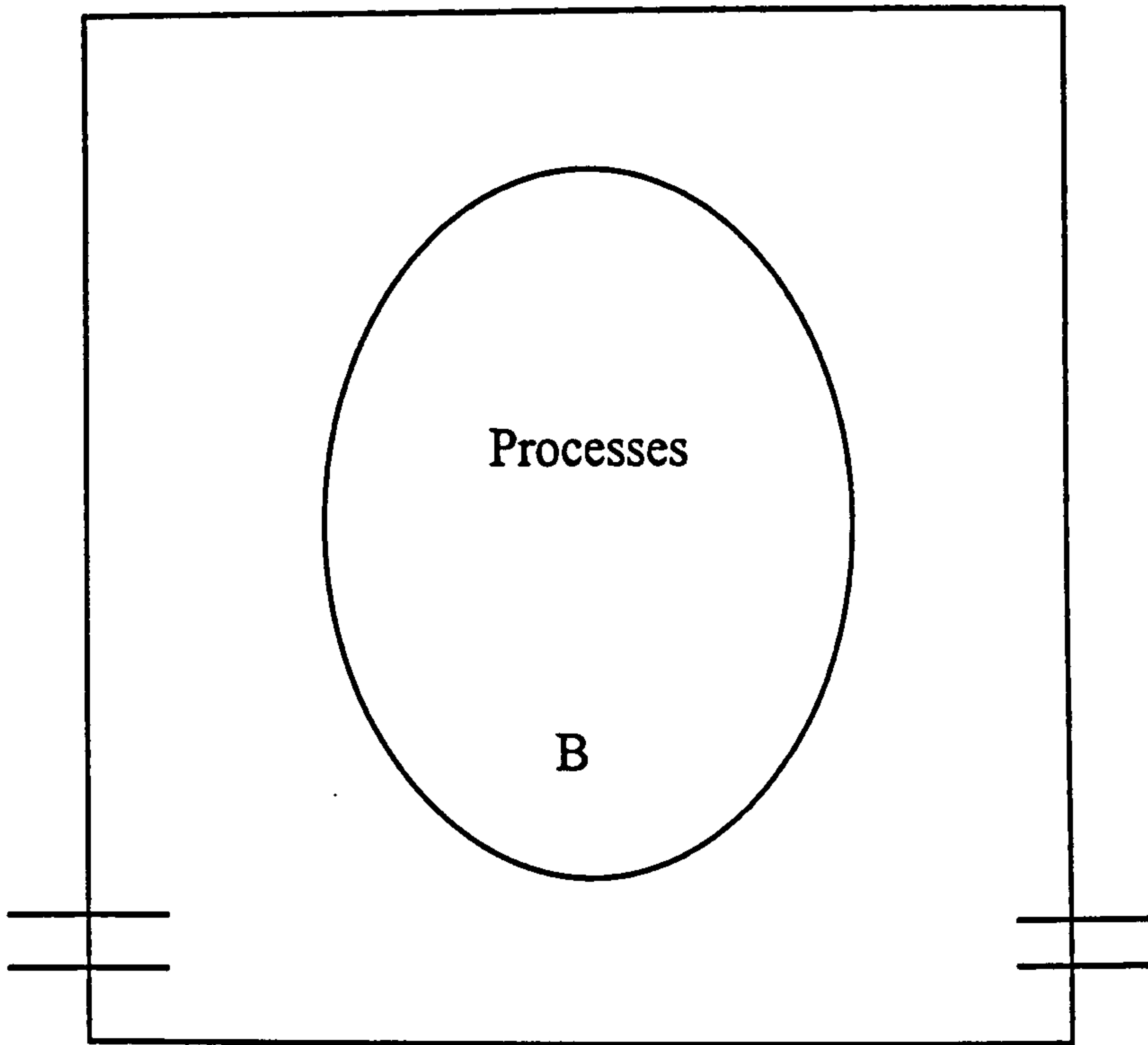
This was done by reflecting on what has been written in the currently examined BPR literature about it and also by referring to a number of real life case studies that validate the suggestion that considering time constraints while reengineering can prove to be beneficial to the initiative overall. Radicality, I suggested, should be seen not only in terms of the amount of change achieved but also based on the timing scales this can be achieved. I also see this addition as the provider of the solution, which can provide clarity in the BPR literature regarding this element. Time is also seen as an integrated activity in BPR which BPR participants are required to work towards while achieving radicality.

A subsidiary aim of this thesis was to provide the reader with a guideline on the

relevant element. In relation to timing this was done in the collective reflections part of this chapter, a part that also gives a synopsis of the situation described in this chapter. Overall, though, the discussion in this chapter tended to revolve round the importance of this particular element and the effect it can have on the success of such intervention if integrated with the rest of the major elements I suggest a BPR programme should incorporate. Also the distinction of BPR from other tactical tools in the organisational change field was one more reason for clarifying this factor.

The chapter that follows builds on the findings and suggestions of this analysis and takes the critical exploration of the notion of BPR a step further by looking at another imperative to the BPR initiative element, the Processes element.

Processes Chapter



The rung of a ladder was never meant to rest upon, but only to hold a man's foot long enough to enable him to put the other somewhat higher
(Cited in Kast and Rosenzweig, 1970 : 50)

Thomas Huxley

CHAPTER 5

5.0 Introduction

This chapter introduces the concept of processes. The aim here is to demonstrate that having a purely process BPR orientation results in a BPR being little more than a TQM intervention and consequently the processes focus should be only one among several. In other words if a BPR activity is process oriented, I believe it is most likely to exclude other important factors that I see as contributors to an enriched and successful BPR initiative. At the end of the chapter the reader can also see a guideline emerging concerning this element which will satisfy one of the subsidiary aims of the overall thesis.

Before I explain to the reader how I will carry the above objective out I have to state the reasons why I have considered the process element as one of the major elements when reengineering. I see this element as important because processes are the means to describe the ways an organisation is conducting its daily operations. Without their contribution the BPR users may not be able to identify what is done, how and by whom in the organisation. It is vital that the organisation has a clear view of its processes (Barker and Longman 1992, Ould 1995) to avoid chaotic situations, which could lead, to confusion, misunderstanding, and profit minimisation, even the closure of a company. Therefore the clarification of processes can contribute greatly to the survival and the long-term existence of an organisational entity. On the other hand though, the overemphasis on processes in such an initiative as BPR could lead the organisation to other problems such as the non-recognition of a number of other elements' contributions. These remarks are further discussed in the analysis following this introductory part.

In order to demonstrate this chapters objective I need to show what the major BPR authors (Hammer and Champy 1993, Johansson et al. 1993, Davenport 1993, Jacobson et al. 1995, etc.) believe and do when the element of processes is at their disposal while reengineering. This is the subject of the first part of this chapter. More specifically these readings will be examined on (i) how they define processes and (ii) how their process orientation perception affects their overall BPR thinking. This takes

place to indicate to the reader that the process element is considered to be very important to their BPR initiatives but overemphasising it, leads to problems such as: (i) a tendency (Davenport 1993, Johansson et al. 1993, etc.) to work through change programmes like TQM which are not reengineering programmes but Quality programs with a little bit of extra! And also (ii) a tendency to work from a mechanistic⁵⁵ point of view (Kehoe, 1994, Jones 1996, Eisenberg 1997, Case 1999) which has the bad reputation for taking into minimal account elements such as the human element. Since then I argue for a holistic BPR this is a view which I find damaging and unproductive towards the systemicity of the suggested holistic BPR approach.

Therefore the second part of this chapter puts a suggestion forward, which shows to the future BPR thinker/user how the element of processes can be dealt with to avoid situations like the overemphasis of this particular element and also this element's disguise within other change initiatives like TQM. Briefly I will argue for a much more holistic and contextual process concept, rather than a hundred percent process driven concept. Based on this I suggest a diamond framework that combines possible process related activities, which the future BPR user will have the opportunity to consider and further challenge in a critical way. In doing so the creation of healthy process relationships will take place leading to the further contribution towards a successful BPR initiative.

The third part reflects on the above and gives a suggested guideline for the people when they will be reengineering in the future, to meet one of the subsidiary aims of this thesis. This is followed by the fourth part of this chapter, which summarises and concludes the discussion regarding the process element.

5.1 BPR and the Process Element: Current Positions

This account, like the previous one, attempts to make sense of individuals' writings (Hammer and Champy 1993, Johansson et al. 1993, Davenport 1993, Jacobson et al. 1995, etc.) about BPR. Its production and analysis is a part of this thesis ongoing shaping of the reengineering concept; a revealing of a notion of strategy, I would call it. In the course of this making sense, the element of 'processes' is under examination.

The above readings will be examined in terms of two areas: (i) on how they define processes and (ii) on how their process orientation thinking affects their overall BPR thinking.

Before extracting what our BPR authors say about this element I shall note that this concern with a process - oriented, as opposed to functional way of looking at organisations is perhaps the most distinctive feature of the many different writers' approaches to reengineering. It seems to be clearly suggesting that organisations should be build - up and structured around processes (e.g., product development, customer order fulfilment) and not in specialised departments like marketing, accounting or purchasing (Ould 1995 could also be used as a reference here). I find myself agreeing on what this type of thinking is suggesting. I would disagree, though, with the orientation the majority of the BPR authors (Davenport and Short 1990, Davenport 1993, Johansson 1993 etc.) take towards this element. Let me explain. Undue focus on perfecting processes I believe, leads to the underestimation of the importance of other factors (e.g., the human element, time) which can equally contribute to the BPR initiative, a point which I consider as one of the major BPR weaknesses (see chapter 9 where all identified weaknesses are clearly presented).

Let us start by firstly explaining what processes are. Ould⁵⁶ (1995 : 1) does not attempt to define it, but he points out the essential features of the term 'processes' as analysed in his book. A process, he states, 'involves *activity*: people and/or machines do things. A process also generally involves more than one person or machine: a process is about *groups*; it concerns *collaborative* activity. And a process has a *goal*: it is intended to achieve something. Processes are everywhere and according to Johansson et al. (1993), if we look at every organisational entity we can identify that it has a number of processes that it carries out in order to achieve its business objectives. Some examples found in Ould's (1995 : 1) reading refer to the recruitment of staff as a process. Others could be the handling of orders for goods, the designing of new products, even the making of investment decisions. The above activities pull organisational resources together to give some outcomes desired for the company. For instance, one outcome of one of these particular cases would be 'to respond to the staffing needs of the organisation of the right type and capabilities on appropriate terms and conditions' (1995 : 1). Basically we see in these activities the procedures

which refer to and describe what is to be done in such a case as the ones stated above.

It also important here to see what process *is not*, in order for this research to be able to correlate the concept of processes with the rest of the factors that are considered to be contributors to a holistic and successful BPR change framework. According to Ould (1995 : 2) 'process is not the same as a function (e.g., Personnel, Manufacturing, Finance, Goods Inwards or Credit Control)'. He sees the latter as 'parts of the organisation which have responsibilities, staff and resources'; but these, as he indicates, 'are not processes, despite the fact that they might take part in processes' (Ould 1995 : 2). This is something that I agree on completely. Therefore I believe that to think along those lines, and redirect our thinking into a holistic BPR scenario, it would be a major advance for BPR thinkers (see the suggestion in the second part of this chapter).

'Processes', then, are seen by Hammer and Champy (1993) to be 'a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer' (1993 : 35). In addition to that and based on their practical experience they also note that people are not 'process oriented' but task oriented, job or sometimes people oriented. They suggest that this should not be the case anymore and people should focus on their processes, simply because of the possibility, of greater efficiency levels being achieved (Hammer and Champy 1993). I would say, after reviewing a numerous publications, most authors (e.g., Davenport 1993, Johansson et al. 1993, etc.) would agree with the above definition. Hammer and Champy (1993) justify their definition by making a historical reference to Adam Smith's notion of breaking the work into its simplest tasks. This act, they continue,

'is assigned to a number of specialists, modern companies and their managers focus on the individual tasks in this process - receiving the order form, picking the goods from the warehouse and so forth - and then tend to lose sight of the larger objective, which is to get the goods into the hands of the customer who ordered them. The individual tasks within this process are important, but none of them matters one whit to the customer if the overall process doesn't work - that is, if the process doesn't deliver the goods' (Hammer and Champy 1993 : 35).

They also give the 'IBM example' (Hammer and Champy 1993 : 36-39) to justify their argument and why they consider process to be of such importance to the whole

transformation agenda:

‘...how could one generalist replace four specialists? The old process design was, in fact, founded on a deeply held (but deeply hidden) assumption: that every bid request was unique and difficult to process, thereby requiring the intervention of four highly trained specialists. In fact this assumption was false; most requests were simple and straightforward. The old process had been overdesigned to handle the most difficult applications that management could imagine. When IBM Credit’s senior managers closely examined the work the specialists did, they found that most of it was little more than clerical: finding a credit rating in a database, plugging numbers into a standard model, pulling boilerplate clauses from a file. These tasks fall well within the capability of a single individual when he or she is supported by an easy - to - use computer system that provides access to all the data and tools the specialists would use...’ (Hammer and Champy 1993 : 38).

Hammer and Champy (1993) as seen are considering business processes as an important one, but not the only one while reengineering. For instance they look at IT as well, which is conducive to these elements (process and IT) further integration. They also, as it will be shown at a later stage of this part, have a clear view on the fact that what they are doing is different from a quality initiative, which is also something that can be drawn from the case studies (Hallmark, Taco Bell, Capital Holding, etc., - in Hammer and Champy 1993 : 159/171/182) they present in this publication. Nevertheless their practice has been subject to negative criticism. Writers like Jones (1996), Eisenberg (1997) and Case (1999) commented on their approach to change and described it as a ‘mechanistic’ one. Criticisms, I find myself agreeable with. Case (1999) for instance notes ‘if the corporation can be treated as a machine, then it follows that organisational efficiency will be akin to mechanical efficiency’ (1995 : 425). Thus, my conclusions from what Hammer and Champy (1993) argue that they do about the process element in a BPR initiative is that they do not do enough. Thus, something needs to be done to avoid further criticism. My suggestions on how to achieve that will be presented in part two of this chapter.

Davenport (1993) believes that process is a key aspect of process innovation, which represents a revolutionary change in perspective. He states that,

‘a process orientation to business involves elements of structure, focus, measurement, ownership and customers. In definitional terms, a process is simply a structured, measured set of activities designed to produce a specific output for a particular customer or market. It implies a strong emphasis on *how* work is done within an organisation, in contrast to a product focus’s emphasis on what’ (Davenport 1993 : 5).

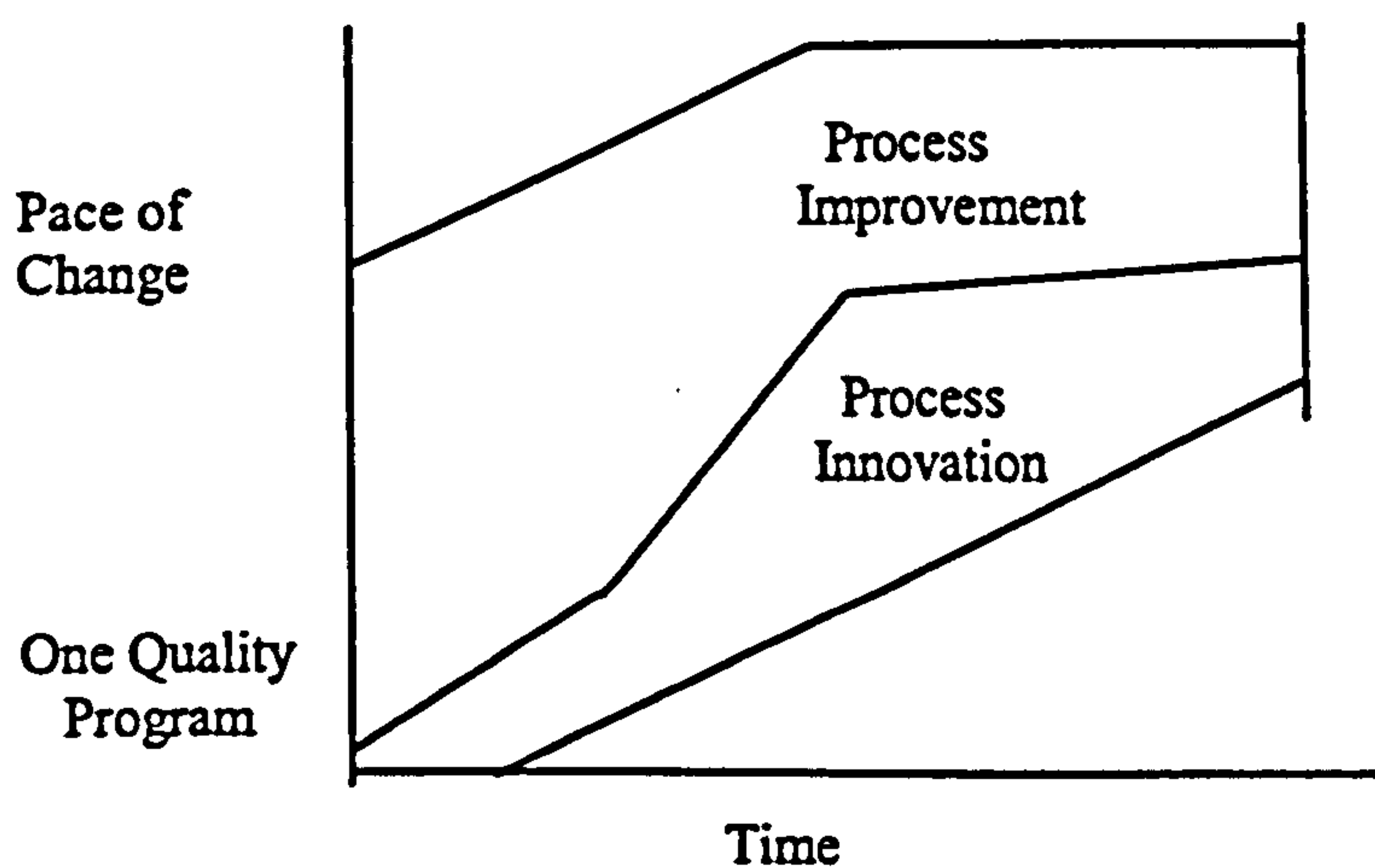
A process is, thus, a specific ordering of work activities across time and place, with a beginning, an end, and clearly identified inputs and outputs: *a structure of action* Davenport (1993) calls it. This structural element, it is argued, is the key to achieving benefits of process innovation; unless designers or participants can agree on the way the work is and should be structured, however, it will be very difficult to systematically improve, or effect innovation in, that work. Davenport (1993) also views process structure as a distinguishable - a separate - entity from the more hierarchical and vertical versions of structure that exists in organisations. 'Whereas an organisation's hierarchical structure is typically a slice - in - time view of responsibilities, its process structure is a dynamic view on how the organisation delivers value' (Davenport 1993 : 6). According to this author a paradox occurs here. While we cannot measure or improve hierarchical structure in any absolute sense, processes have cost, time, output quality, and customer satisfaction and we have to deal with them. Adding to the above, Davenport states that, 'when we reduce cost or increase customer satisfaction we have bettered the process itself' (1993 : 6).

Some managers view the dynamic nature of processes in a negative, bureaucratic sense: 'We can't do anything around here unless we follow a process!' On the contrary, as stressed by Davenport, his book is based on the assumption that *following a structured process is generally a good thing, and that there is nothing inherently slow or inefficient about acting along process lines* (1993 : 6). It is also claimed that his definition of processes can be applied to both large and small processes - to the entire set of activities that serves customers, or only to answering a letter of complaint (Davenport 1993). Davenport's perception on processes also directly reflects his way of thinking when it comes to reengineering those processes. For him, 'it involves stepping back from a process to inquire into its overall business objective, and then effecting creative and radical change to realise order - of - magnitude improvements in the way that objective is accomplished' (1993 : 10). In addition he gives two constituencies regarding the term processes, the *process innovation* and the *process improvement elements* (refer to Table 4.1).

He suggests that *process innovation* can be distinguished from *process improvement* because the latter *seeks a lower level of change*. If process innovation means

performing a work activity in a radically new way, process improvement involves performing the same business process with slightly increased efficiency effectiveness. The actual level of benefit derived from operational betterment initiatives falls, of course, across a continuum, but in practice most firms seek either incremental or radical change. It is possible, though, that process innovation might yield only incremental benefit, in which case Davenport would classify it as an improvement (Davenport 1993). In practice, he argues, most firms need to combine process improvement and process innovation in an ongoing quality programme (see Figure 5.1).

Figure 5.1 Improvement and process innovation



(From Davenport 1993 : 14)

He might distinguish business process innovation from business process improvement but, as seen in the previous chapter, he supports the process improvement type of change and that is because of the lower risk the latter involves, compared to the first one. Indirectly we see Quality management overtaking the radical (time and amount of change undertaken) notion of BPR. If Davenport's (1993) and Hammer and Champy's (1993) ideas on this matter are compared a fundamental difference emerges. And I explain myself. The latter authors, as shown earlier, insist on 'radical redesign' (1990 : 104) of processes and that 'reengineering processes involves a different approach to change management than needed by quality programmes (1993 : 49). They seem, though, to agree on the definition of the process element but disagree on its application side. Davenport goes on by arguing that differences between process improvement and innovation can make it difficult to combine the two and he suggests that to facilitate this combination is to assign them to different managers.

Also, in order not to confuse the employees who participate in, or are affected by innovation and improvement initiatives, all such activities should be carried out *within the context of a single quality programme*, and it should be clear which type of process change is under way for a given process at a particular time (Davenport 1993 : 15). This argument is open to challenge, however. Firstly, what he suggests might be seen as an encouragement for his prospect corporate clients to engage themselves into a *longer duration change method*, which will enable him as a consultant to make more money out of it. Secondly one might also say that they take the quality option because quality is an easy option to take compared to actually thinking of ways of improving the current BPR change methods. I believe the above suggestion Davenport gives towards a 'quality oriented' programme is also underpinned by such considerations.

Furthermore, we see Davenport (1993) presenting the equation of the risks of process innovation and the proportional rewards from it. Given this equation, it is suggested that organisations that can avoid such wrenching change should probably do so. 'In environments that are not in question (e.g., some segments of the utility industry or other highly regulated business, or well - funded government organisations), continuous improvement may be preferred over process innovation' (1993 : 15).

Here the distinction pointed out earlier between Hammer and Champy (1993) and Davenport (1993) on the basis of radical change on processes and where to achieve it becomes clearer. The first talk about immediate, breakthroughs and starting over with a clean slate, and the latter speaks in favour of a structured, qualitative and segmental change reforms (Davenport 1993 : 15). Simply, Hammer and Champy (1993) look at it as *overlaying a new organisation on top of an old process as the act of pouring soured wine into new bottles* (1993 : 48). I would contend Hammer and Champy (1993) beliefs here and I would add that, as also seen in the chapter dealing with the radical element radically changing business processes, from a Quality perspective, does not necessarily mean that the company involved in such a project is doing a BPR. I see it as another quality programme with a little bit of extra!

It would also be beneficial at this point of the analysis to examine how, based on Hammer and Champy's writings, TQM is viewed compared to BPR's processes

reengineering element [and this is in contrast to Davenport's (1993) writings on the issue].

'Nor is reengineering the same as quality improvement, total quality management (TQM), or any other manifestation of the contemporary quality movement. To be sure, quality programmes and reengineering share a number of common themes. They both recognise the importance of processes, and they both start with the needs of the process customer and work backwards from that. However, the two programmes also differ fundamentally' (Hammer and Champy 1993 : 49).

They also argue that quality programmes work within the framework of a company's existing processes and seek to enhance them by means of what the Japanese call *Kaizen*, or continuous incremental improvement. The aim, Hammer and Champy (1993) say, is to do what we already do, only to do it better. Quality improvement *seeks steady incremental* improvement to process performance. 'Reengineering, as we have seen, seeks breakthroughs not by enhancing existing processes, but by discarding them and replacing them with entirely new ones. Reengineering involves, as well, a different approach to change management from that needed by quality programmes' (1993 : 49). I see Hammer and Champy (1993) as being very clear on the difference between TQM and BPR, something which I support thoroughly (see also previous chapter). If a company tries to improve its processes and does so in a roundabout way (e.g., by using TQM) due to risk fears, then what this company is doing is not a BPR but a reshaping of its quality programme; why, then, call it BPR?

Jacobson et al. (1995) work under the 'object advantage' title which suggests that they adopt the same definition as Davenport (1993) but they add that 'the output may be either a product or a service' (1995 : 5); and that these inputs and outputs can communicate either with a specific customer or with another individual process in the environment - not with another internal process, which Davenport (1993) has stated on occasion. It is also noted that they use the word 'process' as *an everyday word without any precise meaning* (1995 : 5). Based on their addition to Davenport's (1993) definition, a customer-oriented process is expressed and justified in terms of meeting an individual customer's needs, not the needs of all customers, and this can be achieved primarily by concentrating on processes that provide value to customers and not merely to other parts of the business. When a company adopts this focus, they

note,

‘it discovers that much of the work previously performed was not performed to satisfy the customer, but to provide something to some internal activity. A customer is satisfied by giving him the right product or service, with high quality and with short lead times, at the right price’ (1995 : 5-6).

Obviously, what they are using here is a much more marketing oriented quality approach. While exploring the thoughts of Jacobson et al. (1995) in this thesis, I have also discovered that they stopped using the term processes and they just simply refer to the notion *as business reengineering*. They have eliminated the word ‘process’ in their term because they see ‘process’ as a ‘superfluous’ term. In the future, business reengineering they argue, ‘will mean reengineering business process and nothing else. As a rule, reengineering can proceed for many years before the better part of a company’s processes have been fully redesigned’ (1995 : 14). They also suggest that, the work will be divided into phases, and each phase will have a clearly defined objective. Hammer and Champy (1993) would agree on this last point but they disagree on how to redesign processes radically, since Jacobson et al. (1995) have established a framework that encompasses business improvement. ‘We view business engineering as an umbrella concept for both business reengineering and business improvement’ (Jacobson et al. 1995 : 14). Despite the above, though, they also accept the fact that radical changes in processes cannot be carried out in a routine fashion. ‘We can only expect to achieve them by using special initiatives, such as task forces’ (1995 : 15). Such a task force is organised like a project, which as they say, is made up of members whose background is cross functional. Since these people are recruited from different organisations, and because they are given freedom of authority regardless of their functional niche, the necessary conditions for developing the most effective processes possible are created (Jacobson et al. 1995). Personally I would say what they do is not nothing else but either modifying or adding something extra to their quality change programme.

Even though the approach to BPR of Jacobson et al. (1995) is a qualitative BPR process oriented one, they have taken the element of processes a step further and refer to how a new company looks after redesigning the processes. They explain it in terms of how a hierarchical (functional) organisation differs from a process oriented organisation and obviously they give their views on it. Before we quote what they say

about this, let us see the assumptions on which they base their views. They start by suggesting that there are many different ways, in which the same design (of processes) can be implemented, that is, included in the company. Secondly and generally speaking 'the same people are with you (your old staff)' in this redesign procedure (Jacobson et al. 1995 : 12).

The points just mentioned are two points that would not be found to be similar to how Hammer and Champy (1993) conceptualise this element. Regarding the first point, the latter set of authors, indicate that they do not accept any other than the 'starting over' notion; on the second point, they reply that a company can only go forward with 'fresh ideas and new people'. This, however, I would argue that can only be decided by the company which will reengineer and nobody else (also refer to the material of the previous chapter). Going back to Jacobson et al. (1995) it can be said that, overall, they adopt a general and not specific solution to the process concept;

'in the reengineering company, every staff member has a vision of what the entire team's ultimate goal and the ways it shall be achieved. Everyone knows how success will be measured. Everyone understands and appreciates the value his or her co-workers bring to the team and the business, and everyone is aware of his or her own part in the greater context' (1995 : 13).

They find themselves borrowing ideas from Hammer and Champy (1993), Davenport (1993), Johansson et al. (1993) and Carlzon (1985, 1987) and that I believe makes it difficult to take a clear position on the element of processes. Generally, though, they tend to believe in the more conservative way of thinking about organisational reform. The structured, quality - oriented redesign of processes within and across work groups (Jacobson et al. 1995 : 22/23). The reason for this is *the minimisation of risk* (1995 : 18), a view which is also shared by Davenport and Short (1990) who, for instance, put forward an industrial engineering model of incremental 'business process redesign'.

Johansson et al. (1993) define processes as 'a set of linked activities, that take an input and transform it to create an output' (1993 : 57). Ideally, they note the transformation that occurs in the process should add value to the input and create an output that is more useful and effective to the recipient either upstream or downstream. They also believe that processes are everywhere. An example would be the collection of data, and applying the rules to organise that data, to create

information. 'Processes are the basis on which all manufacturing entities create wealth' (1993 : 58). They would like to think about business as processes rather than as functions, where managers can focus on streamlining processes in order to create more value for less effort rather than focusing on reducing the size of functions in order simply to cut costs. It is suggested that cost cuts 'will occur naturally as non - value - adding activities are removed from the processes and as the processes increase in their level of effectiveness' (Johansson et al. 1993 : 58).

For these authors, business process reengineering usually concentrates on the *few core business processes* out of many processes that go on in any business, a point that they make clear, unlike, for example, Jacobson et al. (1995). A core business process 'creates' value by the capabilities it gives the company for competitiveness. Johansson et al. (1993) believe that core business processes 'are valued by the customer, the shareholders or the regulator and are critical to get right. They are required for success in the industry sector in which the company is doing business; they should be those processes that the business's strategy has identified as critical to excell at in order to match or beat the competition' (1993 : 59). This is where the 'china breaks' for them (refer to Figure 4.2). This process - oriented business thinking, they believe, will help the company to challenge itself and the market the same time. They would like to see people that understand the above goals, the ways of getting there, the way success will be measured; that everyone would work in cross - functional terms as the norm [where is the breaking of the China if everything is based on the norm? - I wonder] everyone to understand and appreciate the values others add to the organisation, that everyone knows that the key goal is to produce a service or product that the marketplace perceives to be the best (Johansson et al.1993 : 7).

I question the above authors' extremist stance on BPR's process orientation and the way they seem to argue that they apply it. I believe it brings out and strongly supports the quality tactical tool for change (see these authors' views on quality in chapter 4 as well) which is certainly, as I believe, not a BPR (also see the redefining of the notion in chapter 3), but little more than a quality programme with a major emphasis (sometimes only emphasis) on processes. I would say that it is fine to identify the core business processes but what happens to the rest of the attributes of a holistic BPR?

What happens to the clean slate if everything is based on the norm? Where do radicality and timing fit here? Even worse, where is the human element and how does it affect their initiative? I find no answer to my questions while recalling this set of authors dispositioning. Therefore I disagree with the emphasis of Johansson et al. (1993) on processes; simply because processes should be seen as just one amongst other elements for achieving a BPR, a successful BPR.

What I am arguing above can be further justified by recalling Ould (1995). If we compare the way he defines and perceives processes (as shown earlier) with how Johansson et al. (1993) do, it can be said that the first author has elaborated further on the attributes a processes has, compared to the latter set of authors. This is not to say that I do not see any value on what Johansson et al. (1993) offer to the BPR reader, but it is my belief that their definition can be complemented further if they acknowledge what Ould (1995) says and expand on it.

Johansson et al. (1993) also refer to three types of BPR efforts a company can undertake. The first type suggests *cost improvement*, the *second the achievement of parity (or the best in the class)* and the last type directs the company's efforts to *effect a breakpoint* (Johansson et al. 1993 : 60). In other words a BPR effort can be driven by one of the above three stated different business goals. More specifically they say:

1. Process improvement can lead to dramatic cost reductions in non-core processes, far beyond what can be accomplished through traditional cost-cutting efforts,
2. Within core business processes, the reengineering effort is usually aimed at reaching 'best in class', in attaining competitive parity with those who have in the past set the standards and made the rules,
3. The attempt to find and implement Breakpoints, to change the rules and create the new definition of best in class for all other to try to attain (Johansson et al. 1993 : 60).

Although this is a useful categorisation I would argue that by assuming that a BPR intervention is a 'process driven' one, then we do not achieve the holistic thinking this chapter's suggestion tries to pursue. I believe an assumption such as this one should not be made. It is my belief that in doing so the process BPR initiative excludes the possibility for further improvements and learning (drawn from other relevant and

equally important elements in a BPR initiative) in the BPR field (see also the second suggestion in chapter 7).

These authors, to justify further the above categories, reflect on three examples that correspond to the types of BPR that have just been described. These are Dun & Bradstreet, AT&T Power Systems and Coca-Cola & Schweppes (for further reference see Johansson et al. 1993 : 61-83, and chapter 7 of this thesis for further critique on these examples), cases that indeed provide the reader with an explicit set of process designs and their transformations to reflect on the above described types of BPR processes. Their dedication to this element is admirable and extremely valuable to a BPR initiative but at the same time incomplete if it is placed in a contextual BPR environment (see suggestion in part two).

The point just made can also be illustrated in the examples of companies they give above to support those three types of BPR process oriented initiatives. I would say that they were very enlightening and precise in process terms (especially in mapping, design and modelling of those companies' processes). I do not detect, though, any reference to other factors such as, for example, timing of the overall initiative, or any other indication that reveals the reactions of the people involved, apart from a reference to a number of layoffs resulting from the redesign of those processes which were affected by it. Of course the use of IT to map and measure the redesigned processes can be indirectly noted in these cases but I believe that was so because for those companies to arrive to desirable scenarios, the use of IT tools and techniques was necessary. Talking of tools, Johansson et al. (1993 : 224/230) also refer to a collection of tools⁵⁷ available to managers for predictions when reengineering. They argue that these tools can provide accurate representation and that they can reinforce reengineering decisions to be made. I agree but I believe it is always beneficial that they are thought through and used in conjunction with the use of other tools and mechanisms to cover elements like human resource, culture, timing which I consider valuable to the potential success of a BPR change intervention (see also relevant chapters). Therefore, by having in mind the above, what the BPR literature needs to do now is to look at how this collection of tools affects the rest of the contributing elements in such an initiative, correlate them, and reach to a decision that will satisfy and cover not only the process element in this equation, but others as well; for an

enriched and successful BPR intervention to take place.

For Armistead and Rowland (1996) the concept of processes 'is not a new phenomenon' (1996 : 31) but something that has been around for long time. For these authors, processes are seen 'in the historical context of organisations as being the series of activities which were carried out to achieve goals of making, moving or caretaking' (1996 : 31). They do not say directly how important processes are to the initiative undertaken but they note that 'there is much from our past learning about processes which we should not ignore in taking a new view of organisations. The lessons from the past remind us to pay close attention to the redefinition of how people work together...' (1996 : 35-36). I could not agree more. In the previous chapter I have placed these authors in the quality oriented category of BPR writers and one reason for that is because they tend not to detach their thinking from the quality management principles. In other words a quality change programme takes place and that with a number of extra modifications and this they have called BPR. The cases used as examples in their book have the character of TQM more than anything else. I refer to examples like (a) the Royal Mail, which in order to get a British Quality Award, had to undertake a series of assessment procedures which they called a BPR (1996 : 55-59); (b) the Post Office case (1996 : 282-293) which combined TQM with strategic management issues and called what happened a BPR.

Despite the above quality management tendency, in this specific publication I find the authors approaching the element of processes in a much more broad-minded way compared to Davenport (1993) for example. They refer to issues like marketing, finance, strategic management, people (Armistead and Rowland 1996 : 103/161/40/61) which, I believe, if well integrated and complemented by other factors relevant to BPR (culture, time, etc.) can give a new holistic dimension of processes thinking within such an initiative. In one of their chapters they note 'clearly the ability to manage by processes is dependent of people' (1996 : 59). I would say not only people, but also all related process activities to a BPR intervention. The fact that the above authors started thinking and writing about the connections the process element can have with other involved factors to a BPR initiative indicates to me that the process oriented attitude I found to exist in the majority of the BPR readings is faulty and it needs to be modified. What these authors suggest I also find exciting because as

a researcher I can take it a bit further and introduce to future BPR users a contextual way of ensuring that they will not slip back to being process oriented again while reengineering, a way which I believe balances out all factors involved in process related activities in such change intervention as BPR (see also Figure 5.2).

I have to say also that till now in this chapter's analysis I found that all authors agree on the importance of processes in the reengineering field. This is a feeling that I share as well. Despite the above similarity, they seem to have differences of opinion when it comes to this element's application. This is something, which can also be detected if the reader takes a deeper look at the differences created by the interpretation of the scope of processes found in these particular readings. To illustrate further what I am saying I have used Venkatraman's (1992) four distinct categorisations of processes. Venkatraman (1992) talks about four distinct sorts of processes that can be linked with the major BPR readings examined. The *narrowest interpretation* considers those processes that operate within a single function or department. I believe this particular way of looking at processes may be seen as consistent with the definition given by Hammer and Champy (1993) - and this is if we can consider the company's customers as being internal to the company as well as external. Johansson et al. (1993) for example refers to *cross - functional teams*. Davenport and Short (1990) discuss the *redesign of interpersonal processes* within and across small work groups. The second of Venkatraman's (1992) categories considers a slightly wider view of processes, those that *combine a number of different work tasks* within a department. An illustration of the above can be found in Morris and Brandon (1993) definition of processes 'larger than a task...[but] smaller than an area of business such as operations, human resources or shipping' (1993 : 38). Adding to the above, Davenport (1993) suggests that transformational change can and should be managed in segments. 'Even within a discrete business unit, transformational change is best managed in segments, rather than all at one. Our obvious preference is for process segments. Thus, it is rarely necessary to undertake major change in all parts of a business unit simultaneously' (1993 : 190).

An additional view of processes, as indicated by Venkatraman (1992) is the one that locates them predominantly at *an organisational level*. Hammer and Champy's (1993) processes orientation way of thinking would make a good example here. They stress

the need to look at an entire process that cuts across organisational boundaries. 'The improvement that IBM Credit, Ford and Kodak effected did not come about by attending to narrowly defined tasks and working within predefined organisational boundaries. Each was achieved by looking at an entire process - credit insurance, procurement - and product development - that cut across organisational boundaries' (Hammer and Champy 1993 : 47). Finally, processes may be seen as *extending beyond the boundaries* of any single company. Thus Venkatraman (1992) talks of 'business network'⁵⁸ redesign', a network analysis that has been used both for explaining how large companies can be divided into smaller units working in relation to each other and how sets of independent companies can work together creating larger 'wholes'. Based on these terms, Hakanson (1996) believes that network analyses have given results, which have implications for several major managerial areas.

'The most important ones are concerned with the position or strategy of an organisation towards surrounding units. Results indicate that the position in terms of developed relationships with important counterparts has important consequences on how the company will function both in terms of cost efficiency and innovative ability' (Hakanson 1996 : 3857).

Thus, as presented above, depending on the scope of the process seen to be involved, the 'business process concept', might be used to describe a small - scale reorganisation of customer complaints handling, the acceptance and application of a new approach to purchasing or marketing, the reorganisation of the whole way a company provides customer service, or the complete realignment of an organisation's supply chain. This is an area which I believe, because of its authors' many diversified opinions, deserves further research.

To recap, in the several BPR readings explored, the majority of the writers are process-driven thinkers which invites negative criticism (e.g., Case 1999) and creates confusion with Quality management (e.g., Davenport 1993, etc.) approaches to change. More specifically it was found that Hammer (1990) and Hammer and Champy (1993) view processes as an important factor to their reengineering activity. Davenport (1993) sees processes as a key aspect of process innovation and improvement. Overall, though, he tends to see it as the basis for a quality initiative,

which could lead to breakthroughs. Jacobson et al. (1995) borrow their ideas mostly from Davenport (1993) and Davenport and Short's (1990) readings, which again have proved to be qualitative oriented ones since processes are considered to be the centre of their attention while reengineering. Armistead and Rowland (1996) were also found to be quality oriented authors but they acknowledge that processes in future need to be seen in relation to other issues (e.g., finance) for the bettering of their management. Johansson et al. (1993) I see as being the extremists with regard to this element, because as stated earlier, they like to think about business 'as processes' (1993 : 58) rather than anything else, a view that is purely driven by 'cost cutting'. It is my belief that having such orientation as the primary one leads to a BPR being a little more than a TQM intervention. This I believe results in the exclusion of important elements (as will also be shown in the following chapters of this thesis) when deciding and implementing BPR, which I see as imperative for a successful intervention.

It is my belief that this type of 'process orientation thinking' has to change if future BPR thinkers do not want to repeat the failures of the past. They have to realise that BPR's failure to understand and properly assess all critical factors that are affecting its initiatives is a mistake and continuously repeating the same old mistake without learning from it, can only lead to disappointing results. Simply what I am saying here, is that BPR involves not only processes, but also other things that the future BPR user has to consider. My findings are further justified by Eisenberg's (1997) criticisms towards the practice of BPR. Amongst others he notes, 'some major errors were made but too many companies are continuing to make the same mistakes, isn't it time that companies retool their businesses?' (1997 : 3). Thus, what can be done about it? What can a novice researcher like myself suggest which can help the future BPR user bridge this gap in the reengineering field? A suggestion for how to remedy this identified weakness of BPR, is made in the part that follows.

5.2. Resolving BPR's problem with the Process element

5.2.1 Suggesting a diamond framework for dealing with the process element in future BPR initiatives

The previous part dealt with the current concepts and controversies in the currently

examined BPR literature regarding the element of process thinking. The major BRP readings were examined on (i) how they define processes and (ii) how their process orientation perception affects their overall BPR thinking. It was found that all the authors I referred to above, agree on the definition of processes but disagree on the general application side of it (e.g., Hammer 1990, Hammer and Champy 1993 Vs Davenport 1993). Others like Johansson et al. (1993) are purely 'process oriented' something which leads to the engagement of a company's activities into incremental and tactical programmes to carry out changes in the organisation. Jacobson et al. (1995) on the other hand, share Davenport's (1993) ideas but at the end of the day they seem to agree with Johansson's extreme perspective of 'tactical process oriented' BPR initiatives. These findings indicate to me as a researcher that the majority of the above authors' readings use this element in a very unproductive way which

- (i) leads to its overemphasis which causes the immediate underemphasis of other elements imperative to a BPR initiative (e.g., the human element); and
- (ii) what these authors claim they are doing is seems to be Quality Management interventions with a little bit of extra,

and these are despite the fact that all of the authors consider the process element as very important to their change initiatives.

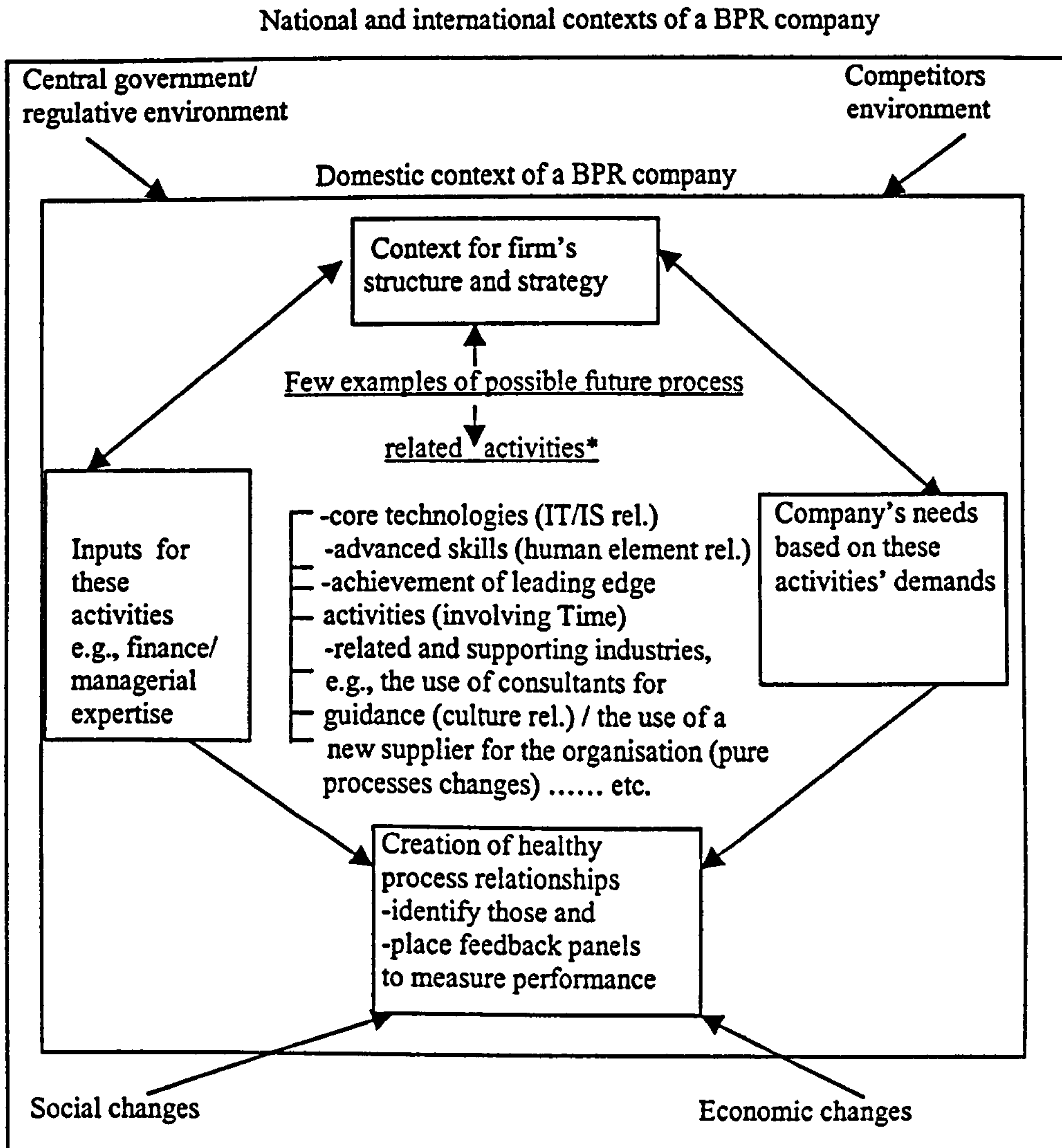
Since, then, I argue for a holistic BPR I find the above situation to be damaging and not productive towards the systemicity of this thesis' suggested holistic BPR approach. This is not to say that I am against using processes to the maximum for benefiting the BPR initiative. Rather, it is my belief that if this element is considered as one imperative factor amongst other major and important contributing factors to a BPR intervention, it can prove to be more advantageous than if it is used in isolation. This was also illustrated in the case of the *USA Postal Express Mail Services* (Carr and Johansson 1995) examined in the previous chapter's analysis. The collaboration of a number of elements in that particular initiative created an environment of a radical and successful BPR, which allowed the company to harvest the benefits of using not only its process element but also all the rest of the elements, involved.

To be more specific I consider the process element as imperative to a BPR initiative because

- if processes are clearly defined then the organisation will have a clear view of what is done, how and by whom in the organisation. In other words it can provide the change intervention with clarification of its members' responsibilities and duties for its success and also for the company's long term survival (Barker and Longman 1992, Ould 1995);
- having a clear view of processes also enables the change participants to identify, accept and integrate the contributions other elements make to their BPR programme. These can further aid not only the advancement of processes but also the advancement of the whole change initiative. For example this element in relation to the time element (refer to chapter 4) can give chronological specifications on possible completion periods of parts of such a change programme (in manufacturing this may include rework, set up, waiting and queue times - Handfield 1995, Kerzner 1995).

Therefore this part will suggest that a good way for solving the problems identified earlier would be for the future BPR thinker to approach the process element in a *much more contextual way* than it does now, which would be conducive to a successful BPR intervention. And I explain. Certainly, BPR managers should worry about processes because they are indeed needed and they are important to their BPR interventions because of reasons like clarification of responsibilities and long term survival (Ould 1995), but the key issue here is for the BPR users not to focus solely on them [e.g., not to be processes oriented like Johansson et al. (1993) and Jacobson (1995) etc.]. Instead, they should allow for the development of a number of 'healthy process thinking relationships' with factors like IT/IS, the human element, Time and even peoples' Cultures, which are affected and at the same time affect and add value to the creation of a successful BPR change intervention. The figure that follows describes exactly how to do that.

Figure 5.2 A *diamond framework* for identifying and keeping healthy process thinking relationships in a reengineering activity



Note
 (*) : These are just a number of activities related to processes examples; the user of this framework can identify other different ones and introduce them to this framework with the intention of finding the ones suitable for their company's individual needs.
 (rel.) : related

I suggest that a BPR practitioner should have the above schema in his/her mind when dealing with the element of processes. This is because via this *diamond framework*⁵⁹ this particular element is placed in a broader context which allows not only for its exploration but also for the exploration of its possible relationships with other activities which might be crucial to the initiative and presently have been underemphasised or even neglected. Figure 5.2 is a diamond framework which I believe makes a difference to a change initiative as BPR and that is by placing a reengineering company into a domestic context which influences and is influenced by

broader contexts like the national and international ones (for further reading, look at Porter, 1990 and 1997; Dicken, 1998, McKinsey, 1998). This is something that the current BPR literature does not do. It is not my intention to analyse these other contexts further but to indicate to the BPR reader that these exist and therefore must not be neglected. Thus, the purpose of this suggestion is to make the future BPR user think broadly, not only in terms of processes but holistically, taking other elements into account as well. I am not arguing that this suggestion is the only one, or even the best one to follow either, but I believe that is a good way to approach the element of processes without

- the tendency of thinking in process terms only and also that
- it would be a good way for minimising the problem of using quality management change initiatives for covering up this process overuse.

In using this diamond framework I argue that a BPR company, in order to avoid overemphasising the process element, needs to place processes in the context of wider relationships which will identify what other interacting forces need to be considered when reengineering. This is illustrated in the middle part of the framework. A company's effort to restructure and create an appropriate strategy has to be based on the company's own, needs which derive from the number of relationships its processes can create. After identifying those, the next step would be to find ways to tackle the bettering of those relationships for their long term health and prosperity.

A very simple example like the one below can illustrate what I mean. One company found out that it needed to buy technological tools to advance its production (whether the company is in the service or manufacturing sector does not make any difference). In this case I would say it would be wise for a BPR manager to examine the importance of processes and their relationship with IT/IS in the situations where these new types of technological advancements are needed (e.g., work group computing systems/filing systems are decided to be applied for the provision of active support to the business process).

One way of examining the above type of relationship would be to collect the potential users' responses in order to gain valuable information. This information could be

relevant to issues involving the human element, for example, whether training is necessary or not, or whether the timing allocated to it is enough to cover their needs or not. To take this a bit further, I would say that this particular company might also find itself at the receiving end of hesitation coming from the people who are going to be using and trying to adapt themselves to the new technological culture brought into the system. In the event where these relationships are not detected at early stages then I do not see any process (core or not) being carried out effectively (resistance to change and other related issues to the human element and culture as stated earlier will be analysed at later chapters) or being carried out at all for that matter! I also believe that the same principle could be applied to the timing element, as seen at the previous chapter and the rest of the five to BPR imperative elements – see also Figure 3.4 . Therefore, in establishing that this is one way of solving the tendency to focus mostly on processes, I believe

- it helps the future BPR thinker in exploring and approaching the element of processes within the BPR initiative within a context and not in isolation and
- it also opens the way for other BPR researches to grasp the advantage of exploring further the relationships the processes element can have with the rest of the elements which could contribute to a successful BPR intervention.

To strengthen the point made above I believe it would also be beneficial to the BPR thinker/user to look and learn from a general categorisation (given below) of business processes given to us researchers by Ould (1995 : 2/3). This I consider relevant and important to what I am suggesting above because a BPR manager has to be able to recognise the fact that when managing such change intervention (and whether he/she likes it or not), his/her organisation operates with and within others processes. By this I mean that an organisational entity also operates broadly into a greater context, which includes more than their own processes. A dynamic environment which incorporates for example functions, departments, organisational layers that are made from resources like humans and others like the legal and social systems which the organisation is accountable to.

Ould (1995) here makes a reference to certain types of processes, which he believes if business processes are divided into, could be useful and productive for the person who

looks at them and makes decisions. I agree with that and I would suggest that for the future BPR thinker to consider as well. It is also my belief that not only this will be beneficial to the future BPR user/practitioner/manager but the BPR researcher as well, and that is because it gives additional research paths to work from for advancing the current BPR readings and practice. According to this author there are 'three broad types (they are useful but not absolute and other categorisations are of course possible)' that business processes fall into: (i) the core business processes, (ii) the support processes and (iii) the management processes category (1995 : 2). It is also this specific author's beliefs that core processes concentrate on 'satisfying external customers'. These are the processes that directly add value in a way perceived by the customer of the business. They respond to a customer request and their objective is to generate customer satisfaction. The second categorisation deals with 'how to satisfy the needs of the entity's internal customers'. These processes might add value to the customer indirectly by supporting a core business process and that is by providing a suitable working environment. The last division refers to 'management processes and their concern is in managing the core processes' [I would add efficiently and effectively] or they concern themselves with 'planning at the business level' (Ould 1995 : 2/3).

It is a very straight forward categorisation and I believe it would be tremendously important if it is further considered and thought through by the BPR user and that is for placing the processes element in a much more broader BPR context scenario. As stated earlier, BPR followers need not be entirely 'process oriented' since it can prove counter - productive in the sense that a number of relevant issues to the processes were not taken into consideration (normally they tend to look at the core processes category which looks inwards and not outwards the organisation). This type of suggested contextual thinking concerning the concept of processes could also act as a good way for minimising the critique that a BPR change intervention is founded on a Tayloristic and mechanistic perceptions when radically transforms organisations. I also see it as a *challenge* that BPR managers would face when separating the core from the rest of the processes when reengineering (and that is always in relation with the environment these are working into). This will give them the opportunity to be critical not only with the main processes identified but generally to all the activities they will undertake. For instance they could question the existing processes in terms

of whether they can carry out the work efficiently or not. If the answer to that is not, then they can either eliminate them or decide on what other simplifications could be possible to enhance them to carry the greater advantages that could bring out in enabling the whole operation to be effective.

Therefore room for improvement towards a systemic BPR type of thinking is always an opportunity for the future BPR readers/practitioners to cultivate their perception and the way they apply a BPR change intervention. In thinking in the diamond framework way it will aid their BPR initiatives not only to be focused on processes (in other words not to be process - oriented) but rather to work towards a BPR change intervention that recognises the relationships processes could build, have and develop with other related factors which are also critical for achieving holistic results within a successful BPR context. I also believe that in the currently examined BPR field there is a tremendous need for such a suggestion since processes are not functions (or people or their needs), therefore they are not able to cover broader needs or requirements that might be of considerable importance to the BPR managerial decision making process.

5.3 A second look at BPR and the 'Process Element'

The presentation and analysis of the current development concerning the role of processes in the BPR literature have shown that by having a process oriented thinking approach while reengineering leads to

- (i) the overemphasis of this element resulting to the creation of mechanistic situations (Eisenberg 1997, Case 1999) and
- (ii) a tendency to work through change programmes like TQM (as seen in the first part of this chapter by authors like Davenport 1993, Johansson et al. 1993, Jacobson et al. 1995, etc.) to achieve changes for the organisation.

The above were the findings of the first part of this chapter. To remedy these I have argued that unless future BPR thinkers consider processes as one of the major imperative to BPR element and not the only one then they will continue fail in their operations. This brings us to the second part where I further suggest that the future BPR user should think of the process element from a diamond framework perspective. This will enable them to identify and keep the identified relationships of the processes

related activities, which could further assist the achievement of a successful BPR change programme.

By suggesting the above I make clear to the BPR readers that in thinking in such terms

- (i) they can achieve an integration of the processes concept which revolves much more around other issues like the company's mission/strategies, peoples' needs and requirements, the company's own capabilities, even the creation of new policies for operationalizing the company's daily practices and not just on the process element itself;
- (ii) in placing process thinking in a broader context it keeps away the fact that processes are a mechanistic way in bringing changes to an organisation;
- (iii) this minimisation of processes overuse will also lead to a BPR change programme taking off without its activities being confused by quality oriented change programmes.

I can now say that the major objective of this chapter which was to demonstrate that by having a purely process BPR orientation results in a BPR being little more than a TQM intervention with a little bit of extra and consequently the processes focus should be one among several, has been achieved. Part one revealed that the majority of the examined BPR writers (e.g., Davenport 1993, Jacobson et al. 1995, Armistead and Rowland 1996, etc.) have a tendency to work through change programmes like TQM and still call what they are doing reengineering. Perhaps I would say this tendency has been created because reengineering as a notion is not very well equipped, therefore the nearest to what they thought it could help them to achieve change is the quality management tools.

I have argued that what they are actually doing is overemphasising processes which firstly undermines or even neglects other of equal importance to their initiatives imperative elements and secondly it creates a reputation of a mechanistic approach to what they are practising. This is something I argued is damaging and unproductive for a holistic BPR approach therefore I suggest a contextual way of approaching the matter. A diamond framework by which I attempt to provide to the future BPR user/thinker a simple and easy way to understand how processes can be placed in a

BPR activity and that is by integrating those with the rest of the organisational factors that influence and get influenced by an initiative such as BPR. In thinking in such terms I stated that this is a weakness BPR has and this one way to solve it. It might not be the perfect solution but at least is a good way of detaching the process element from the critique currently attracts which I believe it affects the general notion of BPR badly.

Therefore a suggested guideline for the people when they will be reengineering in the future would be to

- ensure that their BPR initiative should use the Process element as one of the means to a successful contextual BPR thinking and decision making instead of prioritising it over others. A simple mechanism to do that would be to approach processes in a 'diamond' way which identifies process related activities, points out the company's needs on those and prepares the ground for the establishment of a number of health relationships to enable the success of the overall BPR initiative.

The part that follows concludes this chapter which dealt extensively with the element of processes.

5.4 Conclusion

In the process of demonstrating that a BPR needs to be holistic and that in being holistic it needs to look at a number of different domains and not just giving primacy to one or another, the element of processes was examined.

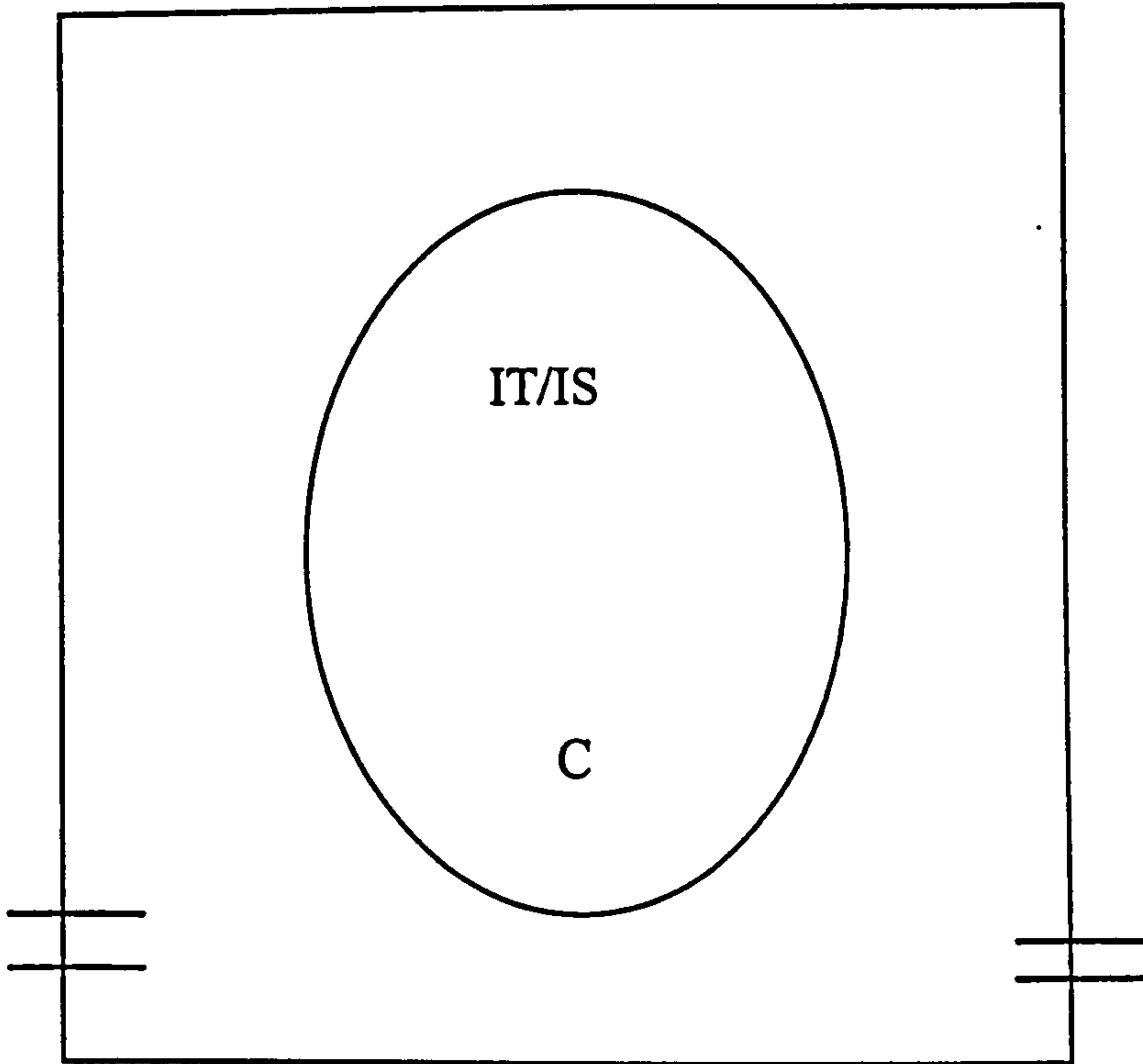
Here the aim of the chapter was to demonstrate that by having a total process orientation results in a BPR being a little more than a TQM intervention. I have argued that this should not be happening and that this element should be considered amongst others. This was shown in the first part of the chapter where the major BPR readings were examined on two dimensions (i) how their authors define processes and (ii) how their process orientation perception affects their overall BPR thinking. It was found that all of the BPR authors this chapter refers to, appreciate greatly this element's influence on their initiatives but the majority of them seems to overemphasise it. Something which leads to problems such as the reception of bad

critiques for the initiative (being mechanistic) and the overshadowing of this initiative by quality management principles. Events, which as long as they take place, I believe a holistic BPR thinking, would be difficult to achieve.

Thus, in the second part of the chapter I put a suggestion forward to solve the above identified problems. A diamond framework which if used effectively by the future BPR thinker/user I believe can maximise BPR's possibilities for success in such a change initiative.

In the third part of this chapter I provided a synopsis which reflects on the ideas that have been presented throughout the analysis of this concept. I also suggested a guideline for the future BPR user regarding the process element, which meets one of the overall subsidiary aims of this thesis.

The next chapter talks about another imperative to the BPR framework element, the Information Technology/Information Systems (IT/IS) element.



*Technology and structure set relatively narrow limits on the boss's freedom to adopt various leadership styles - a production foreman just can't behave like a college dean
(Cited in Kast and Rosenzweig, 1970 : 178)*

George Strauss

*Structural relationships are not once and for all prescriptions but are 'rules of the game' which are adaptable to changing situations and the changing desires of the participants
(Cited in Kast and Rosenzweig, 1970 : 178)*

Ogden H. Hall

CHAPTER 6

6.0 Introduction

As an intellectual investigation, understanding BPR, we have seen, requires the appreciation of a vast network of issues in the organisation world, each drawn from many disciplines and perspectives. This chapter is an attempt to visit the theoretical terrain of Information Technology (IT) and to place that notion firmly in the BPR context. Simply, the aim here is to show that if BPR takes IT as its primary focus then it becomes little more than the Introduction of a New Management Information Systems whereas I believe that IT needs to be one among many focuses that are taken. This will be demonstrated when I investigate how the core BPR readings (Hammer and Champy 1993, Davenport and Short 1990, Davenport 1993, Johansson et al. 1993, etc.) perceive IT and its role in their overall BPR thinking.

More specifically, I have considered the IT element as one of the major factors while reengineering because of its powerful attributes.

- (i) It is the means of 'feeding' the organisation (Harrison and Pratt 1993) that undertakes a BPR programme with information regarding what is happening around and within it at amazing speed (Malone et al. 1993). By having such a tool, decision makers can be aided for example in their SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis which can further indicate the future (and the prospects) of the company.
- (ii) It can also act as an 'enabler' to any of the other factors involved in such a change programme as BPR. For instance IT can enable the company's marketers (the human factor) to internet-sale the organisations products or create awareness if is a service provider; IT can also work in the area of processes to improve the company's production lines (via computerised quality control units).

Thus, the first part of this chapter reveal how the above mentioned readings acknowledge IT and how important they think it is to their overall BPR activities. This is done for the reader to see that the concept of IT is very important to many of the writers of the notion but, as will be later shown, its overemphasis by the majority of them cause problems to companies. It is also my impression that what they are

doing misleads organisations into thinking that what they are actually doing is BPR.

Part two of the chapter further discusses the importance of the IT element and presents the reasons why I believe it needs to be considered as imperative by the BPR thinker/user when a reengineering activity takes place.

The third part aims to produce a suggestion that will enable the future BPR user to think about BPR not in IT driven terms but in much more holistic and integrated BPR way which focuses not only on the IT element but also on the human element, culture, time and processes elements.

The fourth part takes a second look at the relationship of BPR and the IT element and suggests to the prospect BPR user a guideline on how to approach the above in the future. This will also satisfy one of the overall aims of this thesis.

This chapter concludes with a summary.

6.1 BPR's Current Positions on the role that IT plays in the BPR field

This part will examine the major BPR readings (Hammer 1990, Hammer and Champy 1993, Davenport and Short 1990, Davenport 1993, Johansson et al. 1993, etc.) on their current position regarding IT plays in the BPR field. More specifically I will be revealing how they perceive IT and its role in their overall BPR thinking.

Hammer (1990) emphasises that 'our imaginations must guide our decisions about technology - not the other way round' (1990 : 112). He considers IT as a key enabler of BPR, which he believes radical change should encompass (Hammer 1990). He prescribes the use of IT to challenge the assumptions inherent in the work processes that have existed since long before the advent of modern computer and communications technology. He notes that at the heart of reengineering is the notion of 'discontinuous thinking, or recognising and breaking away from the outdated rules and fundamental assumptions underlying operations... These rules of work design are based on assumptions about technology, people, and organisational goals that no longer hold' (Hammer 1990 : 104).

Hammer and Champy (1993) take Hammer's (1990) initial ideas a bit further and describe IT as an 'essential enabler' of reengineering. For these authors the contribution of IT to reengineering is difficult to overstate and they present a whole chapter in their book *Reengineering the Corporation* which illustrates how different forms of IT such as videodisks, teleconferencing and expert systems break the rules that limit how organisations conduct their work. They note,

'it is this disruptive power of technology, its ability to break the rules that limit how we conduct our work, that makes it critical to companies looking for a competitive advantage' (1993 : 91).

The above authors also view reengineering and IT *as irrevocably linked* (Weicher et al. 1995). Two examples given to us by Hammer and Champy (1993) are the *Wal - Marts* case and the *Ford Corp* case. Wal - Marts would not have been able to reengineer their processes used to procure and distribute mass - market retail goods without IT. Ford's achievement in reducing by 75% its headcount in the procurement department was made possible by using IT in conjunction with BPR (Hammer and Champy 1993 : 34/39). Overall Hammer and Champy (1993) are a set of authors, who consider IT as an enabler to their BPR intervention.

I would not like to dispute the above given examples by Hammer and Champy but I would like to note that it seems to me that in these cases these authors revolve everything around IT, despite the fact that they seem to be aware of the existence of other important factors like the human element for example (see chapter 7). In the cases in question, what happened can be seen as an advancement of these companies' processes with IT/IS systems. I believe that gives a wrong impression to the reader, because IT is not always what reengineering companies might require. My argument can be further supported by reference to Caldwell (1994). She also takes a critical approach to what has been stated by Hammer and Champy (1993) about these cases and she notes that 'despite that there are studies that indicate over half of all reengineering efforts are initiated because of a perceived information technology opportunity... the actual technological solution is far less important than educating employees to use IT as both a strategic initiative and as tool in reengineering process' (Caldwell 1994 : 50).

The above is something which I agree on [needless to say that Hammer and Champy (1993) do refer briefly to the human element in what they are doing but it is seen as not having enough to do with the rest of their initiatives' orientations (IT and Processes)]. Therefore we as researchers need to recognise this weakness and consider it as a gap which needs to be filled in the future. Caldwell here suggests a way forward, which I believe, is a good way to start thinking about this element. Even her suggestion is still, however, open to further critique. Therefore, I do not only suggest the greater consideration of the human element in this type of initiative, as she does, but I argue for further consideration of a number of other elements as well, in order to achieve a holistic and systemic BPR approach. I believe that a good way of making IT work and benefit the BPR initiative is to

- educate and re-educate the people involved in it on how to use it and also note that the BPR manager needs to make sure that IT does not only benefit the company's processes but also benefits the people who are using it and
- also provide them with the means (e.g., framework suggested as presented in Figure 6.2) to be able to identify these needs (see also 6.3).

Davenport and Short (1990) describe BPR and IT as having a *recursive relationship*, arguing that 'each is the key to thinking about the other' (1990 : 12). They argue that BPR requires taking a broader view of both IT and business activity, and of the relationships between them. IT should be viewed as more than an automating or mechanising force to *fundamentally reshape the way business is done*. Business activities should be viewed as more than a collection of individual or even functional tasks *in a process view for maximising effectiveness*. IT and BPR; as stated earlier, have a recursive relationship. IT capabilities should support business processes, and business processes should be developed in terms of the capabilities IT can provide. They also refer to this broadened, recursive view of IT and BPR as the new Industrial Engineering. In addition, for these authors, business processes represent a new approach to co-ordination across the firm; IT's promise, and its ultimate impact, is to be the most powerful tool for reducing the costs of co-ordination (Davenport 1990 : 17).

In addition, they present an example of '*IT-Driven*' BPR, which I consider worth

looking at, to show how things are done in practice, to present these authors' perceptions on it, and clarify the role that IT plays during that procedure.

IT-Driven Process Redesign at Rank Xerox U.K

Rank Xerox U.K. (RXUK), a national operating company of Xerox Corporation, has undertaken the most comprehensive IT-driven process redesign we have studied. The process was led by David O'Brien, the divisions managing director, who arrived at the company in 1985. O'Brien quickly came to two realisations: first, the company needed to focus on marketing 'office systems' in addition to its traditional reprographics products; and second, the company's strong functional culture and inefficient business processes would greatly inhibit its growth. He began to see his own organisation as a place to test integrated office systems that support integrated business processes; if successful, he could use RXUK as a model for customers.

The company began to redesign its business in 1987. In a series of offsite meetings, the senior management team reappraised its external environment and mission, then identified the key business processes needed if the company was to achieve its mission. The group began to restructure the organisation around cross - functional processes, identifying high - level objectives and creating task forces to define information and other resource requirements for each process. It created career systems revolving around facilitation skills and cross - functional management, rather than hierarchical authority. O'Brien decided to keep a somewhat functional formal structure, because functional skills would still be needed in a process organisation and because the level of organisational change might have been too great with a wholly new structure.

The level of change was still very high. Several senior managers departed because they could not or would not manage in the new environment. Two new cross - functional senior positions, called 'facilitating directors', were created, one for organisational and business development, the other for process management, information systems, and quality. O'Brien took great advantage of the honeymoon period accorded to new CEOs, but managing the change still required intense personal attention:

Of course, this new thinking was in sharp contrast to some of the skills and attitudes of the company. We were introducing a change management philosophy in a company that, in many ways, was very skillful and effective, but in different product - market environment. We faced all the issues of attitudinal change and retraining that any such change implies. We were moving to a much more integrated view of the world and had to encourage a major shift in many patterns of the existing culture. This meant a very hard, tough program of selling the new ideas within the organisation as well as an extensive and personal effort to get the new messages and thinking to our potential customers⁶⁰.

As the key processes were identified and their objectives determined, the company began to think about how information technology (its own and from other providers) could enable and support the processes. The facilitating director of processes and systems, Paul Chapman, decided that the firm needed a new approach to developing information systems around processes. His organisation used the information engineering approach discussed earlier and worked with an external consultant to refine and confirm process identification. They uncovered 18 'macro' business processes (e.g., logistics) and 145 'micro' processes (e.g., fleet management).

The senior management team reconvened to prioritise the identified processes and decided that seven macro processes had particular importance: customer order life cycle, customer satisfaction, installed equipment management, integrated planning, logistics, financial

management, and personnel management. It selected personnel management as the first process to be redesigned because this was viewed as relatively easy to attack and because personnel systems were crucial in tracking the development of new skills. The personnel system has now been successfully redesigned, using automated code generation capabilities, in substantially less time than if normal methods had been used.

RXUK's financial situation began to improve as it redesigned its business processes. The company emerged from a long period of stagnation into a period of 20 percent revenue growth. Jobs not directly involved with customer contact were reduced from 1,100 to 800. Order delivery time was, on average, reduced from thirty-three days to six days. Though many other market factors were changing during this time, O'Brien credits the process redesign for much of the improvement.

Other Xerox divisions heard of RXUK's success with process redesign and began efforts to their own. Xerox's U.S. product development and marketing divisions now have major cross-functional teams performing process redesign. Paul Chapman has been loaned to Xerox corporate headquarters, where he is heading a cross-functional team looking at corporate business processes. Commitment to IT-driven process redesign by Xerox senior corporate management is also growing.

(From Davenport and Short 1990 : 21 - 22)

Some writers take this to mean that reengineering is primarily a new way of applying IT in organisations, or even that it refers to the application of particular types of IT Systems, such as *workflow software and document image processing hardware* (Jones 1996) to the extent that these are sometimes sold as reengineering tools. The same author also argues that this has led some sceptics to suggest that reengineering is simply another way of selling more IT and, as a reaction to this, according to Jones, other writers argued that there is no synonymy between the two, and that priority should be given to the design of efficient new processes. IT can be a supportive element to those. Indeed, one of the advantages of BPR is seen to be its subordination of IT to business objectives (Jones 1996).

This is a view that I share. Since I favour a holistic and systemic approach to BPR (also refer to chapter 3) I would say that having an IT driven initiative results in little more than the company's introduction of a new management information system, a move that results in the neglect of other elements (what about the timing, and cultural factors; should not these be considered?) of equal importance for the success of the intervention. Companies can do a MIS project, which does not take care if any other elements, but which will probably be called BPR. That confusion can arise.

Also, the company, which overemphasises IT (as will be seen later in this chapter),

could face the possibility of disabling its activities instead of enabling them - which could obviously lead to mounting costs and failure of the intervention. I would say to the readers of this thesis, remember, a BPR initiative is a holistic and a systemic activity. Overemphasising IT results not in a BPR but in another MIS in the organisation. Is that what the companies are paying for? I do not think so. What has been applied might have worked for Xerox. That does not mean that it will work for another company and with the same success. Companies, as seen in the radical thinking chapter (chapter 4), need to place themselves in one of the categories along the BPR continuum and then take action. Action is not taken because we think that our company will succeed because it has the same line of business as Xerox, which happened to do something which was beneficial to its operations. If it were as simple as this, BPR, I believe would never fail!

I believe this confusion is created because of the peoples' (BPR users – change programme buyers) failure to distinguish the difference between a MIS, a BPR and a good BPR. I see a MIS being purely an IT project which is introduced, for example, to advance a company's database. A BPR is the change initiative, which involves processes as well. A good BPR is the change initiative which takes into account not only IT and processes but other factors like time, the human element and culture. Therefore in failing to understand what each one of these three can offer them, results to the misconception of what their companies need to be/are doing.

Davenport (1993) describes IT as the 'primary enabler', which is best placed to bring about BPR (despite the fact that in 1995 he expresses⁶¹ the view that IT is a facilitator to BPR). His whole publication is IT oriented and I find it misleading because of this bias. Davenport's (1993) ideas I also find very similar to those of Davenport and Short (1990) on the matter. I disagree with the approach that views IT as the primary enabler of BPR, because of its extremist way of looking at BPR change in the organisation. I believe that IT is not the only primary element to look at when reengineering, but one amongst others.

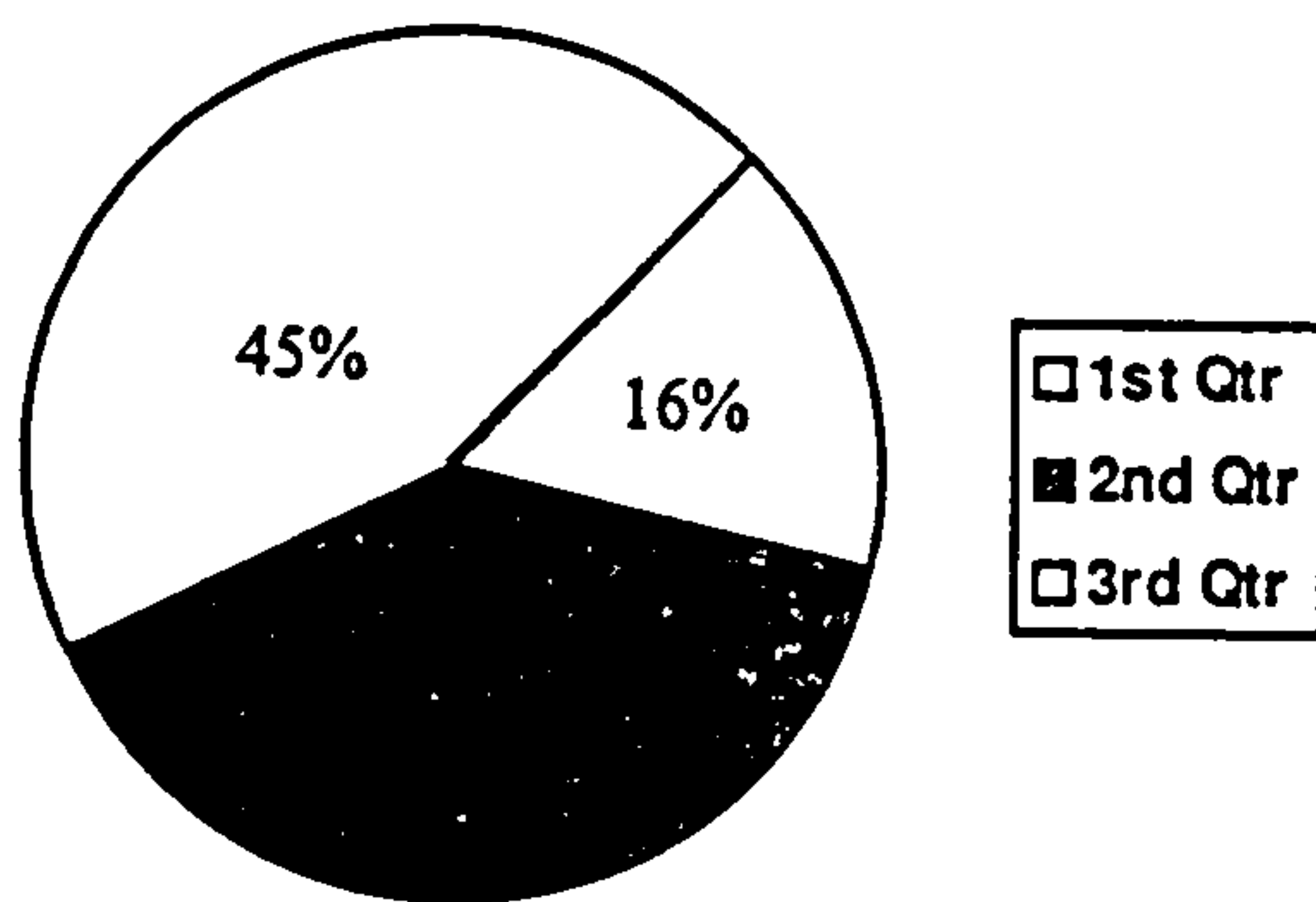
One example to illustrate what I am arguing above is the Citibank N.A., which has admitted it wasted \$50 million in a year - long effort to reengineer its back - office securities processing. In March 1994, the New York - based bank fired IBM's

integrated Systems Solutions Corp. (ISSC) and reimbursed the IBM unit for client - server hardware it had installed (Caldwell 1994). The same author further notes,

‘if the country’s biggest bank and one of the largest systems integrators in the world can mess up that badly, maybe the numbers of failure [when it came to IT] are right. No doubt, other companies with far fewer resources can also make some very expensive goofs. But two thirds of them? It may actually be more’ (Caldwell 1994 : 52).

Furthermore, in interviews with 350 executives involved with any form of business process reengineering, conducted by Cambridge, Mass - based Management Consulting firm Arthur D. Little Inc. only 16% said they were *fully satisfied* with their efforts (see Chart 6.1). The study also revealed that 68% of those executives reported that their reengineering projects had unintended side effects and created new problems instead of solving them (Caldwell 1994 : 56).

Chart 6.1 Executive satisfaction - or lack thereof - with BPR activities



16% = fully satisfied
39% = dissatisfied
45% = partially satisfied
Data : Arthur D. Little

(From Caldwell 1994 : 56)

This is obviously something that makes senior management more sceptical concerning the effectiveness of IT as a whole; many believe is due to the ‘lacklustre’ performance of many information systems in the past decade. In fact, on this matter Kehoe (1994) in an article in the *Financial Times*, argues that, 85% of IT spending in the 1980s was in the service sector, and the productivity in this sector increased only 1.9%, while the productivity in the manufacturing sector rose 44% (Kehoe 1994). Based on the above record, Kehoe does not think it would be unreasonable to view IT as a disabler, which is never used to ‘challenge why things are done in a company, but

instead justify the way are done' (1994 : 8). She continues by saying that systems in the service sector have been used to 'generate more unneeded reports, speed up superfluous work steps, generate unnecessary information, encourage shoddy thinking and misdirect attention to spurious details' (Kehoe 1994 : 8).

Certainly the above also makes me sceptical about the 'disability' IT can cause when overemphasised. Thus, it would be wise for the future BPR user to think of it as just one of BPR's imperative elements and not the only one.

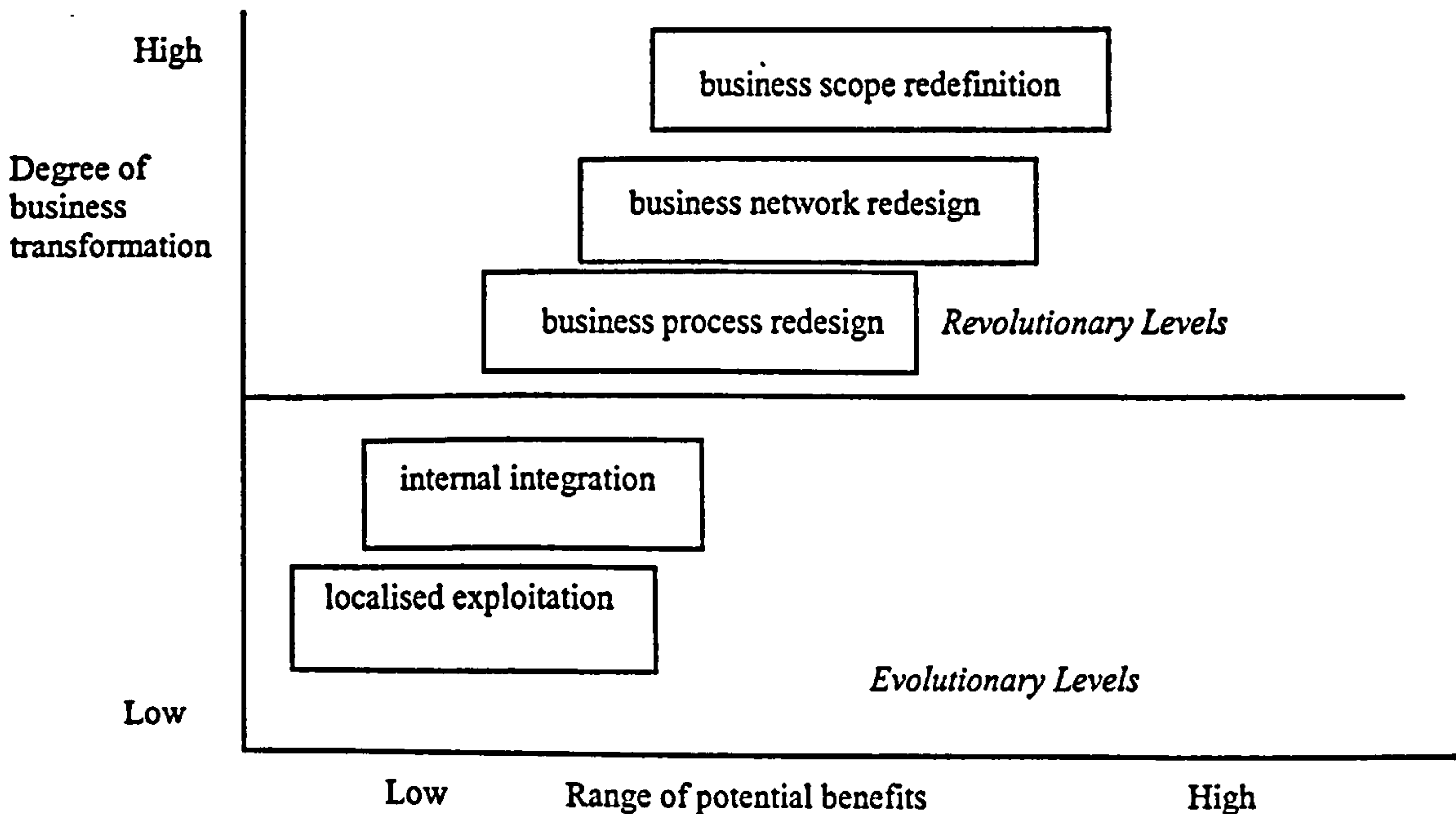
Johansson et al. (1993), as seen in the previous chapter, are processes oriented authors. Because of that, I see them making very little reference to IT/IS. It is an element they take for granted (there are no subsections in their publication to indicate this element's importance). They only say that 'IS can be a possible breakpoint' for their process orientation change initiative but their concern is not with how these information systems are affecting the rest of the BPR initiative but with 'how to use these to speed or simplify the external connections within the core business processes' (1993 : 113).

Simply, these authors see this tool from a technical point of view, which enables the advancement of their processes in becoming speedier and simpler; a 'technocratic' view which has been criticised by authors like Eisenberg (1997). I agree with these criticisms and I feel that we, as researchers, must do something about that (see suggestion in 6.3). Amongst other things Eisenberg (1997) talks about the deterioration of human interaction and teamwork in changing organisations when technology is used heavily. More specifically he notes, 'teamwork also deteriorates due to the use of technology to replace human interaction. For example, voice mail is used to replace secretaries, while telecommuting and 'virtual teams' take the place of in-person meetings. The reduction of face-to-face contacts, however, substantially reduces employees' willingness to put themselves out for others' (1997 : 8).

Venkatraman (1994) on the other hand, sees the role of IT as *a distinctive one in shaping tomorrow's business operations*. He argues that 'IT has become a fundamental enabler in creating and maintaining a flexible business network' (1994 : 73). Using a framework (see Figure 6.1) that breaks into five levels, the author

describes each level's characteristics and offers suggestions for deriving maximal benefits. He suggests that each organisation first determines the level at which the benefits are in line with the costs or efforts of the needed changes and then proceeds to higher levels as the demands of competition and the need to deliver greater value to the customer increases (Venkatraman 1994).

Figure 6.1 Five levels of IT-enabled business transformation



(From Venkatraman 1994 : 74)

Not that he presents or gives us anything new on how to apply IT, but he supports the views of Hammer and Champy (1993) on the compromise position they take on IT in relation to BPR. Thus, as illustrated in Venkatraman's framework, and throughout this part, the focus is on specific, separable technical systems rather than IT as an element of broader, social information systems.

Overall, while a number of BPR authors view IT as an enabler (e.g., Hammer 1990, Hammer and Champy 1993) but with the tendency to overuse it, the rest consider it as the driving power in what they do (Davenport and Short 1990, Davenport 1993). Others do not know when IT will be beneficial to them and they decide on using it as they go along, based on their process needs (e.g., Johansson et al. 1993); sometimes it proves to be a disabler (Kehoe 1994) for the whole procedure undertaken. Clearly, though, IT's enabling role in a BPR activity cannot be disputed. In my view, any BPR

initiative needs to consider the element of IT in a way that does not leave out the impact that a number of other elements can have on its overall success. For a BPR initiative to be purely IT oriented or even be driven by it, I do not think is the most beneficial way to apply BPR, a view that seems to be justified in view of the cases of failures and disabilities caused by IT overuse, as presented earlier on. Thus, the question here is what can be done to improve the situation (see 6.3).

6.2 Is IT really imperative for a BPR initiative?

I have to admit that IT is an element, which has not been neglected while reengineering, but on the contrary it has been, alongside processes, a driving force for many BPR programmes (e.g., see Davenport and Short 1990). I cannot dispute this element's importance either. I do not say that because all readings examined above agree on its importance, but because I value IT as very important to any contemporary changing organisation (see the reasoning that follows). Prior to presenting the reasons why I believe so, I will recap on the findings of the study of the BPR literature on this particular element.

I found out that

- when IT drives a BPR project, leads to this element's overemphasis (Davenport and Short 1990, Davenport 1993, Hammer and Champy 1993, etc.) which as nicely been put by Caldwell (1994) and Kehoe (1994) 'disables' organisations instead of helping them change.

To put this in another way I would say companies are introducing themselves to new management information systems, which they hope will solve all their problems. I question that, though. Can IT/IS solve all problems in an organisation? I believe not. As the Harvard Business School Bulletin (1996 : 36) stated, 'for many managers today, the great business challenges are no longer technical; rather they involve figuring out how to put more *soul* into the workplace'. To take that a bit further I will use Webster (1995) who argued that for an organisational future which is revolutionised by technology, there is the need for a more developed and measured understanding of how organisations adopt and utilise IT. I take this to mean that there are other issues that need to be considered apart from IT. Thus, it is really quite clear

what future BPR initiatives need to do to fight the above weakness (see next part).

Generally speaking I consider IT important because of the relatively high influence it has/can have on any type of organisational activity - organisational life, especially in our contemporary computerised era⁶². What IT can do (capabilities) to enable its user to become more efficient in his/her working environment, is something we are all somehow aware of. For instance Clark (1993 : 11) refers to the principal capabilities of microelectronics-based computing technologies: 'the capture, storage, manipulation, and distribution of information. It is these capabilities which account for the extraordinary wide scope of their application not just to manufacturing (the traditional focus of automation), but to a whole range of administrative work too'. He continues by giving pragmatic examples of how IT can allow for programming in production and for automatic feedback on the performance of machines and human beings within the organisation-irrespective of the type of IT. It is also his belief that IT 'can promote organisational integration by improving the accessibility and speed of information capture and display across different levels and areas of operation' (1993 : 11). It is further noted that 'these capabilities have considerable implications for employees at all levels of the organisation (e.g., the extent to which the change in IT is discontinuous with previous experience, or even the degree of risk or uncertainty associated with it)' (Clark 1993 : 12, see also Hage 1980). Therefore it is not surprising that the influence of this element in our daily life operations as individuals and organisational entities is so great.

More specifically, if I were asked why I believe IT is an imperative element for a BPR change initiative I would say that I believe so because:

- IT can provide the change programme (BPR thinker/practitioner) with information regarding what is happening around it and within it, at amazing speed. Malone et al. (1993) on this state, 'Businesses are again beginning to change dramatically, a key driver this time being the development of new information technologies. Computers and communication networks allow us to move, store and process information faster, more cheaply, and over greater distances than ever before' (1993 : 37). For instance IT, I would say, enables the organisation to have access to a common database (information inputs from all parties involved in the programme) concerning the project undertaken. This makes it possible to identify

their weaknesses and strengths as an organisation and try to adjust those accordingly. IT can also provide software that can create simulations for possible future change scenarios based on their information inputs; and these will help them with their internal strategic needs. It is also a tool, which forces the interaction between IT and human element for instance, in such a change programme. This can lead to the building of a productive relationship between these two elements, a relationship, which may need to be closely monitored. The human element might need training/appropriate skills to be able to work with such systems. Therefore, the BPR manager has to identify and provide those. This relationship is not the only one I detect here. There are a number of others, like IT and processes, IT and culture, IT and time; relationships that a BPR manager can specify, break down, analyse and take the appropriate decisions for their improvement. Thus, IT is not the primary tool for solving any change initiatives problems but is just one of the many factors a BPR manager has to consider while reengineering (see suggestion in 6.3).

- IT is also important not only for internal purposes, as seen above, but for external purposes as well. It is a tool that can identify threats and opportunities in the market place and enable the company to compete based on those. Bradley et al. (1993) note, 'many firms are making strategic commitment to technology with the stated objective of gaining significant competitive advantage in their industry' (1993 : 13). I would say the means to do that include, for example, Internet selling and/or advertising while using web-sites (products of the contemporary IT). These means, I also see as the new frontiers for creating new market targets and that is something which companies have to pursue. Barnett (1995) once stated, 'the computing and telecommunications technologies of the future will be wondrous. Finally we will be granted infinite freedom to walk and fly in the cyberspace realm of pure information, to create the physically impossible, to reach out to other human beings as never before...' (1995 : 29).

Given the numerous advantages that can be gained by using IT tools, it is up to the BPR user to decide when to use them and where to use them in their change initiative. So, using technology should not be a barrier for a change initiative such as BPR. On the contrary, it is my belief that if the BPR users are

- aware of the benefits (e.g., sustaining one's competitive advantage, Bradley et al. 1993 : 131) this element can offer towards their initiative and
- also aware of the fact that an IT extreme orientation can cause problems (e.g., technocratization, financial distress) to their initiative,

then they should be more careful in the way they approach this element in the future. A suggestion how to achieve that is presented next.

6.3 Suggesting a number of multi diversified loops of activity-relationships IT can set up for solving BPR's current weakness regarding this element

From the findings of this research analysis I detected that BPR is facing a weakness as a result of excessive emphasis on its IT element. This, as seen, in the first part of this chapter, leads to the introduction not of a BPR activity but of a new management information systems design by which companies think all their problems will be solved.

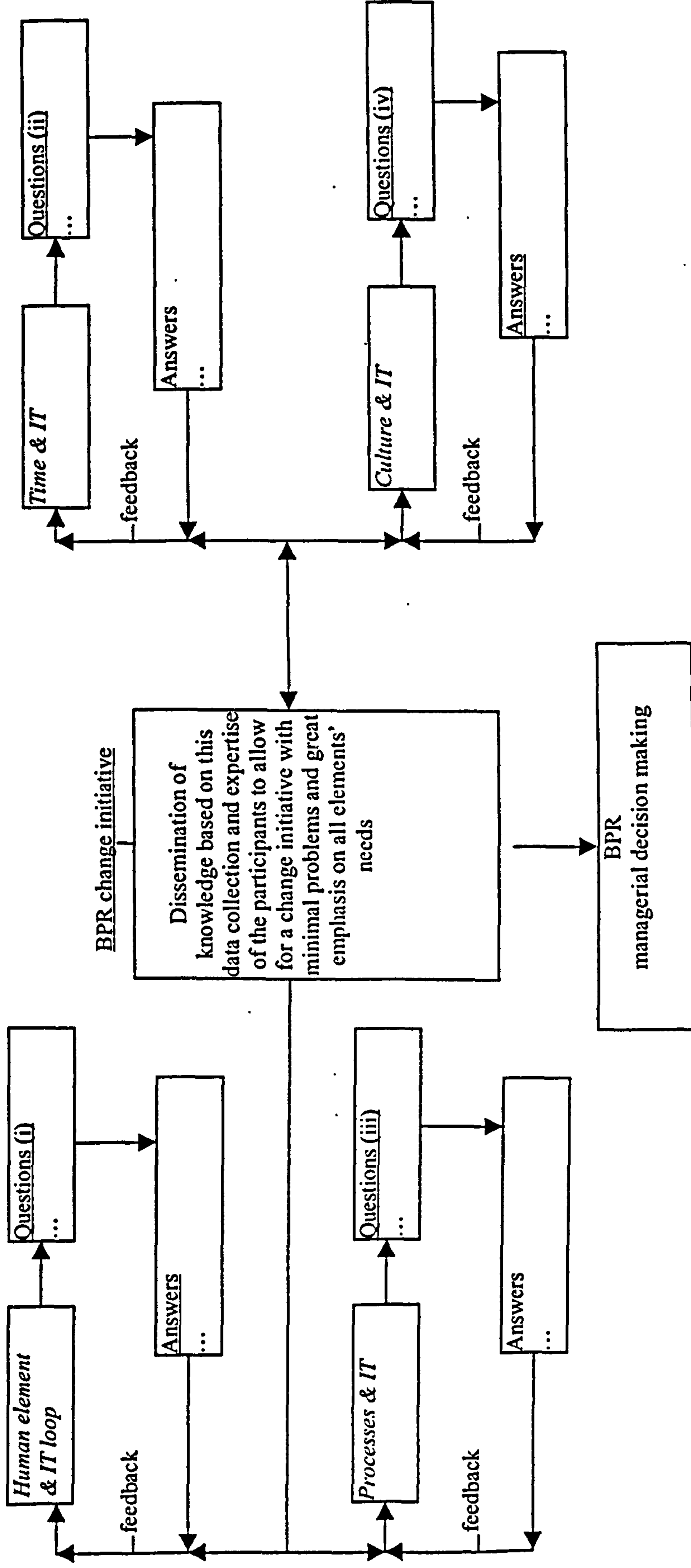
It is my belief that the IT element has extremely powerful attributes that can be used to offer a lot of benefits to a change initiative like BPR (as seen in the previous part). Nevertheless, I would not like to see a BPR change programme driven by IT because of the possible problems it can cause (refer to 6.1). Admittedly it is a powerful tool, but that does not necessarily mean that if introduced to an organisation it will solve all its problems, even if combined with processes as Hammer and Champy (1993) suggest in one of their cases (Ford Motor Co., Hammer and Champy 1993 : 39-44). I see a BPR change programme involving a number of other factors (human element, culture, etc.) which affect and are affected in an initiative such as this one, without having to overemphasise IT.

Thus, I would suggest that future BPR users think about the IT element in a loop manner (see Figure 6.2). In doing so the BPR people are driven away from the event of overemphasising IT in a BPR initiative or even away from the event of not giving IT enough emphasis either. Instead, they will be led to think about IT in conjunction with the rest of the contributing factors (human element, processes, culture, time) in a BPR change programme. In order to achieve that, though, I suggest that a BPR

manager should focus on the design of a number of rational loops (as shown in Figure 6.2) between the above stated imperative elements. That would serve the purpose of indicating to the manager where IT is needed and the amount of time and money necessary. On the basis of these findings, further action can then be taken. The reader can also detect that in the Figure that follows I refer to elements like the human element and culture which have not been discussed in this analysis yet (these are the subjects of chapters 7 and 8). I do not think, though, that this should stop me from making a reference to them while using these to show to the future BPR users how those elements can be integrated with the IT element for the creation of a holistic BPR change initiative.

I am not suggesting that the framework given below is necessarily the best or the most effective to follow, but what I am suggesting here, is my own practical framework which the future BPR user can consider, adjust according to his/her company's needs and implement. I believe this approach overcomes the weakness I found to exist in the examined BPR literature concerning the overemphasis of the IT element in BPR initiatives. It is a framework which I also believe diverts the BPR's users' thinking to a more integrated and holistic approach to BPR, rather than concentrating on one element which in this case misleads companies (providing them with IT/IS and arguing that this will solve all their problems).

Figure 6.2 A multi dimensional loop of activity-relationships IT can set up in a BPR change initiative



The above Figure, I believe, shows the way the future BPR managers should handle IT. Let me start by explaining how these loops can benefit the BPR user. Firstly I have defined the loop activity-relationships between human element, time, processes, culture and IT elements. Based on these I have then drawn a set of guiding questions that firstly integrate these elements and secondly make them reveal vital information about one's company, regarding their loops' needs. The questions I see as most important are given below.

(i) For the human element and IT loop activity relationship I would ask:

- Do people presently have knowledge on the use of IT/IS?
- Who needs those further skills?
- Who is going to provide the knowledge? (academics and/or private consultants)
- How much will that cost?
- Is the idea acceptable to people?
- What are the company's expectations when applying IT?
- ... (any other question that the user might think will provide them with further insights regarding the above loop)

(ii) For the Time and IT loop activity relationship I would include the following:

What type of IT/IS is needed in the organisation? (clarify why it is indeed necessary)

- Who will be the provider?
- Is their recommendation economically viable?
- How long will it take to set up the new system? If is long, how should the current activities should be carried out? (are alternative plans in place?)
- Is after-sale service, provided?
- ... (any other question that the user might think will provide them with further insights regarding the above loop)

(iii) For the Organisational Processes and IT loop activity relationship I would ask:

- Where exactly is IT needed (in departments for administrative purposes and/or in manufacturing for the production lines)?
- What is the cost to implement the above?
- How will those affect the running of the current processes?

- Who is the beneficiary here?
- ... (any other question that the user might think will provide them with further insights regarding the above loop)

(iv) For the culture and IT loop activity relationship I would question:

- How will the introduction of such a new management system affect people in the organisation (is it with fear, hesitation)?
- Are the BPR managers prepared to tackle the above? (Perhaps they need to be honest about the company's needs to use IT, maybe they need to encourage people by providing proof that IT can make their 'work indeed easier to handle'⁶³).
- Do BPR managers think that the use of professional help would aid them to get the message across? If yes, who can help?
- Can IT offer a systems database for the whole organisation to communicate and maintain the new learning for all involved in such a change programme as BPR?
- ... (any other question that the user might think will provide them with further insights regarding the above loop).

When managers pose these questions, they are bound to get some answers. These answers, I believe, will reflect their individual company's situation on the loops activity-relationships given above. My intention here is not to fill the 'answer boxes' presented in the Figure above and that is simply because this is for a company to do so. The answers will vary from company to company, because each company has different needs and requirements in relation to the acquisition of new knowledge (do they need it or not?), how to acquire that knowledge, how much to spend on it and who needs it most. What I really want to point out with these 'answer boxes' is the fact that by filling them, the BPR user puts in writing his/her company's current status concerning their needs regarding those imperative elements.

When the answers in the loops are completed, the data should be collected and disseminated by the BPR manager and his reengineering team. Then, the knowledge they accumulate from the above and their expertise (along with professional help if necessary) should be used towards the shaping of decisions on how to carry out their BPR change initiative appropriate for their organisations.

I believe that what has been described above is a simple way of focusing a BPR manager's attention on all imperative factors involved in such a change initiative. It is a simple framework that of course can be also customised by the future BPR user to suit his/her company's change needs. There is also the need for this framework to be applied but this I believe is a subject for further research which goes beyond the limits of this thesis.

6.4 A Second Look at BPR and the IT Element

The aim of this chapter was to show that overemphasising IT results in little more than the introduction of management information systems in a company, whereas I believe that IT needs to be one among many focuses that are taken. To demonstrate the above I referred to a number of readings (Davenport and Short 1990, Davenport 1993, etc.) on the topic and I presented to the reader what really happens when this bias occurs. I found that most of the time, overstating IT was a barrier to the initiative and also caused financial problems (disabilities) for the organisation overall (Kehoe 1994). Thus, I suggested that future BPR users think of IT in 'loop' terms (as shown in Figure 6.2) to solve this problem.

To begin with, in the first part of this chapter I reflected on the overall perception on IT and its role in the BPR field. The reader here has the opportunity to see a set of ideas and perceptions on the matter which are drawn from the BPR practitioners' and writers' practical BPR change programme experiences as described in their publications (Hammer and Champy 1993, Davenport and Short 1990, Davenport 1993, Johansson et al. 1993, etc.). To be more precise, the findings in this part revealed that IT is considered to be very important to a BPR initiative, by almost all writers reviewed. I too, consider IT to be very valuable to the BPR initiative. What I disagree with, was the overemphasis on IT, resulting in an IT driven BPR change programme which is misleading for the companies engaged in such change activity.

Thus, I set out in the second part to explain why IT is of significant relevance and importance to a BPR initiative. I have argued that this is important for two reasons, namely:

- the ability of IT to process information at amazing speed which can benefit the organisation internally (building loop activity relationships with all participant factors involved in the change process) and
- IT's ability to aid the organisation externally (market its services, advertise, compete in general, etc.).

After establishing that indeed in a BPR initiative (if appropriate) the use of IT can contribute greatly to the initiatives overall success I proceeded to the third part of this chapter which focused wholly on my suggestion as to how to avoid overemphasising IT in future change programmes such as BPR. My suggestion really aims to direct the future BPR thinker to use IT's capabilities as presented in Figure 6.2, in favour not only of processes but also of the rest of the elements (time, culture, human element) imperative to BPR more effectively and in an openly integrated way, a contextual and integrated way which would allow for different loop activity-relationships to develop, and be considered when reengineering. This will improve IT's relationships with the rest of the participants in such a change programme as BPR. In doing so, the IT element will not be driving the initiative, nor it will be partial and narrow when contributing to its relations with the rest of the contributing factors that I believe can, if put together, make an enriched and successful BPR intervention. This will also result in the recognition of what companies need to acquire to enable their change process to take place with the minimum barriers and mistakes.

What I am suggesting here might seem 'obvious', 'primary' or 'back to basics theme', but I believe that unless this happens, the weakness I found to exist in the BPR literature will continue acting negatively on BPR change programmes. Thus, I concluded that IT is important to a BPR change activity and that it also needs to be considered as one of many imperative elements to such activity, something which should not be confused with the idea, misleading to companies, that a BPR programme is an IT driven initiative. For me, the above are two different things and my suggestion to the future BPR user is to avoid looking at BPR as an IT driven change programme simply because it leads to problems (Caldwell 1994, see part 6.1).

My suggestion sees IT as an element, which acts in a holistic context and not just

from an isolated perspective. I discuss about loops, feedback, relationships, possible needs identification and give solutions to those, a number of dynamics that, if we are IT driven BPR thinkers, I believe we will not be given the opportunity to explore; that is one of the reasons why I believe BPR has so many failures.

Talking of relationships we can recall Huczynski and Buchanan's (1991) reading to illustrate this. For instance, they give an example which involves the human element and IT, and where the reader can find explicit presentation of several personnel issues that IT can affect, and if I may add, can be affected by in an organisation. These are:

- the kinds of work tasks that have to be done in job design (the horizontal division of labour),
- the organisation of work or the grouping of jobs,
- the organisation's structure or the hierarchy through which work is planned and organised (the vertical division of labour),
- the knowledge and skills required to carry out work,
- the values, attitudes and behaviour of employees (1991 : 274).

Thus, it is my belief that in the future when BPR managers will not only have in mind *the loops* I have suggested in the previous part but also be able *to advance* those (by looking for example at other inputs like the one above by Huczynski and Buchanan, 1991), it will make their BPR change initiative more complete.

Overall, though, the suggestion regarding the creation of IT loop activity-relationships can, I believe, achieve three things:

- (i) the future BPR manager will look at issues that are of vital importance to the managing of their BPR initiative (by asking questions on the needs of the imperative elements involved, the future user will have the opportunity to reflect on his/her organisations capabilities and weaknesses and take the decisions appropriate for them);
- (ii) these loop activity-relationships can increase and develop the BPR user's awareness of the interrelationships of the aspects involved in this organisational change programme. This is also a very good way of redirecting the future BPR user's thinking in other organisational affected areas, while not

- being fully focused on the IT element all the time;
- (iii) the future BPR manager can use these loops as a framework by which he/she can identify and monitor his/her organisational BPR needs when and where it will be felt necessary.

I will conclude here by saying once more that IT has a lot to offer to the contemporary business world. I believe that in our case, IT can offer a great aid towards a BPR intervention when it is not overemphasised and seen in isolation (in terms of what it can do by itself for the intervention) but viewed in conjunction with the rest of the elements which, as argued, can contribute to an enriched and a successful BPR intervention. Thus, a suggested guideline to the BPR writers/thinkers/practitioners/writers of the future would be

- to promote the rise and development of a number of loop-activity relationships with the several factors that IT works with so the BPR initiative is not only IT focused. This can be achieved if, for instance, the organisation identifies at the early stages of such initiative as BPR, 'what is needed to enable its IT to operate efficiently'. In doing so the initiative will avoid being hundred percent IT focused, and create the prerequisites for this element to integrate with the rest involved factors. Figure 6.2 shows how to structure this type of thinking.

The above are followed by a conclusive part.

6.5 Conclusion

In Chapter 6, attention was focused wholly on the concept of IT. The aim was to demonstrate that having an IT driven BPR results in the initiative being little more than the introduction of management information systems in the organisation.

To show the above I began by exploring the current thinking and the role IT plays in the business environment and specifically in the BPR field. It was found that IT's supportive role to such initiative is considered by all authors whose readings were examined as a *valuable enabler* to BPR. There are some, though, like Davenport and Short 1990, Hammer and Champy 1993, Davenport 1993 who see this element as *the driving force* while reengineering. I argued that having an IT driven BPR can only

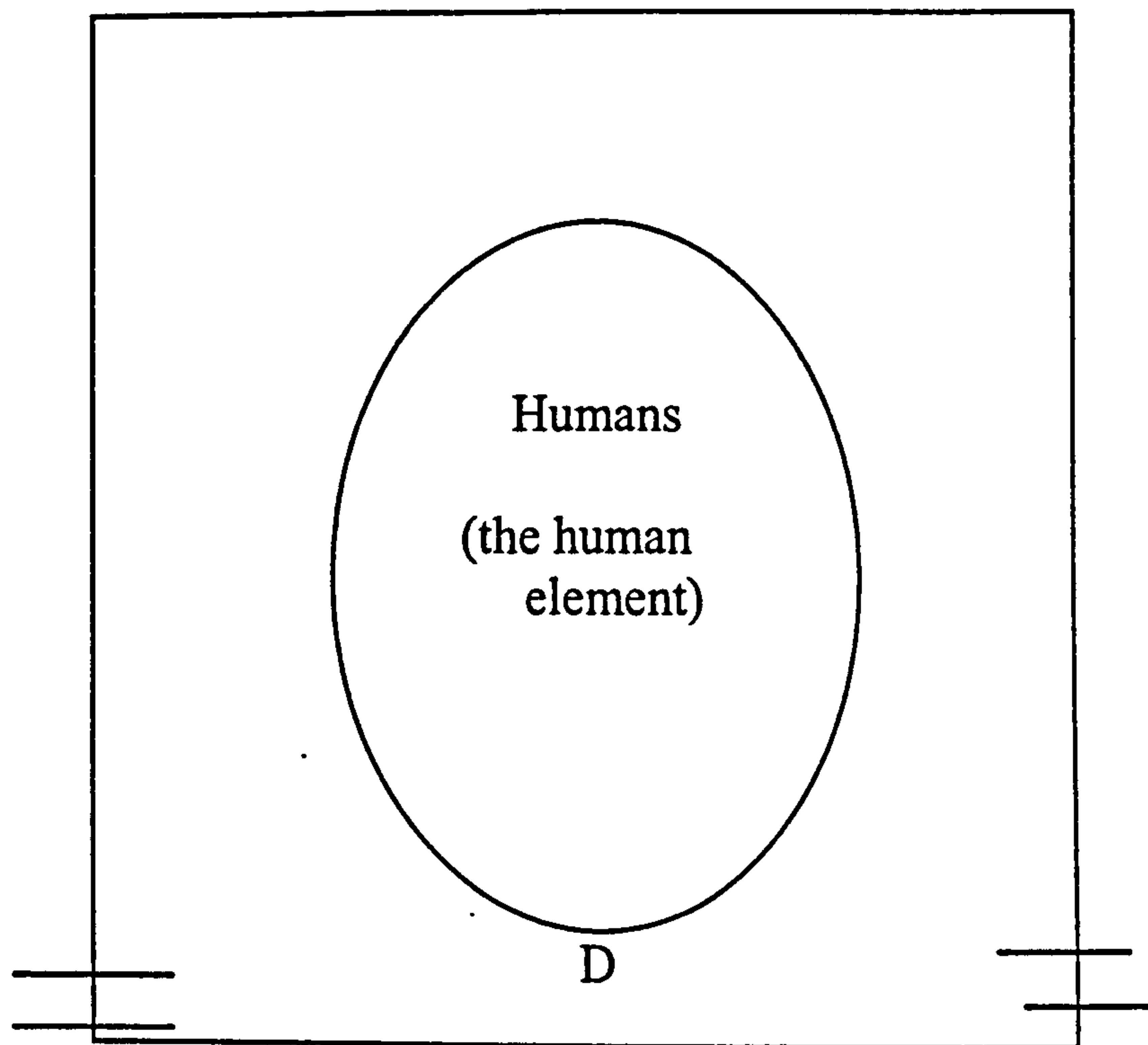
result in the implementation of just another IT system to the organisation, which most of the times neglects other factors imperative to a BPR initiative, which can equally contribute to the success of such intervention.

Therefore a suggestion was put forward. I suggested that future BPR thinkers need to create a number of multi diversified IT loop activity-relationships which would enable them to understand and identify their company's needs (drawn from the integration of the BPR initiative's imperative elements) in such a change programme. This I consider important because of the benefits this will generate for the user; benefits, which were also described in the collective reflection part which, followed.

In this part, I suggested that for a BPR intervention to be successful, its future users need not only think in IT loop activity-relationships terms (which would allow its users to use the IT element in conjunction with other of equal importance contributing elements) but while doing so, they need to acknowledge other inputs (like the one above by Huczynski and Buchanan, 1991) for advancing those as well. Having established that the objective of this chapter was met, I went on to provide a further guideline for the future BPR, something which also satisfies one of the overall subsidiary aims of this thesis.

The next topic for discussion is the human element, as seen to be developed in the currently examined BPR literature.

Human Element Chapter



Whenever I have studied human affairs, I have carefully laboured not to mock, lament nor condemn, but only to understand
(Cited in Kast and Rosenzweig, 1970 : 2)

Spinoza

If you dig very deeply into any problem you will get to 'people'
(Cited in Kast and Rosenzweig, 1970 : 244)

J. Watson Wilson

Physical resources unused - lie inert. Coal left alone for a million years is still coal. Human resources left unutilised deteriorate
(Cited in Kast and Rosenzweig, 1970 : 244)

Rubert Vance

Every man is in certain respects like all other men, like some other man, like no other man
(Cited in Kast and Rosenzweig, 1970 : 244)

Clyde Kluckhohn and Henry A. Murray

CHAPTER 7

7.0 Introduction

This chapter's objective is to show that there is the need for the current BPR literature to give more consideration to the human element in a BPR initiative.

The human element is important because of the *role* it has in any transformation change initiative like BPR. I believe that the human element constitutes a mechanism (incorporates human brain and logic) which holds together all the rest of the factors (like IT, processes, etc.) which I consider as important to a holistic BPR initiative. If the human factor is underemphasised or even neglected in a BPR activity, this could adversely affect the initiative's operations. In fact, without the commitment and support of the people in an organisation I believe a BPR will fail. For example, reengineering people should not only look at the actions the human force is taking in the organisation but also reflect on how those actions could be put to the company's advantage if complemented and further integrated with other affected elements. This is why I strongly believe that the human factor needs to be given greater emphasis and consideration when reengineering.

Therefore we will begin by revealing and discussing what the relevant BPR proponents say (and what they are not saying) about the human element. This literature exploration will indicate that the majority of the main BPR readings do not take into account any approach to organisational change that talks about organisational development, motivation, and competencies, which (I will argue) would enhance a BPR initiative. These issues will be explored and discussed later and the reason for stipulating these specifically is the fact that they are not given great emphasis in the currently examined BPR literature (reference is made to the people element in the current BPR literature – Hammer 1990, Hammer and Champy 1993, Davenport 1993, etc. - but I believe it is too limited) and it is my belief that adequate consideration of these factors could lead to useful learning for BPR users.

The rest of this chapter is divided into five parts. The first part reveals the current developments in the BPR literature concerning the role the human element plays when such a program takes place. In this part we see the relevant authors' perceptions

on the matter. More specifically we look at,

- how important humans are in the BPR process (are they mentioned by the relevant authors- if yes to what extent /or not?),
- the effect of BPR initiatives /on the human resources (negative: downsizing, positive: educating people and cultivating their organisational culture).

Concurrent with these I present a critique which raises questions on what is there and what should be there for reengineering success.

The above points are followed by a discussion which reveals a number of inconsistencies in the current BPR literature concerning the human element. Therefore the second part looks at what BPR can learn from the organisation change literature. The third part explores certain guidelines that the BPR literature can use to expand on and complement itself; and from the findings (e.g., the human element has not been given enough consideration, and that the currently examined readings are concentrating on or are driven mostly by IT or processes) it is suggested that the current literature could employ and expand its literature domain to improve its writings. This discussion in the third part of the chapter is divided into sub-parts under the heading 'Resolving BPR's problems with the human element' and includes a number of suggestions. Of course this is not to say that these are the only solutions/suggestions that can be found/or recommended to tackle the problem, nor to say that these are empirically tested but it is my belief that these are the preliminary action steps that need to be taken to address these inconsistencies revealed in the analysis presented in section 7.1.

From what has just been said it might also sound that my main suggestion is to expand the literature base used by the BPR writers. I would say that what I am arguing for is for the BPR literature/users/thinkers to look at how other organisational change proponents have moved to a position in which the human element is given adequate consideration and to learn from that. I also believe that the three major suggestions given in this chapter address a number of issues and relate their purpose to *contextual reference points* as described by Pettigrew (1987 : 58), which this thesis considers as important to the complementing of the current readings concerning BPR.

The discussion continues in the fourth part entitled 'a second look at BPR and the human element' in order to bring together and reflect on the ideas in section 7.2 on organisational change and in section 7.3 on resolving the BPR human element shortcomings. The chapter concludes with part five, a summary of findings and recommendations.

7.1 The BPR and the Human Element: Current Positions

I believe that the advent of BPR has surfaced the connection between a number of related aspects in an organisation which were hidden or even not challenged strongly before, due to the bureaucratic ways of conducting business. Many authors like Weicher et al. (1995), Willmott (1995), Jones (1996) argue that BPR's failures are attributable to a tendency to approach people in the workplace in a mechanistic way. BPR's emphasis on process reorganisation, it is argued, leads to a 'shallow technicist appreciation of the human dimension of organisational change' and it ignores the value of human 'creativity and fulfilment which makes people different to other factors of production' (Willmott 1995 : 34-46). Another critique this time coming from Eisenberg (1997) states that 'business reengineers (like Hammer and Champy 1993) suffer inexcusably from a major blind spot. They fail to see that a business is a business because of its people and that it exists by serving the needs of the people. Surgically cutting away part of the employee body and leaving the remaining employees hemorrhaging dangerously impairs the company's vitality' (1997 : 6). Others (Hammer and Champy 1993, Davenport and Short 1990, Davenport 1993) do not talk about it in a direct way although their work contains many implicit references (look at the analysis, which follows).

Why has BPR become associated with downsizing (Kehoe 1994, Jones 1996, Eisenberg 1997) when BPR proponents (like Hammer and Champy 1993) claim that job reductions and cost cutting in general are not essential BPR characteristics? Eisenberg says, 'although *reengineering* is not the same semantically as *downsizing* in practice, the two terms have become relatively synonymous; some other of the widely used synonyms are *reorganisation*, *restructuring*, *rationalizing*, and *layoffs*. Then there are the Orwellian euphemisms, such as *rightsizing*, *delaying* and *dehiring*' (1997 : 6). For instance White (1996) in writing in the Wall Street Journal referred to Hammer as 'the management guru whose ideas launched tens of thousands of pink

slips' (1996 : 1). Kehoe (1994 : 8) on this matter states, 'the reengineering also leads to job cuts'. Why are BPR's explicit organisational goals (which most often argue for greater local empowerment and autonomy) in conflict with human motivation and use of the human resource in general? To illustrate this link between BPR and downsizing I will present to the reader what Hammer and Champy say in their 1993 reading and what is really happening in practice. Hammer and Champy (1993 : 48) claim that 'reengineering is not restructuring or downsizing'. However, in the same book we see a case study by IBM Credit, which reengineered its operations and was considered by these authors as a successful case. 'A small head-count reduction was achieved' (1993 : 39) they said, but nothing else was stated about it. This is very revealing which appears to contradict their earlier quotations given above, because the use of the word 'achieved' tends to suggest that downsizing was actually a goal of BPR. A year later an article by Kehoe (1994 : 8) was published in the Financial Times which reported what really happened in this particular company. Amongst other things it was revealed that from 1991 till 1994, following reengineering the 'IBM US marketing and sales workforce was about 40,000 down from 71,500 in 1991' (1994 : 8). Thus, according to Eisenberg (1997 : 6) 'the bottom line is that reengineering is usually applied for expedient cost cutting rather than for value-added objectives and growth'. Therefore it is no wonder that a mental connection between BPR and downsizing exists and people are afraid of it.

The human element is a very diversified topic to explore and particularly interesting when we delve into the BPR perceptions about it. Earlier chapters revealed that this particular factor is an area, which needs to be specially addressed. For example when looking at Davenport's (1993) reading we see a much more IT oriented BPR thinking and if we reflect on the Johansson et al. (1993) work we see a processes BPR orientation (also refer to chapters 5 and 6).

This thesis has identified two very obvious reasons for that. Firstly, the human element is an issue, on which BPR has been heavily criticised and secondly (paradoxically enough) it does not view this as a fundamentally important element (unlike IT) and hence fails to specify how to deal with it.

The following will reveal what the proponents of BPR say about the human element -

whether they refer to it, what is their justification for layoffs, and what they suggest should be done if a situation such as this occurs.

Hammer and Champy (1993) recognise the importance of the human element when they note that 'companies are not asset portfolios, but people working together to invent, sell and provide service'. However, they fail to demonstrate how to reengineer the human resource in conjunction with reengineering processes. How often in their book do they talk about the human element? They refer to the notion numerous times; they also state that 'peoples' roles should change during reengineering from controlled to empowered' (Hammer and Champy 1993 : 70). They fail though to consider it as one of the most important factors when reengineering. The term 'People' or 'human element' is not even listed in the books index section. In the same publication out of the four case studies presented, only Capital Holdings addresses this matter (refer to chapter 3 & Hammer and Champy 1993 : 182). Despite the fact that in their writings they provide a long list of why reengineering fails, nowhere do they include the prerequisite to retrain and re-educate the people who will ultimately work with the new process.

Furthermore Hammer (1990), describes a number of principles which do not address issues like how the human element could interact or communicate with the rest of the elements he mentions. Although he makes reference to the management factor which falls under the human element umbrella, it is not elaborated in any interactive way which could show how the management can deal with the human element in relation to other elements like time, culture, processes, IT and interpret how these affect each other.

Hammer and Champy justify the 'downsizing factor' by saying that this is created as a result of company efficiency increase (1993 : 47/48). Thus, it is a *site-effect*, which is believed to result when a BPR initiative takes place (Johansson et al. 1993).

'Oh, I get it. Reengineering, they may say, is another name for downsizing. Or they equate it with restructuring or some other business fix of the month. Not at all. Reengineering has little or nothing in common with other programs and differs in significant ways even from those with which it does not share common premises. Reengineering is not restructuring or downsizing. These

are just fancy terms for reducing capacity to meet current, lower demand. When the market wants fewer GM cars, GM reduces its size to better match demand. But downsizing and restructuring only can mean doing less with less. Reengineering, by contrast, means *doing more with less*' (Hammer and Champy 1993 : 47/48) (emphasis added).

It certainly looks as if they are playing with words. They admit they will use less people but the justification is that those people will *do more*. Hence their justification is that the organisation has not suffered from reengineering because output is increased. But this is to ignore the human component of the organisation. The same authors argue that the problems facing companies result not from their organisational structures, but from their process structures. In other words they say that the problems in organisations lie with how things are done and not by whom or by which department they are done. Thus companies should accept this and continue their business transactions as usual. It seems to me that authors like Hammer and Champy (1993) perhaps find it easier to justify why downsizing is occurring rather than addressing it as a problem (or a principle or a characteristic of the BPR notion) that needs to be thought through in order for solutions to be found.

An explanation for the reasons why this is happening can be detected in Grey and Mitev's (1995) reading. They see downsizing as an issue, which is interlinked with the people's commitment in the organisation. Some of the staff's lack of commitment, they say, is not driven by fear of change but is in fact a very rational response to the 'brutal and futile managerialism of BPR'. They go on to say that such job reductions are actually 'part of a deliberate decision on the part of an organisation, rather than being inevitable' (inevitable for the organisation when choosing the BPR framework, as they put it). Rejection of BPR by staff is, then, argued to be understandable as a response to the 'fear of impending redundancies and loss of promotion prospects' (Grey and Mitev 1995), a valuable insight that this thesis uses to further highlight the weakness of BPR proponents in facing this problem effectively.

While exploring Davenport and Short's writings (1990) it also emerged that they acknowledge the importance of individuals in the process, despite the fact that they view it through the *IT lens*. They note, 'IT can lead either to greater empowerment of individuals, or to greater control over their output' (1990 : 15). Nevertheless, they do

not comment further, or give any recommendation on it; their remark shows that they share the view that little has been achieved in redesigning the 'motivational factors in the organisation'. Zuboff (1988) and Schein (1988) are quoted here to justify their point. Zuboff (1988) argues that IT-intensive processes are often ignored; and Schein (1988) indicates that companies often do not provide a supportive context for individuals to introduce or innovate with IT (in our case, not only with IT but with a number of other issues also). In other words they accept the fact that the human element is not given enough emphasis when reengineering.

Even when examining BPR based in IT-driven redesign mode, it is clear that the concern 'that perhaps the greatest difficulty in such redesign, is getting and keeping *management* commitment' (Davenport and Short 1990) (emphasis added) which exists and creates an unbalanced situation. Someone might wonder why this occurs. Davenport and Short (1990) note that processes that cut across various parts of the organisation, based on an initiative which is driven by a single business function or unit, will probably encounter resistance from other parts of the organisation. It is suggested that both high-level and broad support for change are necessary (Davenport and Short 1990). It is fine to acknowledge the CEO's role but to change the business to a degree of complete transformation, I say, demands an integrated perspective, people working together; empowered and educated (even re-educated) to develop their competencies (Dulewicz 1989) and people who are emotionally and monetarily compensated for their services (this should apply not only to managers but to employees at all levels as well). The question is how to achieve this, especially in practice. A question that these authors do not answer. Having a good, skilful and committed manager, it seems, is not enough. The human element in an organisation is far more than that. It is about employees' objectives, relations, culture, structure, and satisfaction. It is about a mission, values, and harmonisation of their work as a team and especially an environment having direct communication with its people (Beardwell and Holden 1994). These are all issues⁶⁴ that can be placed in the organisational context as will also be presented in Figure 7.1.

Edwin Dean (1996) views downsizing as a 'big problem' and he expresses his concerns about today's business organisations. He notes that,

'the typical implementation of business process reengineering in America is an

excuse for management to lay off people with the experience needed to provide quality to the customer, and to grow the enterprise for the future'(Dean 1996).

For Davenport and Short (1990) downsizing is an issue on which they do not comment, and, as seen earlier, they approach BPR from an IT-driven redesign perspective, a perspective that, since it is based on industrial engineering, views a fewer people as a natural consequence.

What Davenport (1993) says on this does not really differ greatly from Hammer and Champy's (1993) view. He provides the reader with his own explanation of why human element should be considered as an enabler to process change. He states,

'due in part to the pioneering efforts of the sociotechnical aspect, the changes in organisational structure, behaviour and policy that enable process innovation may not be as innovative in an absolute sense as those derived from IT'(Davenport 1993 : 95).

It would be helpful to recall here, once more, that Davenport is a believer in an IT-driven BPR initiative, therefore IT is the major element that is redesigned first. However, this is in spite of an admission that there are other equally important and powerful factors. He comments,

'to focus only on information and associated technologies as vehicles for process change is to overlook other factors that are at least as powerful, namely organisational structure and human resource policy. In fact, information and IT are rarely sufficient to bring about process change, most process innovations are enabled by a combination of IT, information and organisational/human resource changes'(1993 : 95).

As BPR researchers we have to give this author credit for his acknowledgement of this factor and for the fact that he took his thinking a step further, this time, by mentioning aspects such as team formation, team education, management and operational employees' involvement (1993 : 100/107). However, the examples he uses of DuPont and Aetna, as well as Mutual Benefits Corporations are given to illustrate that indeed human element is only an enabler to process redesign. Thus, this exclusive assumption that IT is the most innovative element in a redesign process takes us to the point where the human element becomes a supporting act. Davenport further offers a justification that his perceptions are based on the fact that structures and human element have been a part of the enterprise for a much longer period of

time, and therefore are more familiar to management as change tools; thus it is the managers' usual job to deal with them (although managers have not universally mastered this) (1993 : 96).

With the above statement, Davenport (1993) appears to be rejecting the learning that came out of the socio-technical systems view which argues that optimising either technology, social or economic features would always lead to a sub-optimisation for the firm: it is necessary to optimise the three things together in order to get the best benefit for the firm. What he says contradicts this and it also sounds as although he believes the sociotechnical people are wrong and we should not be looking for an optimisation of the social and the technical aspects but actually that we should be looking for a sub-optimisation (an absolute optimisation) only of the technical aspect. Well, I say that if BPR is about an absolute optimisation of the technical aspect, then the reader of the notion can be sure that the social side of it is going to suffer. However let us continue presenting the rest of the material and return to Davenport's critique later.

A solution to this extreme positioning could be for the future thinker of the BPR to consider the integration and combination of socio-cultural and technical aspects and that, perhaps, for a BPR process innovation to succeed (or have a greater chance of success) transformers should not just leave the human element in the change process to manage itself. Organisational and human element issues should be considered as more central to the whole procedure of behavioural changes that occur within a BPR activity. If the human element is not enthusiastic and devoted to new procedures there will be no beneficial changes occurring and constraints will probably be imposed on any initiative undertaken by any organisational entity.

The above statement from Davenport (1993), I believe, makes it clear that he does not consider the human element in a BPR initiative and all he seems to care about is getting the IT right; and that is despite the fact that he is writing about issues like motivation, compensation and evaluation. In his work I found no indication of justification for layoffs - why they occur and how the problem can be solved and cured in advance. This is an opportunity for the author of this thesis to challenge this type of orientation in a BPR environment by saying to its supporters that the

sociotechnical people are the ones who got it right and not the BPR authors. Let us not abandon what the sociotechnical people have argued, but let us make more of it.

There is a paradox and irony though, whereby even when it is acknowledged that the human factor is important, still BPR initiators/practitioners/consultants have problems with it (as emerged from ERSC 1996). Therefore it is my belief that the scope and breadth of such changes in organisation require a further elaborated approach to deal with them and to provide the means to overcome this critical hurdle. I also believe there is some truth behind the following quotations:

‘Too many systems fail to yield any real business benefit because of human problems in implementation’ (Gibson 1984 : 61); and that,

‘The great irony is that familiarity [being aware of the issue] seems to have bred neglect, in part because the evangelists of process innovation are much more likely to lead the information services function than the human resource function. They undertake carefully managed projects, employing tested methodologies and strict timetables, to build new systems enabling processes, that, because of the human aspects of change are managed as afterthoughts, lead to significant human resource problems’ (Gibson and Davenport 1985 : 25).

The irony for me here is to read and compare Davenport (1985) with the Davenport of 1993. A simple way of saying it is that he has gone back on what he said before. In 1985 he was absolutely aware of the problems that could result from having an IT initiative simply pivoted on having wonderful IT. He is aware that it leads to problems of human resources and there he is in 1993 supporting the idea of forgetting about the social side of it and just concentrating on the perfect IT. He is definitely contradicting his opinion on the matter. I wonder what was the reason for that. Probably he was just saying what the fad of the moment (1980) was. Between the period of 1980 and 1990 we could say that there is a time lag in what is going on socio-culturally within society in the 80s decade compared to the 90s decade. If people were writing in 1985, probably writing in 1983 or 1984. By that time they were at the tail-end of a kind of liberalism period and by the time we reached 1990/1992 we almost had a decade of more of a conservative, a reactionary maybe politics that basically emphasised getting organisations effective, efficient, profitable and who cares about society. So the whole ‘ethos’ was a very different sort of ‘ethos’; which moved away from caring about the people in the organisation and maybe now

in 2000, we are in a situation where again with this time lag, we are now going into a more liberal situation where people are beginning to care about people again and people are beginning to worry about the human resource management in the organisation. Thus, in this type of scenario maybe now is the right time to write about the HRM in relation to BPR and perhaps the reader and other fellow BPR writers on the topic will listen to what this thesis has to say.

Armistead and Rowland (1996) look at change from different aspects (e.g., management, employees empowerment) and they also give their own interpretation regarding any reactions to resistance to change from the human element point of view. It is also noted that in their writings they share fully the principles given by Hammer (1990) which suggest integration of activities which can lead to the formation of teams (for instance, for customer order processes, installation of equipment and customer service) (Armistead and Rowland 1996 : 63).

Armistead and Rowland (1996) make reference to a number of issues that they regard as important but, instead of being specific, they use them to indicate that they are important not only to what they see as BPR, but also to continuous improvement (TQM) and management processes activities. They say, 'here we want to cover a number of issues which we regard as being important for managing by processes, BPR and on-going continuous process improvement activities' (Armistead and Rowland 1996 : 61). Here they refer to concepts like rewards, career progression, specialist skills and leadership related ideas (1996 : 63/65/67) but there is nothing specific to indicate what should specifically be done in a BPR intervention to clarify this matter (as this chapter's suggestions will be doing as will be shown in the next part of this chapter's analysis). One of the issues they refer to, though, is 'the view from the top managers; how do they see the new organisation and how do they communicate the message to the rest of the people in the organisation' (1996 : 61). I say, what about the rest of the workforce? Should not they be considered/or even taken into account in this communication process (which I would like to believe would be a two way process)? I believe they should consider all the participants of the equation, and adding to the above BPR managers need to be aware of how their decisions might be affecting their people in general. These authors, despite the fact that they do not reveal anything new to the reader, on the subject we are exploring, do

recognise the fact that *changing people's behaviour is a difficult task* (1996 : 71); and they correlate those ideas to the notion of value (one of culture's major attributes).

They do not take a position on the matter of human element as being fundamental or an enabler to the BPR process but they refer to it as a *main asset* to the organisation. As stated earlier these particular authors point out several reasons for reactions to change, which I consider worth looking at. They mention *ignorance, fear of the unknown, tradition, comfort, politics and mindsets*⁶⁵ (Armistead and Rowland 1996 : 71-72) as the factors being the major barriers or even factors that cause constraints, in trying to manage human element. It is a start, though, since I believe BPR projects (and initiators of projects) need, as this thesis has shown, to consider the human element on an on-going basis as the organisation shifts to managing itself based on the dynamic environment in which it is operating. Simply, in order to achieve a holistic BPR I believe the above constraints need to be placed in a broader context (for example comfort, politics, and fear I see as products of the overall human element notion; tradition and mindsets I see as directly linked with the bigger picture of culture), in order for the future BPR user to be able to analyse them, see how these interact with each other and also correlate those with the environment the company operates into. There is also no demonstration by these authors on how to deal with problems caused, as seen earlier, by any so called *site-effects* the BPR activity might cause or any other recommendation on how to deal with the issue.

In a similar way, Johansson et al. (1993) accept that in the world of process management, the management of a company has to have 'a whole new look at the pieces that make up the company'. This includes the people, management and leadership skills, expertise needs, asset management and performance measurements (Johansson et al. 1993). They also assert that it is *self-evident* that 'people are a business greatest asset but too often this notion is merely empty rhetoric' (1993 : 26). It might be asked why. Their disposition on the matter is not clear-cut, but since they are process oriented (process-driven) reengineers, one can detect that they are indeed in favour of processes and that they deal with them in a mechanistic way (refer to chapter 5); and consequently the human element receives marginal treatment, instead of the one it should (one that is driven from a human element context).

They state, 'companies that seek to create new paradigms, defunctionalise and seek totally process-driven work, and to seek and effect Breakpoints, need to make sure they take full advantage of their greatest resource' (1993 : 26-27). This is not happening, though, and this 'can be revealed from the examples of companies at the forefront of BPR' (1993 : 27). According to these authors, 'one often sees leaders who rose through the technical ranks rather than finance, marketing or administration backgrounds to lead an initiative as such' (1993 : 27). Without trying to undermine the capabilities of such people as managers, I believe their managerial touch on the human element issue would not be the same if they came from the latter background instead. Perhaps this is another reason why these companies fail to succeed in BPR.

Although the above authors consider people as an enabler to their activities, their way of approaching it clearly shows a mechanistic view of referring to human element in a BPR initiative. An example to illustrate what has just been said can be drawn from the same reading and draws on the Dun & Bradstreet Corporation (a business information provider) (Johansson et al. 1993 : 61-65). The authors here graphically present the process improvement initiative (described as 'cost reduction process oriented', 1993 : 61) which took place, in which the major emphasis was on the changes in processes and not on any other elements that could influence that particular change transformation programme (e.g., the human element). Definitely, their focus is on how to achieve the breakpoint that will lead to cost cutting, processes mapping, new value metrics of quality, time and service. Another example here could be the Motorola⁶⁶ pager business which undertook a BPR effort in order to be transformed to a process-oriented company (Johansson et al. 1993 : 23). One of the major goals in such an effort is to move as much as possible toward variable cost procedures with minimal fixed assets (e.g., AT&T Power Systems Corp. - Johansson et al. 1993). These are 'processes that can expand or shrink as demand requires, with resources, especially people, who can flow into and out of as many processes as possible' (Johansson et al. 1993 : 154).

These authors also argue that accepting a process orientation initiative has a negative side. One *inevitable outgrowth* in accepting the above will be *excess resources*. The human resource manager, they say, 'will have to determine what to do with unneeded or obsolete physical and human capacity' (1993 : 154). It is easy to say, and easy to

pass such a responsibility to someone else. Can a manager deal with that, though? Is it really their job to do so or is it just that they are the ones who happen to be there to sort things out as expected by the initiators of any BPR project? Are they prepared and skilful, educated, confident and competent enough to execute what is required of them? If they are HR managers I would expect so, but if they are people with other backgrounds, as stated above, I do not see them being adequately trained and confident enough to do so. As a manager of a big project you can not get another manager in to solve your human element problems. I am not arguing that the newly appointed managers do not have the skills to do so but I say, realistically not every manager can deal with the human element issues. I also think that if we continue thinking in these terms it would be one added way of creating more problems for BPR and that is by getting an insensitive manager in who unless he/she gets some training aid will be thinking and acting negatively towards the initiative.

Johansson et al. (1993) also take what they say a bit further and try to justify why that is happening - they also give solutions (e.g., vertical integration - bring people back and forth in the given structural settlement) which do not seem to solve any problems, since, they clearly state that '... once the process is reengineered, excess people must be moved out of the business or the tendency will be to create new inefficiencies just to keep people busy' (1993 : 154). I would like to think that by just trying to accept the problem and act on it reactively it does not get to the route of the problem. In case a company had to get someone to help them out who is not a human element specialist at least they should be wise (while acting proactively) to consider providing that person with the appropriate education/training and tools (specific training for those involved in a BPR initiative, managers or not) to help them do so. A good example here is what Eisenberg (1997) states leaders can do in case they have to downsize workforce. He notes that in the event of downsizing leaders at least should:

- do not do it repeatedly
- provide as much advance notification as possible
- communicate directly, honestly and empathetically with employees
- ensure that the management walks the talk
- establish two-way communication rather than hoarding information at the top and releasing it on a top-down, need-to-know basis

- justify the need for the change
- honour the past by acknowledging its rightful place in the company's development
- present the downsizing process as part of a clearly articulated vision of a desired future for the organisation
- involve employees in designing and implementing the reengineering process
- downsize gradually
- provide safety nets for those who will be laid off to ease their transition
- reduce the workload in accordance with the reduced work force
- reinforce risk taking (Eisenberg 1997 :14/15).

A number of pointers, which in case of a workforce downsizing could guide the BPR user what to do and how to do so. Of course these should not be thought through without constant integration with the rest of the elements this thesis considers as imperative to a BPR initiative. Thus, the future human element manager (BPR user/thinker) must constantly reflect on how the above can enable him/her to achieve a holistic and systemic approach to BPR.

In 1995, though, a BPR reading by Carr and Johansson (the same Johansson who co-authored the 1993 BPR publication) was published and I must say that I found it much more 'broad minded' towards the importance of the human element in the BPR activity compared to his earlier comments on the topic. I believe his latest publication has certainly come some way from the above described tough line he espoused before. Since 1993 he seems to have developed his ideas but in my judgement, although he and Carr have addressed some of the human issues, I still feel that they have not taken a sufficient holistic BPR view.

Going back to the earlier question whether the proponents of BPR are taking into consideration other orientations apart from processes and/or IT when reengineering, it seems to me that the answer is no, they do not; simply we see the IT oriented people, in looking externally to the organisation, focusing on the changes in technology that are taking place and how these can best be harvested. They do not necessarily look, as will be later shown for instance in the Honeywell Case (cited in Miner and Crane

1995 : 159), at demographic changes that are going on and might have an effect on their initiative's success rates. They seem to avoid things that have to do with, for example female participation, equal opportunity trends, etc. Even the process oriented supporters seem not to take these elements into account. This tendency of theirs to look inwards for bettering their processes neglects elements found external to the organisation which could also improve its processes. From my exploring of the literature it seems imperative that the writers of the BPR literature do that. Can BPR though learn from anywhere about the multi-diversified human element? If yes, from where?

7.2 What BPR can learn from the Organisational Change Literature?

It has been shown that proponents of BPR give little consideration to the human element, let us now see how proponents of organisational change have dealt with the human aspects of their change initiatives. To illustrate this we can look at how the human element is given adequate consideration. This is something that leads me to conclude that BPR could usefully learn from the human resource management/organisational change arena. I will start by presenting to the reader Table 7.1 which shows how broad the human element concept is.

This table was initially drawn to show the points of difference between Personal Management (PM)/Industrial Relations (IR) and the Human Resource Management (HRM). Something, which this thesis will not focus on but the intention for doing so, is to present, a number of dimensions (beliefs and assumptions) that can be found when dealing with the human element in the organisation. Someone might ask why the Beardwell and Holden model and not any other. Why any other and not Beardwell and Holden? Firstly, I believe any table that is as multi-dimensional (as far as the human element relationship is concerned) as this one, could have been used to illustrate the fact that indeed, when referring to different environmental contexts there are a number of issues that BPR managers have to be aware of, before attempting to manage this specific element (another example could be Pettigrew 1987). Secondly, a BPR manager I believe would find a table like this one quite useful because in a few lines it provides a prescriptive mode to a number of other dimensions she/he might not think or even articulate before and especially in the time scale, of the initiative given.

Table 7.1 Twenty-seven points of difference

<i>Dimension</i>	<i>Personnel and IR</i>	<i>HRM</i>
<u><i>Beliefs and assumptions</i></u>		
Contract	careful delineation of written contracts	aim to go 'beyond contract'
Rules	Importance of devising clear rules/mutuality	'can-do' outlook; impatience with 'rule'
Guide to management action	Procedures	'business-need'
Behaviour referent	norms/custom and practice	values/mission
managerial task vis-à-vis labour	Monitoring	nurturing
nature of relations	Pluralist	Unitarist
Conflict	Institutionalised	de-emphasised
<u><i>Strategic aspects</i></u>		
key relations	Labour management	customer
Initiatives	Piecemeal	integrated
corporate plan	marginal to	central to
speed of decision	Slow	fast
<u><i>Line management</i></u>		
Management role	Transactional	transformational leadership
key managers	Personnel/IR specialists	central/business/line managers
Communication	Indirect	direct
Standardisation	high (e.g., 'parity' an issue)	low (e.g., 'parity' not seen as relevant)
prized management skill	Negotiation	facilitation
<u><i>Key levers</i></u>		
Selection	separate, marginal task	integrated, key task
Pay	job evaluation (fixed grades)	performance-related
Conditions	separately negotiated	harmonisation
labour management	collective bargaining contracts	towards individual contracts
trust of relations	regularised through	marginalised (with exception of some bargaining for change modes)
job categories and grades	Many	few
Communication	restricted flow	increased flow
job design	division of labour	teamwork
conflict handling	reach temporary truces	manage climate and culture
training and development	controlled access to courses	learning companies
foci of attention for interventions	personnel procedures	wide ranging cultural, structural and personnel strategies

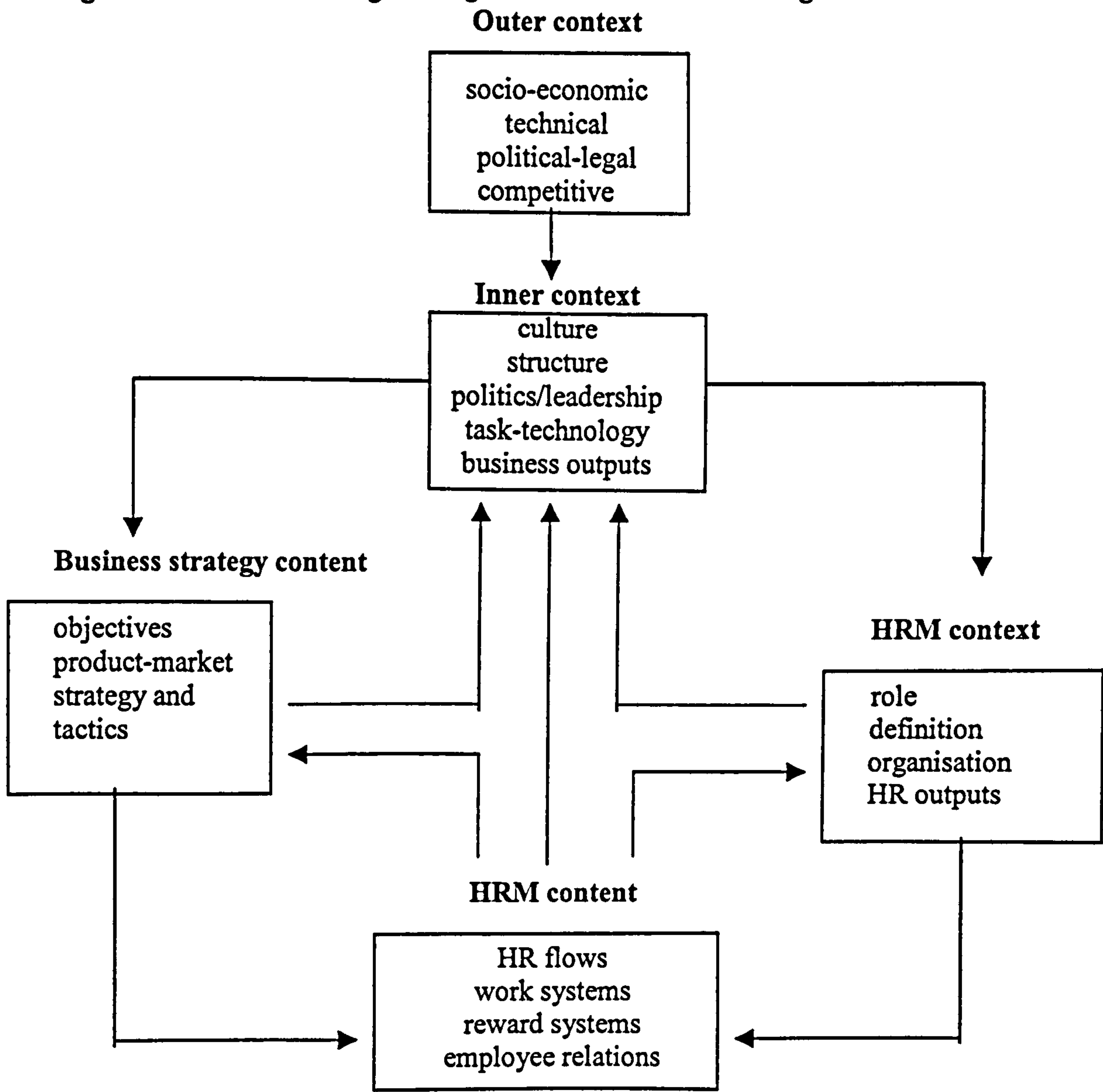
(From Beardwell and Holden 1994 : 21)

As briefly stated above the main reason for presenting this table is to indicate to the reader of the current BPR literature the broadness of such a concept as the human element and the different ways of looking at it under the umbrella of the different

environmental contexts. If the BPR writers continue to neglect the importance of this element while writing/practising BPR as shown in the analysis earlier, their trials will continue to fail. On the other hand if they consider the concept and its relationships with and within the different contexts human element influences and is influenced by, I believe they will have a greater chance of success when reengineering.

Having that as a starting point, we then need to look at how the above can 'blend' with the rest of the organisation of change and how this particular element is treated by the HRM change proponents. Figure 7.1 illustrates exactly that.

Figure 7.1 Model of strategic change and human resource management



(From Beardwell and Holden 1994 : 20)

The above figure is presented, not in order for this thesis to adopt the strategic element the authors are trying to pursue, but to indicate to the reader that there are several contexts that exist in an organisational environment, apart from the management aspect of the HR, which most BPR authors, as we have seen, refer to, but do not place into such outer and /or inner dynamic contexts. The example presented below indicates some of the options which might be used to show why processes orientation driven BPR is too narrow and does not look out sufficiently to cover a dynamic context scenario.

How environmental scanning developed at Honeywell

An illustration of how Environmental Dynamics can be dealt with by an organisation, can be drawn from Lorenz P. Schrenk's (1988) reading (cited from Miner and Crane 1995 : 159). A BPR manager can also learn from this given example, that definite results can not be gained but at least a trend, of how things develop in a transition period, can be detected and managed.

As part of an overall human resource planning effort, Honeywell constituted a small team to explore the environmental scanning process. This team defined subject categories to be monitored and identified trends within each category. A graduate student was hired on a part-time basis to identify data sources, gather data, and maintain files. Team members monitored various publications such as *the Wall Street Journal* and the *Monthly Labour Review* and clipped relevant articles for placement in the files. Gradually a data base was developed in a number of areas related to company operations. The data focused on hard data and the interpretation of it.

With the aid of some additional library research, the team then moved to the creation of a scan document. Various team members took responsibility for specific trends and circulated draft sections. Meetings were held to finalise these drafts. The report that emerged was broken down into eight major segments each containing discussions of from three to eight major trends :

- work force demographics (female participation in the labour force; supply of engineers)
- economic conditions (productivity; energy costs and supply)
- technological developments (robotics; office automation)
- work force social trends (unionizations / labour management relations; special interest groups)
- legal and regulatory environment (equal employment opportunity; social security and retirement)
- regional and metropolitan characteristics (variations in labour costs; political - economic climates)
- international factors (Japanese competition, European Economic Community)
- Human resource management (flexible compensation; quality of work life)

The report was published internally at Honeywell, with copies going to senior executives, heads of operating units, key human resource managers, and various corporate staff units. It was used by operating units to help generate human resource plans, and it served as background for corporate-wide human resource strategies document. Revisions are issued yearly and there have been several separate international scan reports as well.

(From Lorenz P. Schrenk's (1988), cited in Miner and Crane 1995 : 159)

This is an example which brings people together and asks them to look outside of the organisation, to become aware of sociological phenomena in the society and recognise that they need to reflect in re-orienting what their organisation is doing. Does BPR literature take these influences into account or not? If it does, what are the BPR readers' and practitioners' reactions to them? If it does not what can be done about it? It seems that the literature I have researched till now does not specifically reflect on these aspects. This is a gap in the current readings, thus I suggest that the BPR practitioners should be looking at disciplines like the human element one which can provide some additions and answers to their own practices.

It would also be an interesting parenthesis if we insert here several comments from Computer Science Corporation (CSC) Indexes⁶⁷ to strengthen the point made above. CSC Index identifies two principal obstacles to BPR: *the fear among employees that their jobs are endangered* and that *years of experience will count for nothing*. It was concluded that in order for companies to overcome these apprehensions, managers must constantly communicate their plans and expectations to their people (Edward 1994 : 35). Although companies which are seeking to reengineer, according to Weicher et al. (1995), may work on revamping the performance appraisal system to support new values, again their initiatives have been proven problematic. The reason is that, when bonuses are linked to profits or even the performance of a team, this may lead to a situation where individuals are judged on factors beyond their control, something which, I believe, leads to confusion and incompetence at the workplace.

The CSC Index also points to *poverty of ambition* as a reason why BPR projects fail. 'Companies that just flirt with reengineering suffer the pains without the gains' (Edward 1994 : 35). They suggest that managers should not order or control the work of others; it is better for them to be considered as facilitators. This is also how Hammer and Champy view it. One suspects that their facilitation is that experienced by a flight sergeant 'encouraging' soldiers who are parachuting for the first time! They say, 'managers change from supervisors to coaches; the managers now have to spend less time keeping the pieces of paper moving through departments but more time helping employees do richer and more demanding work' (1993 : 76). I question that, though; since these authors recognise the vast importance of the role the human

element can play in the process why do they not put it as part of their set of principles (as shown in an earlier chapter) or why, in Davenport and Short's case, is this element not considered as fundamental, for it to be introduced in their five step model (refer to Figure 3.2)? Does that not signal to the users of the BPR notion that this mode of HRM needs to be further elaborated and integrated in literature and practice for a successful BPR programme? It certainly says something to me. If I were to suggest a way to minimise the risk of failure I would say to them that they should not wait longer but should integrate the human element literature with the rest of the BPR literature and activities, and learn from it at once, since it can enhance the process,.

Adding to the above, Eisenberg (1997 : 6-12) gives his own reasons why BPR fails and these are because people are not appreciated in the process, values are not considered as important either, the fact that companies today are short term profit seekers and instead of learning from past mistakes they continue to apply this short sighted type of thinking. These problems he argues that lead to major problems, which he categorised, into two levels: (a) the company level and (b) the reengineering survivors level. In the first level he sees companies having problems with their teamwork – *deterioration of teamwork* and also *a decrease in creativity* of those people who make the teams. This is either caused by the introduction of IT which replaces the human interaction or/and because people guard whatever information they have believing that is less likely for them to go when downsizing takes place. *Decision making* also suffers because of *delayed* action. People postpone decisions until the dust settles. *Crippled support functions* are also a problem faced by the companies who reengineer because they do not financially support their human resources development but they spend the money to support downsizing. As far as the second level is concerned, people in such companies suffer from stress. A type of stress, which is not only affecting them physically but emotionally and behaviourally. This author further states 'even merely worrying about change can trigger stress and deplete vital energy' (1997 : 12).

What is the reaction of the major BPR literature and practice to the above points then? It seems that the literature does not cover those and the practice which according to Eisenberg's personal experience⁶⁸ does it inadequately; 'the companies that do offer assistance to reengineering survivors usually do so inadequately, for example, most

programs are poorly founded, are often staffed by lesser-trained counsellors instead of psychiatrists or psychologists, function in a mostly reactive mode, and are allotted insufficient time. Hence, they are restricted to offering more of a Band-Aid than the truly comprehensive solution that is potentially available with state-of-the-art stress management training' (Eisenberg 1997 : 12).

Therefore the reader can challenge what has been said about the human element in the current BPR literature in terms of conflict of opinion and of inconsistency between the authors' views (which have been pointed out as gaps which can also be seen as weaknesses of BPR regarding the human element) and what is happening in the real world⁶⁹ (revealed from the examples given to us in their references). How, then, can companies make sure that their people will be kept motivated and empowered, stress free in order to aid the transition when they know that they may be dismissed under this mechanistic approach to managing this resource? Still, there is more to be done. The next part suggests a number of ways to tackle the above identified problems.

7.3 Resolving BPR's problems with the Human Element

7.3.1 The Issue of BPR in a dynamic context

Based on the finding that the human element is not integrated enough in the BPR literature and the idea that the latter needs to reflect on other domains of literature to harvest the advantages of using the human element, it would make a good suggestion for the future BPR writer to look at. To further justify the above need BPR literature and practice has I will also refer to the fact that 3 years after his 1993 publication Hammer⁷⁰ admitted that 'he was not smart enough' about the importance of factoring in people in his 1993 publication'. That tells me that a suggestion like this one can aid the recognition of the human element factor in the future BPR readings and practices.

I view the human element as very important to any type of organisation and organisational activity, for the simple reason that if they weren't people around there wouldn't be any sort of organisation operating. While looking at BPR failure rates (Hammer and Champy 1993, Jones 1996) and while exploring its literature I found that the human element has not been taken into account when the initiative was

undertaken (even though the proponents of BPR are aware of its existence). I believe that unless people are committed to the organisation then any type of change that is introduced will be disregarded, or its implementation delayed. Therefore, I see the BPR failing and that is for the reason it does not manage its people well (maybe does not know how/or does not know where to look at), starting from the factor that it does not have the mechanisms in place that could enable it to attract the people to the objectives of the initiative. In order for the BPR literature to do that though, since it lacks of such literature, is to acquire the human element literature domain which hopefully will allow for the learning/knowledge of how the human element reacts/needs to be treated in such change programmes. I see the BPR literature going back to primary ways to integrate its literature with other organisational literatures (Human, Cultural, etc.) in a way to enable its approaches to be successful in the future. This is, as mentioned earlier, a suggestion for the future writers of the discipline to accommodate in their BPR readings the relevant human element literature that deals extensively with the human resource interactions within the organisational environment. Aspects that could enrich and make this framework successful, aspects that deal extensively with the human resource interactions within the organisational environment. This will enable the reader of the notion to broaden his/her paradigms and perceptions, on issues like,

- how the human element affects the initiative (positively/negatively),
- to recognise the advantages in doing so,
- to become clearer on how the two relate (directly/indirectly),
- stressing the need for practitioners/managers to consider the above and look at this element, not as another task in a Tayloristic-mechanistic way to manage the whole initiative, but in contextual terms.

This integration of ideas, as stated, earlier will only be possible if the literature is expanded to covering those aspects. I believe that with my suggestive pointers I already started doing so. A suggestion, rather an example of how that can be done, will follow. The BPR literature at this particular stage could view the notion in correlation to HRM (it could have been PM, IR or any other). HRM was the best candidate of all, here, because I believe the ideas it carries are closest to the idea of systemic thinking this research would wish to see BPR pursuing when transforming

the organisation. The key function for the HRM unit alongside with other specialised units in a company according to Harrison (1993 : 29) 'is the one of auditing the human resource, applying organisation-wide personnel systems which do not generate harmful interbusiness-unit rivalry, developing people to consolidate core competencies and facilitating the mobilisation of the human element across the organisation'. It seems that these ideas also cover the ideas of PM and IR; someone else might call it an extension of those or an umbrella that includes, integrates and expands on those in a way. This attribute of the HRM, I believe, it allows the human element notion to be multi-diversified and to approach its ingredients in a contextual way, rather being restricted and narrow-minded. Its ideas, as seen above, can combine strategy, peoples' competencies, and company's capabilities when planning and implementing proactively and/or reactively. Thus, BPR change managers could enhance their activities by acquiring a wider ownership of the human aspect and how that could be a key to a successful BPR implementation, if they could give it little more emphasis when changing their organisations.

This line of action is taken in order for this thesis to show 'the significance and nature of context' (and not only this) - in other words make the point by showing how we need to be aware of the surroundings of 'something' and their interactions, in order to be able to understand it.

'An event seen from one point-of-view gives one impression, seen from another point-of-view it gives quite a different impression. But it's only when you get the whole picture you fully understand what's going on' (Source : The Guardian; cited in Beardwell and Holden 1994 : 29).

Therefore to become aware of and understand the context of human affairs in relation to the BPR initiative we need to further examine it under those terms. To start with, its origins need to be brought into light and relevant information about its history could be helpful. Then, how it is defined (if it can be) should be introduced for the BPR reader to see how the HR issue evolved over the years. Any debate or discussion on the matter could be tremendously helpful if revealed in terms of HRM territories and models. Through such discussion, a number of issues could emerge: the stakeholders' interests, the situational factors (strategy management, labour market), what kind of human element policies are necessary in such organisations that undergo BPR, and

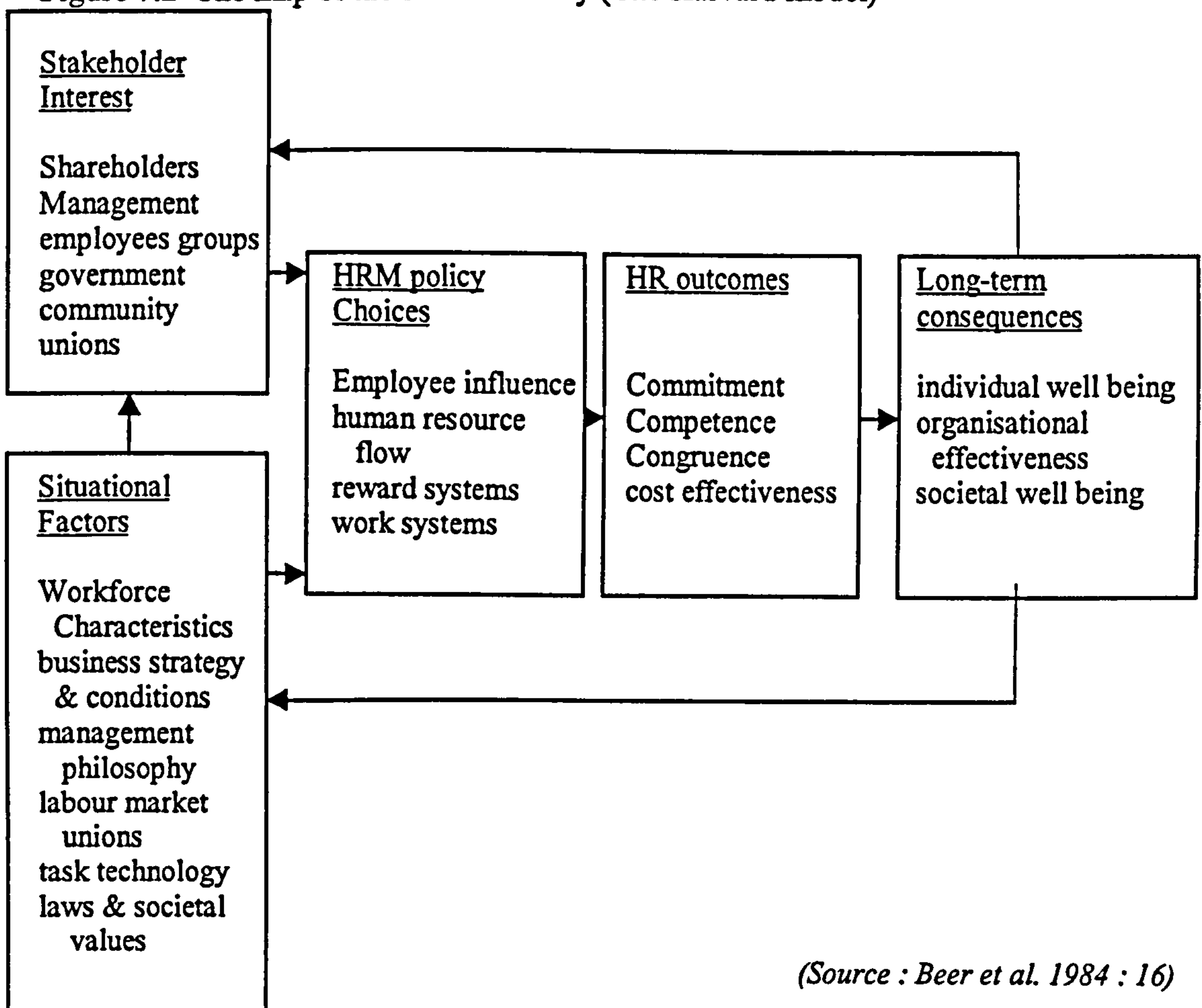
the possible outcomes and long term consequences/implications of such lateral thinking (see Figure 7.2). This type of thinking could place the BPR initiative in a human element context (and not this only, considering the dynamics of the organisational activities) and vice versa (refer to Figure 7.1). The benefits for doing so will be towards the reader (of the BPR literature) in terms of clarity and to the user (manager/practitioner) in terms of what their expectations to be based on the proximities this contextual framework will provide in such event (BPR change program) (see Figure 7.3). Even though this might seem easy to follow but when accepting to correlate the usage of another discipline in order to complement BPR, the reader should also be aware that the critique (positive/or negative) that the joint discipline carries would be added to the equation as well. This, though, should not stop BPR from 'experimenting', if I may say so, since such complementarity can only be for the better.

To elaborate a bit further, we can concentrate on one of the many HRM models; the one from Harvard University which was developed in 1984 and shows a 'map of an HRM territory' that BPR managers could consider if given the opportunity to study its framework. This is to emphasise further the point that indeed, when dealing with humans in organisations, it is not just the various groups of employees involved that must be considered, but a variety of stakeholders like the government, the community, the stakeholders (themselves). In an organisational change initiative, the above stated groups need to be further considered as well. It is important, as suggested by the creators of the map, to have a model that 'recognises the legitimate interests of various groups and that the creation of HRM strategies would also have to recognise these interests and fuse them as much as possible into the human resource strategy and ultimately the business strategy as well' (Beardwell and Holden 1994 : 17). Thus, in the BPR literature, it would be beneficial to see an analysis on how these could have added value to its underemphasised human element, for example. One might also argue that the Harvard University model it might be old compared to today's dynamic environment. If we look at a company today, any company, small or large I believe that they have a number of stakeholders; the situational factors in relation to their contemporary policies are still a major issue. Therefore I see BPR benefiting in learning by using this given knowledge to them by the existing managerial and change literatures. I believe in doing so it will clarify many things for the future BPR

user. For instance in acknowledging what their priorities are it will be easier to establish relationships for the accomplishment of the BPR change required. It will also be easier for them to create and accept a vision (since they contributed to its creation), be motivated by it and work towards it. This was also my thinking when I included figures like 7.2 and 7.3 in this part of the chapter. These are a graphical representation on how issues like stakeholders, company environment-dynamics and human element are:

- relevant to a BPR activity (since these interact with each other and can influence the change BPR is bringing into an organisation)
- of great importance to the overall BPR learning (for further advancement of the major BPR readings and also BPR's application).

Figure 7.2 The map of the HRM territory (The Harvard model)

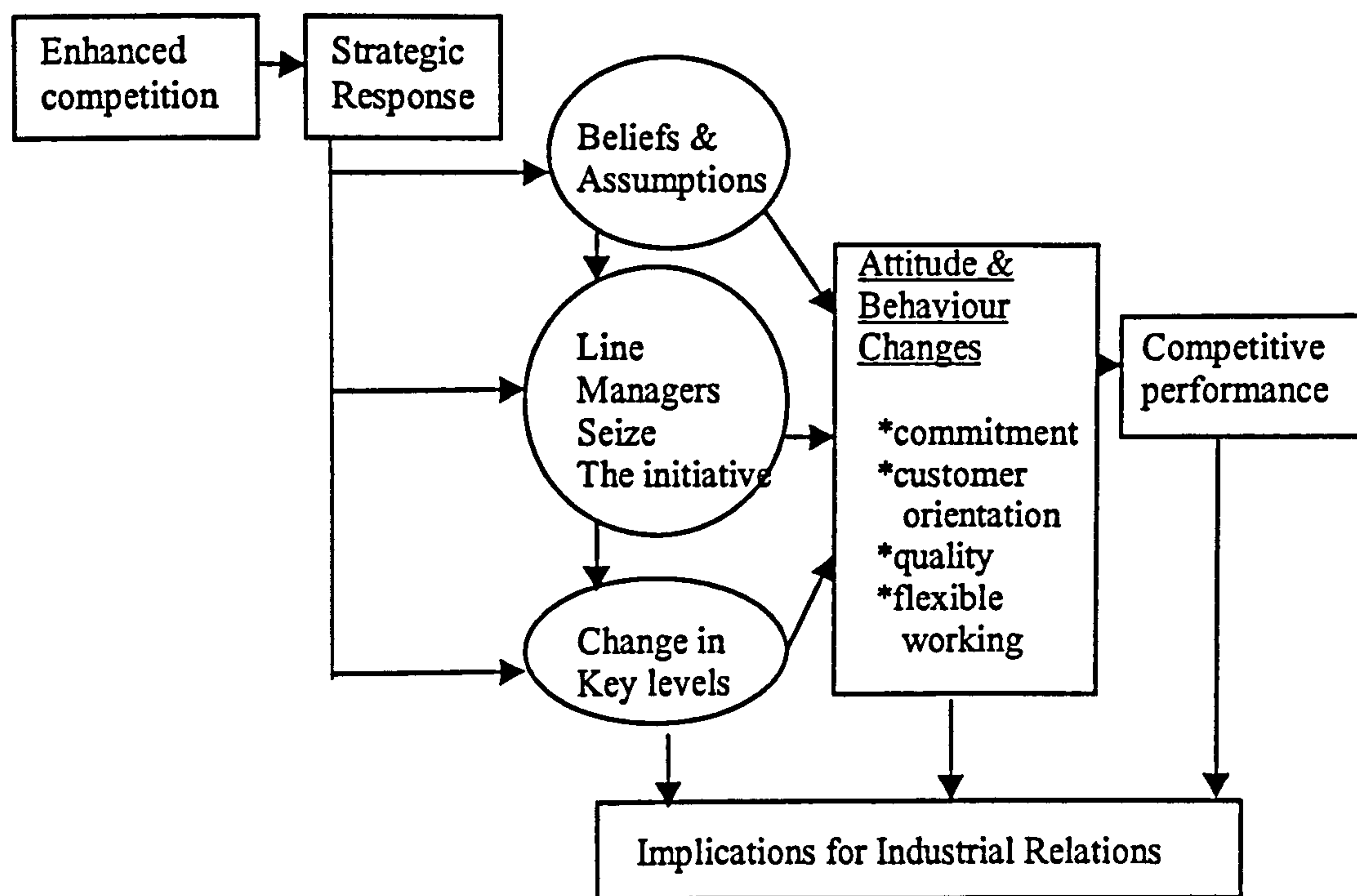


A positive critique on the above model states that 'in acknowledging those various interest groups has made the model much more amenable to *export* as the recognition of different legal employment structures, managerial styles and cultural differences

can be more easily accommodated within it' (Beardwell and Holden 1994 : 18). This neo-pluralist⁷¹ model has also been recognised as being useful in the study of comparative HRM (Poole 1990 : 3-5). As also indicated by Beardwell and Holden (1994 : 18), this Harvard model 'has found greater favour amongst academics and commentators' despite the fact some of them still criticise it in being unitarist⁷², whilst accepting its basic premise (e.g., Hendry and Pettigrew 1990).

In this model the reader can see a number of factors that can contribute to organisational effectiveness and at the same time the individual well being. I believe this is what the BPR initiative should be striving for, therefore it would be beneficial to consider further the components of that map in order for the initiative to satisfy the needs of its human element which, it has been proven, plays a major role in the process of such transformational activity [even though many as seen earlier, writers, do not want to admit it - perhaps politics in the organisation (as also was indicated in chapter 1), power, money, image and company (consultancy - agent unit, point of view) prestige, are amongst the reasons that could be considered as factors posing barriers to the possible success of such an initiative].

Figure 7.3 A Model of the shift to HRM



(Source : Storey 1992 : 38)

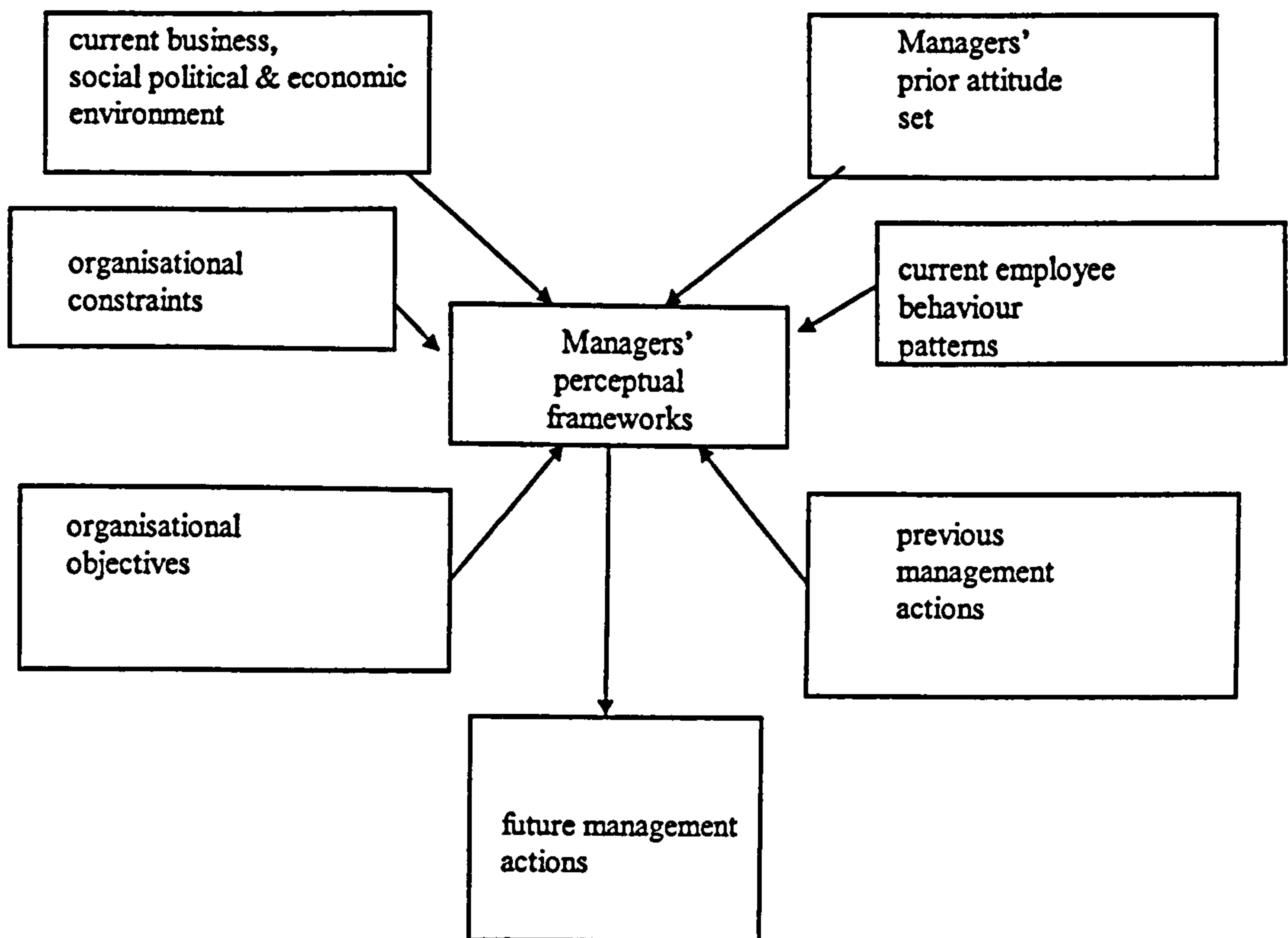
Thus, as seen above, the subject of human element is one which influences a wide range of behaviour within both the organisation and society as a whole. Therefore, accepting its contribution and effects on a BPR initiative, (instead of just referring to its importance), I believe, will prove to be extremely helpful. Firstly, as a pointer towards several directions that BPR managers need to look at and secondly, as a tool for further integration⁷³ of the element and all its relevant aspects, in order for the managers of the initiative to achieve the best possible outcomes of that interactive exercise. In doing so, the BPR reader/practitioner would also have the ability after that integration, to go back and consult the BPR literature on how to deal with or perceive the human element within this new context (always in relation to the specific concerns of the initiative the organisation is going through).

At this particular point, it is my intention to direct BPR readers on how to perceive change (what it involves) and other surroundings that have an impact on how the organisation behaves. This is something that this research has identified to be missing from the analysis of the BPR notion in relation to the human element. The reason, I believe, is the tendency of the majority of the BPR writers to be driven by an assumption (e.g., IT and/or processes) which looks inwards the organisation and not necessarily at how the environment could affect their decisions. Focusing inwards will most probably direct the organisation to do more with the same people, whereas if they looked outwards, then they might actually considered the possibility that the company can keep the same people, but creatively explore those/or new markets and do more things. Thus, if the understanding and the way people in organisations/BPR managers think, were altered to such a degree that they could perhaps accept the patterns, constraints, objectives, actions and the attitudes of their own and others' environments (Martin, 1998 calls this the 'perception and attitude formation and development – see below) it would be easier for them to focus not only on the human element but also on the rest of the elements this thesis discusses in its analysis as well (see also Figure 7.4).

Martin (1998) states that perception is 'one of the fundamental ways in which attitudes are formed and it provides the basis of creating the perceptions of self by others' (1998 : 67). He also stresses the fact that perception is a 'truly personal experience' and that employees and managers are 'not likely to interpret facts in the

same way, or even in a consistent way across time' (1998 : 62). Therefore BPR managers, if exposed to this type of thinking, presented and analysed in and by the literature, could reform their own way of thinking (in understanding how the rest of the people with whom they work, perceive things). This could lead to the acknowledgement of the importance of other relevant issues that are likely to be affecting the BPR initiative and, to an extent, their own decision making process. An example of the above can be shown through Figure 7.4 where management perceptions and the impact on subsequent actions are seen to be formulated [This is not to suggest that employees have no influence on the process, but simply to state that the ultimate influence rests with managers (Martin 1998 : 63)].

Figure 7.4 Managers' perception and the impact on subsequent actions



(Adapted from Martin 1998 : 63)

Here we see how the external environmental factors and the internal ones create a stream of frameworks that would, in the end, contribute to the general understanding of the person in the middle (BPR manager, or an employee). An integration of ideas will be achieved, translated in the individual's own mind to create an understanding or perceptualization of their environment, which in turn will be reflected in their

decision making, or acceptance of responsibility. I believe this type of thinking, and the understanding and development of the perception of the different people involved can only be achieved if the BPR literature presents to its reader what has been stated above in the form of a educational guideline which explains how this managerial perceptual framework works. BPR managers could also see what is involved in the formulation of their perception and how it relates to the rest of the factors involved in this process. The same process is applicable for the employee of such organisation as well. Thus, if each group of people is aware of how the other perceives the environment, it could be a lot easier to understand their actions, respectively, and for them to communicate in clearer terms. In simple words, the above stated could fall under the educational process of the learning cycle umbrella of the people working together, especially in a BPR initiative.

To conclude this part I shall say that the suggestion that future writers give more emphasis to the human element when publishing/writing/ practising BPR, I believe, answers one of the questions I posed earlier in this analysis, concerning *what can be done to address and try to solve the problem of not having enough coverage and integration of this particular element in the currently examined BPR literature.*

7.3.2 Incorporating a multi-orientation assumption approach for a BPR initiative

This second suggestion to the future writers of the BPR discipline refers to the need for their literature to avoid focusing on being driven by individual assumptions about processes and/or IT when reengineering. Because of this tendency, the current writers, as seen at earlier chapters of this analysis, make assumptions governing the current BPR literature which are reflected in the orientations of the initiatives taken, something which I believe they should not do. This, I believe, is a major reason why the notion has heavily been criticised (Jones 1996, Harrington et al. 1998). The findings of this research have shown that several of the authors' readings examined, tend to look at BPR as process oriented (e.g., Johansson et al. 1993), while others view it as IT oriented (e.g., Davenport 1993). In consequence, it seems that (for example) the human element, and/or the cultural element (or any other for this matter) is/are not given the right attention. Also this suggestion would be a good pointer to the current and future BPR thinkers and users.

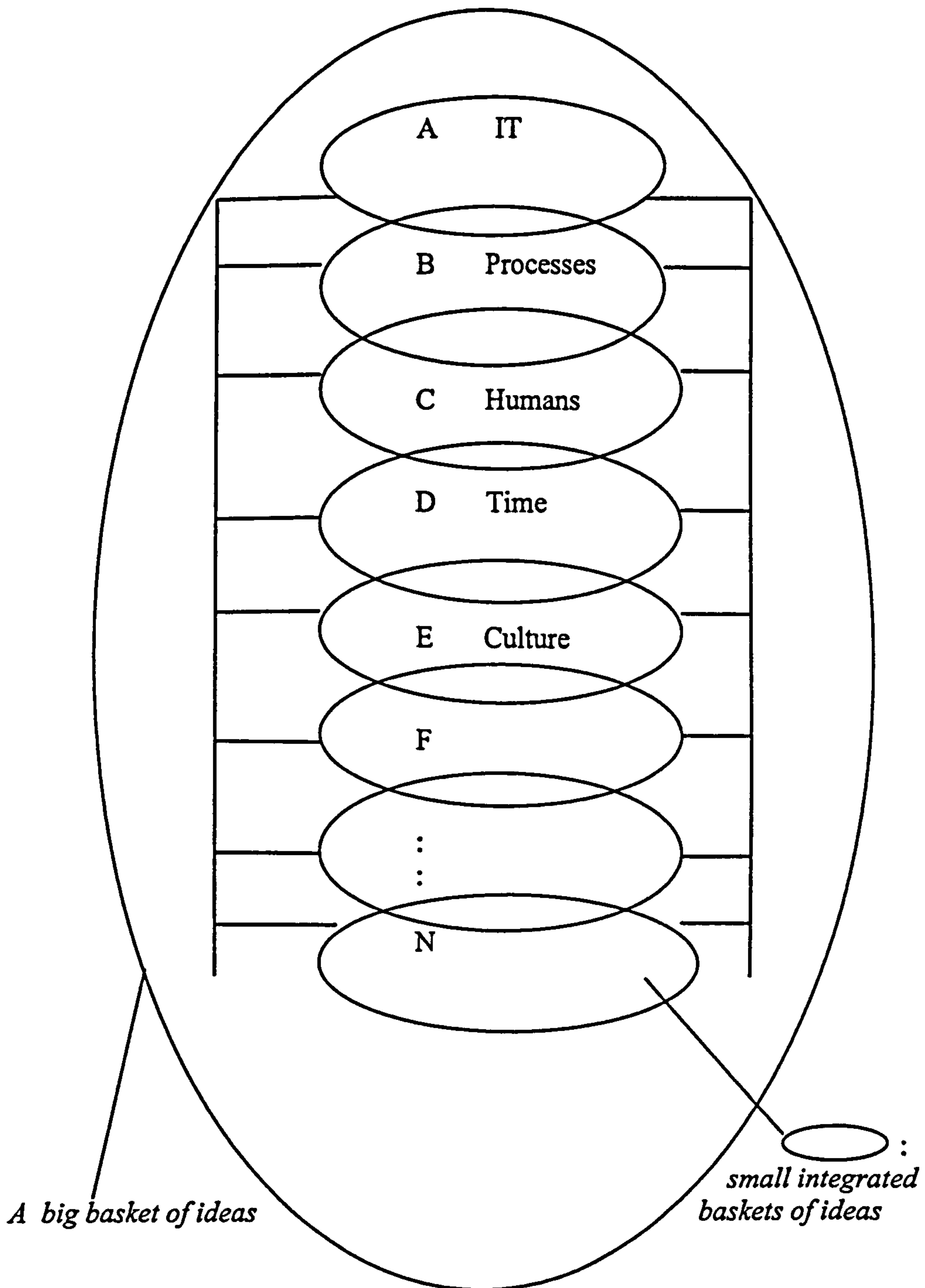
I believe that these assumptions should not be made because it leads to BPR failure and unless future theorists and practitioners change their view of what is involved in the process, they will continue to experience failure. I see again the need for future BPR readings to show that processes involve people and that companies cannot have a process without having people involved. This is not to suggest that the future initiative be wholly human element oriented; to do so would be to fall into the same trap and receive the same critique as the rest did. It would be wiser, though, for the existing literature to introduce to the reader a 'multi-orientation' type of assumption (see Figure 7.5) which could include IT, processes, human element, Culture (etc.) approaches, which would cover a range of issues and not just one element. That is what this thesis is arguing for; a holistic and systemic BPR.

This will lead to the creation of a framework of ideas which the reader/future BPR project manager could refer to, build upon and adapt, to the individual BPR initiative their organisation undertakes. These small in size but large in terms of material covered 'baskets of ideas' will hopefully be dealt with the respect and the depthness they deserve, otherwise issues (could as now) be left out. This is not to say that every detail can be fully taken into consideration but at least these will be surfaced, and according to the managerial judgement, be further utilised. This would also be another way for broadening the paradigms of people in organisations (especially acting managers and directly involved personnel). As a result it should be easier for them to educate themselves and accept ideas that they would not have done before, or have not been accustomed to.

For example an IT applications manager/officer (it could also be a human element officer for example, etc.) will start viewing the importance of the human in the undertaken initiative, which indirectly reflects also on him/her as well, since he/she is a member of the workforce in the organisation, and will start respecting the work of others in the chain, irrespective of skill orientation. How can this be shown in practice? This can be detected when the above person, receives training specifically on BPR and that will for instance show, when she/she starts rearranging his/her department budget to spend more money on employee training and development, and tangible cooperation is established with the rest of the members taking part in that

initiative. Then, responsibility and communication are bound to be cultivated, if such an environment of equality of opportunity environment amongst the people in the organisation exists.

Figure 7.5 A multi-orientation assumption approach for a BPR initiative



Here one could say that in a multi-orientation assumption approach, there may be more than four or five orientations that need to be taken into account when reengineering; and that is something on which I would agree. At the present, we can have a basket of ideas that forms a multi-orientation assumption approach such as the one presented in Figure 7.5, which shows how these elements interlink with each

other. What the model here says is that when people think about doing a BPR what they should be doing is not simply focusing or be driven by just one element but instead, they need to be looking at all these elements and what they can have is a basket of ideas that can bring together and somehow these could complement each other if are considered by the BPR future managers/readers/writers/practitioners.

Simply, an integration of ideas will be achieved in order for the decision making process to become multi-dimensional. This is not to say that the above preliminary model can not be complemented if necessary. On the contrary, this thesis recommends that, if it seems necessary to the BPR managers/initiators, any other principal element can be endorsed and developed to cover specific initiatives' needs. Others might look at it as another way of suggesting to the current literature a framework answering the question *how relevant concepts to BPR can be perceived and integrated into the analysis of the notion without giving greater emphasis to one element and less to another*. It should not either be confused with the suggestions made earlier in this chapter regarding the human element. This suggestion focuses on the *assumptions* people make when engaging in to a BPR initiative (that is, before any transformation takes place). People in getting involved into BPR either overemphasise several factors and give others less emphasis, or even worse, neglect some entirely. I would call it a pre-conceptual (and obviously biased) way of thinking which should not be taking place, since BPR activity as shown throughout this thesis, involves everything and everybody (and their feelings and ideas and perceptions about it) in the organisation, and a good manager has to consider that.

Being aware of the importance of other relevant factors in the process, people will balance their way of thinking and hopefully try to gain as much as possible from all factors analysed for their scenario beforehand. This can also be regarded as a process of personal development and paradigm broadening, to allow the accommodation of new ideas and willingness to tackle situations that cause difficulty to the initiative. It is an activity that should take place before the initiative starts and that could be accomplished by a number awareness of the environment seminars, designed by an external (academic, consultant) to indicate the surroundings of an initiative such as this one. If the company finds it interesting and considers it important it could continue to include it in the training and development schemes throughout the

initiative.

In this sub-part it was suggested that future BPR writers acknowledge the fact that failure in BPR could be driven, inter alia by the tendency of the current writers to view their BPR initiatives under the 'extremes', as I would call it, of IT and/or process orientations. I believe that these assumptions should not be made, firstly because it causes the BPR initiative, as seen earlier, to be subject to negative critique and also because it leads to failure. It would be beneficial if a BPR programme were initiated based on a multi-orientation assumption approach (as presented in Figure 7.5) which would not exclude other crucial factors, such as human element, that could contribute to the project's success.

7.3.3 Action for dealing with human relations

In the first part of this chapter I raised the question what companies could do to make sure, when reengineering, that their people will be kept motivated, empowered and less stressed in order to aid their company's change transition process. The third suggestion, which unfolds in this part of the chapter, answers the above question. It presents a two-fold managerial plan for future effective BPR decision making, a suggestion that I believe prescribes directions on how the future BPR literature writers and practitioners can deal with the conflict of opinion that I also found to exist regarding the downsizing factor and how to motivate the employees of an organisation which undertakes a BPR change initiative. I believe this suggestion is necessary to be put forward for the simple reason that downsizing is an issue that should not be avoided and fudged over with (as writers do now) due to the fact it involves the people from the organisation that managers are trying to reengineer. The authors in choosing not to mention it at all, I believe, is not the proper way to go about solving this matter, since as it seems the case when you do a BPR you will probably get downsizing of one sort or another. Generally we see a conflict of opinion arising. On the one hand there are the authors that talk about downsizing as being a consequence of BPR and on the other hand we have another group of authors who as shown in a previous part, do not even mention it. At other times the same authors belonging to one of these two categories contradict themselves on the matter. That in itself should be evidence of the difference of opinion that there is there and that is an

area that needs to be brought into light and be dealt with.

Due to this conflict of opinion found to exist in the currently examined BPR literature regarding the downsizing factor, it would be advisable for future readings to go back and elaborate further on that particular aspect. A suggestion would be for the current literature to note that when a company is undertaking a BPR initiative there is strong possibility (established by the cases found in the readings of Hammer and Champy 1993, Davenport 1993, Johansson et al. 1993, etc.) that releases of employees could be occurring, therefore, it has to provide its readers with advice on how to deal with this possibility. Something identified as missing from the examined readings (as already have been indicated this reluctance of not referring to this factor is perhaps of the political element in the consultancy competitive market arena - power, money lost, prestige, bad publicity, lost prospective clients, etc.).

To solve this problem, this thesis suggests to the literature (reader/authors/practitioners) that firstly it needs to make the above clear in its readings, by accepting the fact that, dismissals can be a possibility when reengineering. Another can follow this recommendation, which suggests that the literature could draw on the design of a plan, in other words, the mean(s), BPR managers/readers can refer to or use, for further direction, when trying to handle such an issue. This plan (see Figure 7.6) would categorise the people that would possibly be affected by the initiative, into two large groups. The plan's suggested parts could take place simultaneously or according to managerial discretion, separately. For instance, the basis for creating such a managerial plan could be for the first category, on the terms of dismissal and why that was caused by this initiative. The organisation here should also, apart from the educating part of the release reasons, aid the people affected in the process, to acquire a new job, provide compensation funds, or find other solutions to this situation, e.g., early retirement packages. These actions, with many others, could be considered to be sub-parts of that section of this plan (at a later stage, further elaboration will be presented on the means and vehicles managers can use in order to deal effectively with the communication of those messages).

The second category of people under this suggested plan would be the people that would still be employed by the company and are there to aid the organisation to go

through this initiative. Here the organisation has to create other sub-strategies to establish the beginning and continuation of this change programme. For example educating (provision of training) these employees and making sure that they understand that they will not be released (which can be achieved by using a number of communication approaches, which will be discussed later) and empowering them, will enable the company to develop a new perception about the newly changes brought to the organisation, which will later be reflected in the overall culture (theirs and the organisations).

The above described is one way which illustrates how to tackle (of course with further complemented research) the problem concerning the conflict of opinion and avoidance that exists in the currently examined BPR literature regarding the downsizing activity. BPR practitioners when they know that in undertaking such initiative, releases of workforce probably are bound to occur, and that they need to be prepared, and at the same time prepare their people about it and help them in many ways to deal with redundancy. Reasonably, if doing so, the literature will not be receiving so much negative criticism. Thus, is a point where the literature needs to expand and make clear that in undergoing such a change as BPR, negative possibilities could be occurring. By also indicating the possibility (or putting it up front) that in undertaking such initiative, releases of workforce probably are going to take place hopefully the future literature (managers/writers/practitioners) will minimise the shock that people will experience when they are told they been made redundant but they will not make it feel any less unreasonable to the people who are involved in the organisation and the reason why they can not make it feel any less unreasonable is because those people have invested their efforts into the organisation and a lot of their own time. As a result this will be natural for them to be feeling resentful of the fact that the organisation is making them redundant.

Thus, simply, what the literature now needs to be trying to do is to integrate ways to minimise the shock that people experience when they find out that there are redundancies in the organisation. The point is that if there are going to be redundancies at least they should be dealt with humanely so people are helped to find other jobs or things are done for them to support them whilst they go through the process of being made redundant; BPR so far does not seem to talk about these things

at all and it is really the HR function that is involved in making sure that people who are going to be laid-off are helped with finding other jobs, are helped to deal with the kind of crisis they face when they are made redundant and so forth. I believe that this suggestion that future users/writers/readers of BPR discipline incorporate the HR function in dealing with the fact that there will be possible redundancies is a good one, but the reason for that being a good one is not in itself sound. It has to be interlinked and integrated with other literature domains to give positive results. It is more to do with the fact that the people in organisations have knowledge about the market place, they have knowledge about how people can be helped to gain other skills they can use in other jobs and so on. The whole business of making people redundant can be smoothed so that the initial shock and reaction can actually be overcome and that it does not become so bitter in somebody's mouth that after the event they turn around and criticise BPR for doing redundancies; instead they actually being helped by the organisation. It is an issue that cannot be avoided but on the other hand it can be ameliorated. Redundancy or downsizing is always something that is going to be experienced personally and because of that it is very difficult to alter the fact that people will experience it as being unreasonable and as a negative side to BPR but, on the other hand, what we can do is to put mechanisms in place, and an example could be through the HR function, that will actually help people to deal with the crisis that redundancy/downsizing might actually mean to them personally.

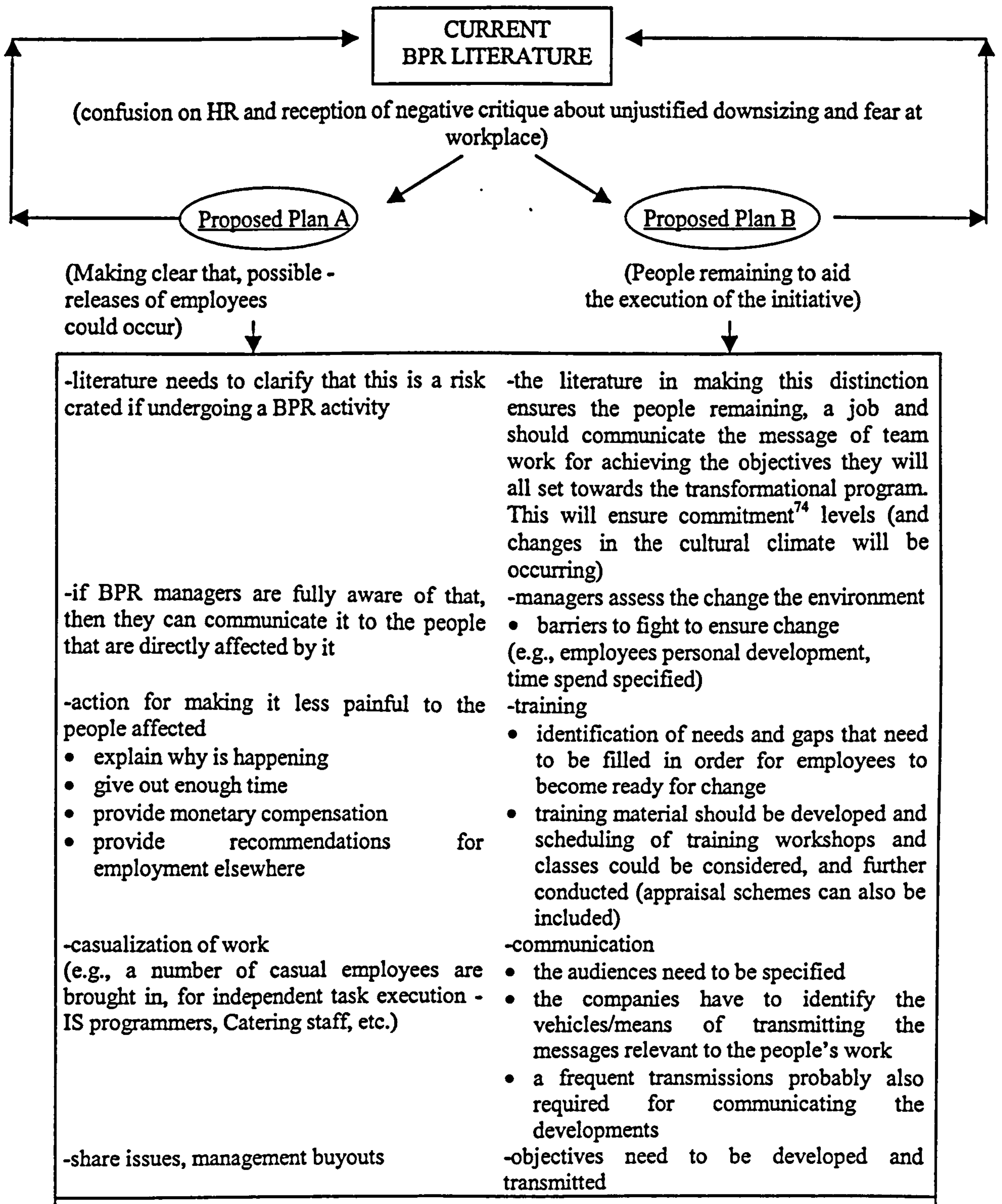
As a second benefit of that categorisation, this research sees the involved to this specific initiative managers/companies being able to motivate their employees (covered by the second part of the plan) to achieve the new goals set by them and the company. This will also affect the level of competence (and morale), and feedback skills of these employees, something, which is necessary for the success of this radical change programme.

A third benefit could reflect on the timing (radical aspect) of the activities undertaken by the people stated above. Being clear on the objectives set and with the reception of the right managerial support, proximities on time can also be achieved, in order to give the BPR initiative that different aspect/edge, from the other change programmes.

Before presenting this action plan I would like to signal to the reader that I am not

naïve by saying that what it is suggested by it will work. Any sensible manager, even a novice researcher like myself should know that is not as simple as that. It is how a manager applies it; you might find it would work for half the people and for the other half it will not. In addition, I am not arguing that it is the best way to go about solving the weaknesses identified in BPR literature either. I do know that obviously what I suggest is a practical empirical approach and in that sense it is not perfect. It will sometimes work, other times it will not and in a way it is the management's judgement to decide which. Also, I am sensitive towards the fact that there might be problems when trying to apply it as well. It is not just that you do it and it works. It has to work in a context. For instance I suggest for specific training to be given to the people remaining to enable the company to go through the BPR initiative. In case that a particular type of training is not enough to cover the project needs or a number of individuals get ill then adjustments to the training time scales need to be made to satisfy these unexpected events (these problems might not just be coming from the training front but from all of the bullet points presented in this action plan, which I certainly see as capable of creating their own problems to the BPR project). Therefore a BPR manager has to think holistically in these terms in order to be able to provide flexible terms given the circumstances.

Figure 7.6 Managerial action plan for effective communication in a BPR activity (how to empower people to work towards such initiative and keep their morale high and how to make downsizing not to seem as a *crime*)



If BPR mangers are aware of those plans (refer to the above figure) and the fact that

they can be put into action simultaneously (or this is something that they can decide, since this plan gives them the choice), then, according to what they wish to focus on in their individual companies, they could make the appropriate and necessary arrangements/decisions to satisfy their initiative's needs. This is not to say that this figure presents the only way to approach the weaknesses of the current examined literature, but at least it clarifies that, most of the time this is a risk that companies have to take and it is up to them to decide how to approach the matter. If they have a guideline that allows contextual thinking (and a range of other questions to answer, as shown earlier), I believe managers could refer to it for direction and consultation towards their decision making regarding the human element and how to deal with it. This figure is a suggestion to the BPR literature with the intention to minimise the confusion that exists regarding downsizing as a by-product of BPR to provide them with a general guideline for further clarifying this problem. By making clear and putting it up front may help them to deal with the issue of downsizing. Further research to establish the effectiveness of the model could make the basis for another extensive research.

Generally speaking, in engaging people in the accomplishment of any change programme Clark (1996 : 8) argues, 'the achievement of appropriate and integrated human resource strategies is critical to the achievement of corporate effectiveness', something which this thesis strongly believes in. The above is noted because of the fact that BPR managers need to make the right efforts for the achievement of integrated human resource policies-initiatives and with the business strategy more generally, for successful results. For example, a focus on the individual supported by appraisals, training and development, performance related pay, internal communications arrangement and different forms of individual participation and involvement such quality circles and employee briefing groups, is necessary (Clark 1996 : 8/9).

In developing such a strategy as Plan B suggests in Figure 7.6, a strong corporate culture (an element which will be discussed extensively in the chapter that follows) would ensure employee commitment and patterns of behaviour that are consistent with the values and philosophies of the senior management in the organisation, with the latter being heavily shaped by the particular business plan or competitive strategy

adopted. Clark (1996) also argues that this will enable the senior management to reduce the risks associated with devolving responsibility, by promoting employee commitment to an overarching structure of behaviour, thought and feeling (1996 : 8/9).

A good example here could be the package (see Table 7.2) British Telecom (UK) has developed with the attempt to create a more cohesive approach to communications within the company. Emphasis here is on having both top down and bottom up measures, something which Beaumont (1993) argues is 'considered to be one of the most positive developments in the communications area' (1993 : 159).

Table 7.2 The employee communications package at British Telecom (UK)

<p>1. Attitude surveys The results could provide a range of communication targets and objectives for line managers to achieve which are to be assessed in the light of the results of subsequent surveys</p> <p>2. Team briefings/meetings 60% of company members felt that this is the most effective form of communication. Voluntary team briefings occur on a monthly basis, with more than three quarters of managers and employees in districts being regularly involved in them</p> <p>3. The 'speak-up' campaign Employees can seek a phone or written reply to questions concerning company matters</p> <p>4. The 'open-line facility' This variant of the above is a recorded telephone message (updated daily) covering national and local developments in the company</p> <p>5. 'Walking the job' Local managers are encouraged to be more visible and accessible to their staff</p> <p>6. Video Videos are increasingly used to explain and promote particular initiatives or developments</p> <p>7. Publications More than 70 regular publications (largely produced in-house) are aimed at various groups of staff</p> <p>8. Direct mail This has involved circulation of the company's newspaper and short report on the company's performance</p> <p>9. Training The training unit (more than 2000 employees) provide in-house courses to improve the communications skill of managers (e.g., appraisal, counselling, effective meetings) and support related developments, such as the total quality programme.</p>

*(Source: Industrial Relations Review and Report No 449, 10 October, pp 11-14)
(Beaumont 1993 : 158)*

In this package there are a number of employee communication devices that a BPR manager can consider for further application in the BPR initiative he/she will have to manage. This package can also be adopted by them, and based on the initiative's

needs, can be modified and complemented. It gives a guideline on the available means to communication between themselves and employees. At this point they can decide how they would like to proceed in communicating their messages.

In addition to the above, BPR managers should also be aware not only of the channels they can use to achieve that, but of the whole communication process that 'can be found in most organisations' according to McQuail and Windahl (1981). There are a number of models of communication [amongst them the first model by Shannon and Weaver (1949), and for the reader's reference this can be found in Beardwell and Holden's book (1994 : 559-560)] which the BPR manager can look at as a primary source to enhance his/her knowledge on the matter. I say that, if BPR managers are familiar with the process, then employee involvement, motivation and communication will become an enabler in the transformation activity undertaken by the company (minimisation of misunderstanding, misinterpretation, and conflict).

Carr and Johansson (1995 : 55) also suggest that for an effective communication during change in the organisation managers could also,

- Simplify the message, no matter how complex the issue is. Keep follow-up as simple and understandable as your initial message.
- Anticipate the issues and communicate your position clearly.
- Don't underestimate the technical requirements of a communications project. For especially complicated projects, a full-time communications manager may be required.
- Involve top management in delivering your message.
- Honesty is the best policy. Tell the truth.
- Identify and know your audiences. Select the right message and media for each.

Overall, the BPR manager, if directed by the literature where to look and what to be careful of when exercising his power in decision making, could increase the chances of a successful initiative (and the literature would prove to be a lot clearer and straight forward to the issues it relates to, than from what it is now).

This thesis gives greater emphasis on harnessing the skills and knowledge of the workforce (organisational development), along with their commitment to build organisational capabilities for business advantage - in our scenario that could be translated into a successful BPR initiative. After the literature establishes a distinction between a possible downsizing activity and people remaining in the organisation in such initiative (as I do), then it has to make sure that the communication channels in the process are placed correctly in order for peoples' development to be practised and reach its ultimatum, which is the empowerment and commitment within and for the organisational achievements. This is a chain, which directly relates to competencies (organisational and individual) which is a sub-division of the human element function, and the people that reengineer need to look at it as well. The people who work within the human element function know about competencies; therefore, it is the job of the BPR people to seek and get advice from them on the matter of improving/developing and integrating the relevant knowledge on how this aspect can prove to be advantageous when reengineering. The reader of this thesis can look also at several HR readings, amongst them the ones from Klemp (1980), Boyatzis (1982), The Training Commission (1988), Antonacopoullou and FitzGerald (1996), which deal extensively with the competencies element.

At an earlier stage of this thesis analysis, it was suggested that human element has been somewhat neglected or not given the right attention within the BPR literature (a view established based on literature exploration and not on empirical research) and we assumed that was one of the reasons why so often the initiative had negative results (something, which is also reflected in the negative critique towards its practices). To support this further I will refer to Hall's (1992) survey, which includes employee know-how, personal relationships and organisational culture in his analysis of intangible resources, which a company possesses. His survey of 847 chief executives found that they believed employee know-how to be one of the three most important contributors to overall success (the other two being the company and product reputation). Additionally, Giles (1991) maintains that the technical side of strategy generation is overemphasised, to the neglect of the human aspect of strategy (a phenomenon established from the majority of the readings presented in this BPR research exploration). He suggests that wider ownership of the strategy among the organisational members is the key to successful implementation. Of course, there is

the critique that ‘this is oversimplistic’ (Harrison 1993) but this does not change the fact that the human element can be considered as a factor of equal importance to any other (e.g., IT) in our BPR scenario and that BPR managers need to know how to deal with it to secure higher success rates⁷⁵. This thesis provides the answer to *how* human element can be tackled, if following the suggested ideas given in Figure 7.6. BPR managers, after being introduced to the above two-fold strategic plan they should not think that their job is over. A complement to the above suggestion would be for them to become familiar with other issues relevant to training and communication that will enable them to plan ahead with success. They should also be aware of the process of learning and its outcomes, the barriers to learning and development of the groups of learners that can be found in an organisation (especially their organisation) and the fact that there are different hierarchies of learning and various levels of it, so they must be able to understand the various stages of learning (novice, advance beginner, competent, proficient and finally expert) (Beardwell and Holden 1994 : 280-286, 323-324).

Managers can only become aware of those if the current BPR literature integrates its readings with the above issues found in the HR literature and presents them to the reader. This acquisition of knowledge and integration of issues would further allow for managers to take the decisions appropriate for them which would directly influence their organisation’s initiative for BPR (also refer to chapters 3 and 4).

Mumford (1988 : 28), writing primarily about managers, identifies significant blocks to learning. These are given in the Table that follows.

Table 7.3 Blocks / Barriers to learning and development

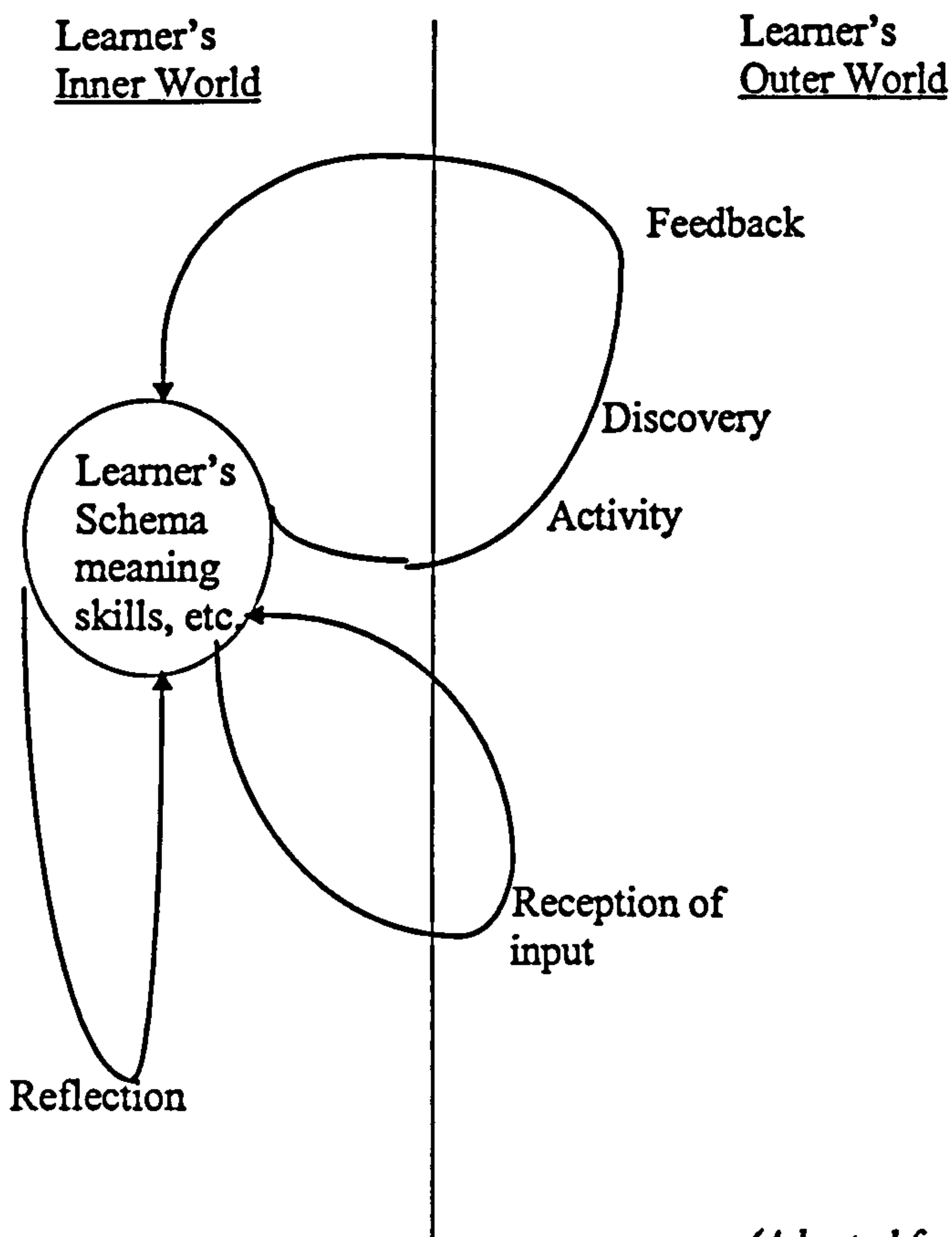
<u>Perceptual</u>	<u>not seeing that there is a problem</u>
<u>Cultural</u>	<u>The way things are here...</u>
<u>emotional</u>	<u>Fear of insecurity</u>
<u>motivational</u>	<u>unwillingness to take risks</u>
<u>Cognitive</u>	<u>previous learning experience</u>
<u>Intellectual</u>	<u>Limited learning style/poor learning skills</u>
<u>Expressive</u>	<u>poor communication skills</u>
<u>Situational</u>	<u>Lack of opportunities</u>
<u>Physical</u>	<u>place, time</u>
<u>specific environment</u>	<u>boss/colleagues</u>

(Adapted from Mumford 1988 : 26)

Others like Rotter (1966) and Barry (1988) talk about the issue in general terms and refer to those barriers as a subject, not only to managerial behaviour, but to the rest of the people in the organisation as well. Thus, provided the literature covers this topic, the BPR managers could easily detect, identify and evaluate themselves and their company's efforts in the light of those categories, which would make it easier for them to deal with these issues. In addition to the above, these managers should also become aware of the needs and experiences of adult learners, and that they are different from those young people, in order to direct a human element development scheme that would address those needs appropriately. For instance Knowles (1984 : 12) suggests that 'what motivates the adult learner most, are their needs for self-esteem recognition, better quality of life, greater self-confidence, self-actualisation'. In knowing that, for instance, a good BPR manager would design the learning and teaching with that in mind (and along with any other aspects he believes could enhance his actions for a successful initiative).

A further distinction of the classes of employees (Knowles 1984 : 10-12) will also enable the BPR manager to acquire the right skilful people and provide them with the skills they need (e.g., women, disabled people, cultural and ethnic minorities - see also Gallos 1989, Thomas and Alderfer 1989). To achieve learning (the outcomes of learning), the individual in the organisation has to go through a process (Beardwell and Holden 1994 : 284). This thesis acknowledges the fact that this process and the elements within it, constitute a very rich and complex field to which we cannot do justice here. We will only refer to the Lancaster model of learning cycle, and further recommend to the reader a text like Atkinson et al. (1993), or Ribeaux and Poppeleton (1978) for extensive referencing. The reason for suggesting understanding how a person's learning cycle works, is to indicate to the BPR manager how the process unfolds and how the receiver of the process perceives it. It is also to stress the fact that having a learning initiative in their organisation linked with BPR could enable them to get more out of their business. This collectivity and inner understanding of *one's-self* and *one's environment* (always in relation to oneself), I believe, could lead to people adding knowledge to the BPR transformation process.

Figure 7.7 The Lancaster model of learning cycle



(Source : Binsted 1980)

(Adapted from Beardwell and Holden 1994 : 296)

A critical model said to represent 'all forms of learning including cognitive⁷⁶, skill development and affective, by any process', (Binsted 1980 : 22) is the Lancaster model. This identifies three different forms of learning: receipt of input/generation of output, discovery and reflection. Of concern in this thesis is that the BPR manager gets the outcomes of this process of learning as close to the initiative's success as possible. Beardwell and Holden (1994 : 284) place those outcomes into four major categories; skill, competence, know-how and knowledge and hierarchies of cognitive and other skills. BPR managers should consider these as well.

For example they should create the right environment for attracting their employees to work and develop themselves. They should ask themselves to what extent their human element manifesto will attract, keep and motivate people to work in their organisation, at present and in the future (Hollinshead and Leat 1995 : 17). This, of course, as stated earlier, will be initiated when the identification of these peoples' needs has taken

place and the increased sense of self-worth and economic well-being are established; the step following is the learning process cycle and lastly, the above stated outcomes. Therefore, the more effort BPR managers place in the early stages of this *learning and development chain*, as I would call it, the higher returns (in outcomes terms) could be expected.

This suggestion has introduced to the reader a way of approaching the downsizing factor in a BPR initiative. A two-fold managerial action plan was drawn to make the situation clearer for the BPR reader/potential user that indeed, in case a BPR is undertaken, there is high possibility that losses of jobs might occur. I suggest that this needs to be clearly stated by the BPR literature prior its operations for the simple reason that is necessary and at the moment writers avoid dealing with the issue, and that again this conflict of opinion on the matter and avoidance is causing a problem which gives this discipline a negative critique. The plan suggested, draws on several issues that need to be considered. Especially, emphasis should be given to how to motivate and empower or even understand one's employees; it is vital for the BPR manager to acquire knowledge, which seems to be missing from the literature covered, about how employees learn and act in given situations in the organisation (e.g., change, radical or not) and try from this initial step to build and interlinked all the rest of their ideas to achieve a successful BPR transformational programme. These last remarks also answer a previous question based on how people can be integrated into a BPR, a field which at the moment has proven to be process or/and IT driven.

7.4 A second look at BPR and the 'Human Element'

The presentation and analysis of the current developments concerning the role of human element in the BPR literature have brought to light the need for the latter to advance its current readings and perceptions on the matter and integrate these with the rest of the imperative elements of a holistic BPR initiative. I believe that unless the BPR literature does that, BPR operations will continue to fail. More specifically, it has been identified that what has been written in the readings examined needs to be integrated with the human element literature domain (and others). This could be achieved as shown earlier in parts two and three of this chapter, via an integrated scenario of human element and other interlinked issues and ideas, in order to enable

this literature's future readers to enhance their paradigm(s) on how the human element interacts while a transformational activity takes place. This would be valuable to the general understanding of the patterns of organisational behaviour and within these, the reader can appreciate the relevance and the impact of specific phenomena (Pettigrew 1987) surrounding him/her and the initiative itself.

The aim of this chapter was to show that there is a need for the current BPR literature to give more attention to the human element in a BPR initiative. It is my belief that unless the future writers of the discipline start addressing this point in an integrated manner, as discussed earlier, then the BPR initiatives will continue fail. For this reason this thesis suggests that the future readers and writers/users of BPR engage themselves in a 'map' activity in order to view the BPR element within the human element context and vice versa (this can be done, if we integrate different literature domains in the organisational environment e.g., HR, PM, IR issues with the current BPR literature) and other concepts that examine and discuss the effects the human element has in the overall organisational activity. Here we can also refer to the contextual approach Pettigrew (1987 : 58) discusses:

'there is no doubt that in trying to understand how organisations manage strategic change [such as in a BPR initiative] more or less effectively, we need to encourage research that examines processes of change in a historical and organisational context. A contextualist approach is most valuable in developing an understanding of patterns of organisational behaviour...'

Thus, supporting this thesis' earlier statements with the position Pettigrew (1987) takes, results in a justifiable suggestion for the current BPR literature. This is not to say that the critique on this approach has not been taken into consideration; Pettigrew here (1987 : 58) stresses the fact that the contextualist approach,

'concerned quite properly with surfacing and explaining how years of history combine with organisational dramas to form strategy, is likely to provide for a detailed structural study of any one specific phenomenon. Yet studies of specific phenomena out of context are likely to provide only partial and crude explanations of process' How is this problem to be solved?'

As far as the BPR literature is concerned, as a first point, is suggested that it should adopt the idea behind this approach and try to insert it into its own way of thinking for the analysis of its elements. This was clearly shown in suggestion # 1 of this passage, which indicated that BPR needs to be placed in a dynamic context. This was followed

by another important finding which reflects on the assumptions made prior to reengineering which, I believe, because they are IT and/or process oriented, neglect the importance of the human element or any other element that might contribute to the success of a BPR change transformation initiative. Such an extreme driven BPR orientations, I believe should not be made, because it leads to failed BPR. Instead, what suggestion # 2 introduces is a 'multi-orientation assumption approach' towards a BPR initiative, which intends to maximise the integration of a collection of elements that would allow for contextual thinking to take place. Once more, the concern of this thesis is the misleading way of thinking while engaging an organisation and its employees in such a change programme. The current BPR framework has been heavily criticised because of the fact that it bases its assumptions entirely on one element (e.g., IT); something which leads to the initiative being managed in a mechanistic way. This suggestion recommends a multi-orientation assumption approach towards a BPR initiative with the intention to eliminate the above event from happening and to show an integration of a number of other ideas and how they can all interact. It could also be considered as an additional way of resolving the earlier stated problem of contextual analysis. It further justifies a number of other suggestions that Pettigrew makes in his reading for the purpose of fighting the disadvantage that method carries. For example he looks at this approach to manage change more effectively and he gives a number of other general questions that managers can ask themselves in order for them to be able to observe other patterns related to the initiative they take. For instance:

- 'What relationship exists between specific, often operational decisions, organisational routines and overall patterns of strategy? [in our case, the BPR initiative?]
- For specific strategic decisions, are the patterns of iteration which researchers such as Mintzberg (1978) and Lyles (1981) have begun to note confirmed? Moreover, building on the work of Hickson et al. (1986) how do these vary in different contexts?[how could BPR differ in those terms?]
- Just how do managers manipulate the systems and routines of the organisation to resist or promote change?... [how can BPR managers achieve that?]' (Pettigrew 1987 : 58/59).

I believe that by giving the three suggestions presented and discussed in this chapter I answer to the above complemented to this thesis questions. It was also an attempt to provide a better understanding of how the current literature could learn and improve its coverage of the human element in relation to a range of other elements. In doing so, I would also like to believe, that a direction for achieving and bridging the gap, could emerge and create the basis for further research in this particular field.

The last part of this chapter deals with how the conflict of opinion by the currently examined authors, concerning the downsizing factor or their avoidance to the issue, could be addressed. Suggestion # 3 recommends a managerial action plan for effective decision making for a BPR initiative in the BPR literature. This plan suggests the categorisation from the very beginning (on deciding to undertake a change initiative), of the groups of people that will probably be left behind and the ones that will remain and aid the company's initiative in becoming a reality. This, in a way, could dissolve the conflict of opinion that exists in the current BPR literature regarding the downsizing factor and issues like employee empowerment, communication, commitment, training and development which will lead to advanced competency levels. If undertaking an initiative such as BPR, the literature should make clear, put up front the possible effects (e.g., downsizing, since it is considered as a negative one, due to the negative critique it has received) on people and also provide a further explanation why this is happening. In doing so there will be room left for enhancement of the commitment of the remaining employees in the organisation (e.g., employee personal development, a positive effect). Therefore a clarification of this confusing element under the human element umbrella can lead to,

- a minimisation of criticism,
- a purification and further indication of possible events (e.g., the releasing of employees and an introduction of personal development techniques at the same time) when undertaking a BPR initiative;
- a suggestion for the current readings to direct their initiatives in such a way that will be approachable and understandable by all members of the organisation, involved in such change programme; and lastly
- the recognition of the fact that further research is needed to elaborate on the points discussed earlier in this chapter.

This thesis also acknowledges the fact that there is still room for further improvement for these suggestions to complement the current BPR literature and be complemented at the same time. More research is vital here, for example in 'what situations can one ignore the human element and when not'. At this particular point and time, what I shall stress is that all the points mentioned above could provide the foundation (even the beginning) for a new wave of thinking in this suggested interactive activity between the human element and the current BPR literature, which at the moment the latter fails to provide its reader.

Thus, a guideline for the future BPR reader/practitioner concerning this element is to

- consider the contribution of the human element to the same extent as it does with the rest of the elements that might affect their intervention. One way of doing so is by actually involving people in the processes (not just say that you will, but actually do it) and at the same time provide them with the knowledge they need to carry it out. This is a route to opening the communication channels between the participants in such initiative.

7.5 Conclusion

This chapter's aim was to indicate to the reader that there is a need for the current BPR literature to give greater emphasis to the human element when reengineering. This was felt necessary by this author, because while exploring the BPR notion and the relevant authors' readings on the matter (part one), that emerged as a gap in the domain of the currently examined BPR literature. I also believe that this is a contributing factor to the reason why BPR fails as well.

To address this problem, a number of suggestions have been put forward, not with the hope of changing the current BPR writers' mindsets but to guide newcomers in the discipline and especially the future writers of it. Starting from the second part I have shown to the reader how the proponents of organisational change have dealt with the human aspect in their change initiatives and I pointed out that it would be useful if the future BPR users/thinkers/writers/practitioners learn from that. This though I consider as the preamble as to what I set out to be specific suggestions in part three. As said

above, this set of suggestions formed the third part of this chapter and I would like to believe that their introduction to the future readers/practitioners/writers would

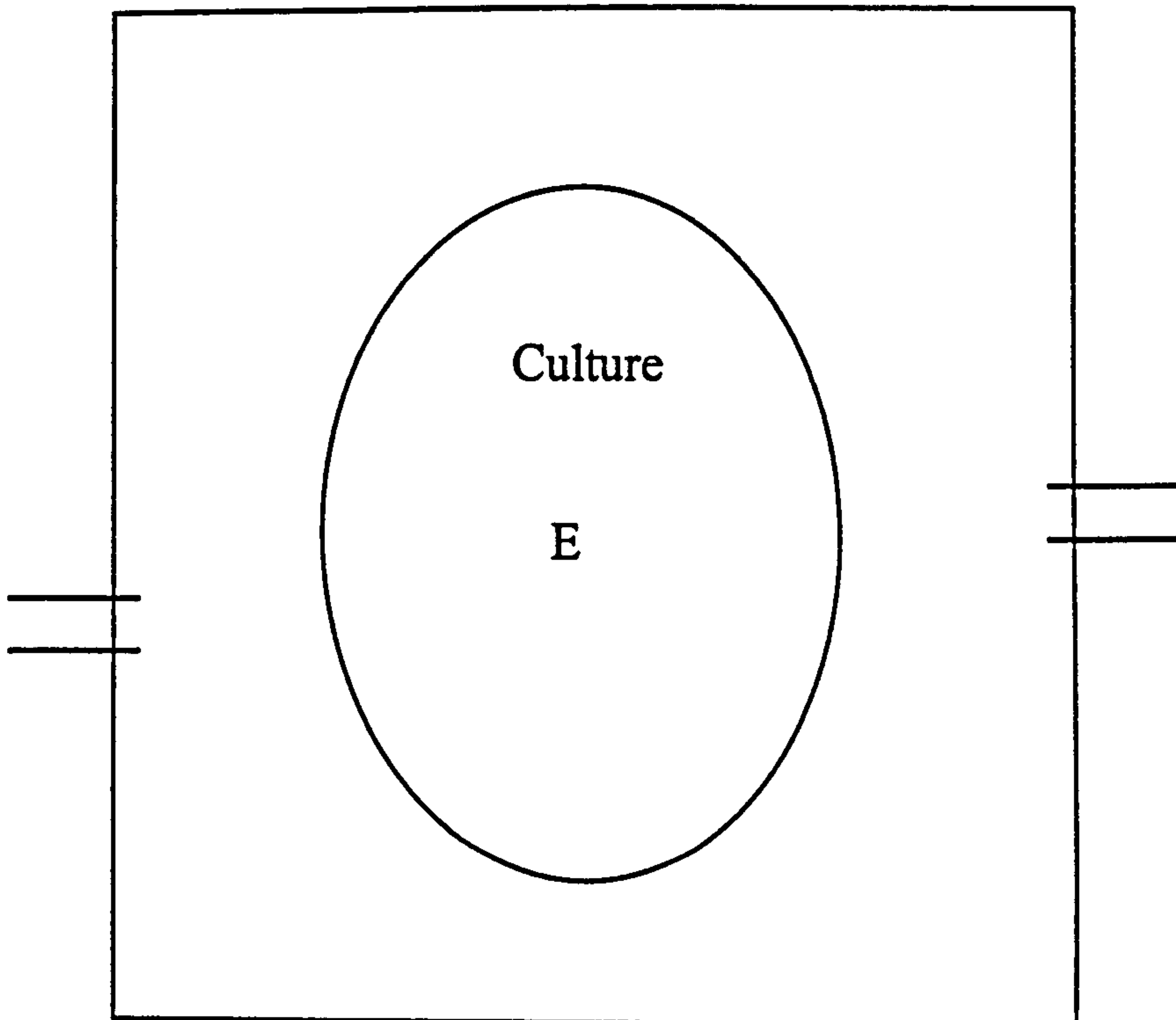
- place BPR in a dynamic context,
- initiate a new way of thinking about BPR; the fact that certain assumptions should not be made prior to a BPR initiative due to the causing of 'narrow mindedness', and lastly
- give managers a two-fold plan to consider when they are deciding about and for any BPR initiative (including a more ameliorated way of dealing with the human element in the organisation).

It is not claimed that these are the only solutions to the problem but at least they can be considered as a step towards improving and pointing out to the BPR literature a direction (where, what to look for and how, in order to complement what currently exists regarding this element) for dealing with this matter.

The chapter concluded with the summary, where collectivity of thought regarding the human element and the BPR literature was resumed and a guideline was also put forward in order for this author to satisfy one of this thesis' subsidiary aims.

There follows, in the next chapter an exploration of another element, the culture factor, and the perceptions concerning this aspect in the currently examined BPR literature.

Culture Chapter



What 'must be done' is usually closely related to what is believed to be the 'nature of things'; however beliefs about 'what is' are often disguised assumptions of 'what ought to be'
(Cited in Kast and Rosenzweig, 1970 : 2)

Klyde Kluckhohn

CHAPTER 8

8.0 Introduction

The aim here is to stress the need for the element of culture to be recognised when reengineering. I will demonstrate that by providing an analysis of the culture element found in the currently examined BPR literature. A thorough presentation of several authors' perceptions and dispositionings (e.g., Hammer and Champy 1993, Johansson et al. 1993, Armistead and Rowland 1996 etc.) is given and an exploration of their differences and similarities on the matter is revealed. In doing so I believe I will increase the awareness of the future BPR researcher/user/thinker on the topic. I will argue that if this particular element is identified and utilised efficiently it has a lot to offer towards the success of a BPR intervention. I consider the cultural factor of crucial importance to such initiative as BPR because of two reasons. Firstly, if considered it could add value to the initiatives operations. This is to say that people in understanding the notion will be able to understand themselves and the organisational ways of conducting business (including changes). This understanding could prove to be of vital importance to the future of any change initiative undertaken by the organisation and that is because of the element of direction of change it involves (see also part 8.2). Therefore BPR to achieve that it needs culture as well as the human element. The second reason is the ability of the cultural notion to provide the means (via literature and practice) for the human element to comprehend and work towards achieving the desired change. Through those the BPR manager would be able to closely monitor and manage better the change initiative. These are briefly the reasons which I believe they make culture one of the five major factors that need to be considered in depth when reengineering (part two of this chapter presents and further discusses the above reasons).

The first part of this chapter reveals to the reader how culture is perceived in the current BPR literature. This is done for the reader to see that the concept of culture seems to be important to many of the writers of the notion but, as will be shown, not important for the

specific literature to expand on it or for tangible action to be taken. A number of these readings indicate its importance, others do not, and the remaining do not put this element in the context of BPR when they refer to it (e.g., it is not mentioned in the principles given out as the foundation of BPR). The aim here is not to give a universal solution to the problem but to point it out and to establish the case that,

- culture has been neglected and not really discussed within the current BPR literature, to the extent that this thesis believes it should have done⁷⁷,
- the authors that refer to it are not specific and are quite uncertain in what it means,
- the current perception of the notion also lacks a direction in terms of what managers should do, and how to deal with culture in the future.

The second part will extensively discuss why I consider culture as an imperative element to BPR and it will also reflect on the relationship of culture and organisational change. The above will be further illustrated by a number of studies which indeed prove that there is a strong relationship between the two (change and culture). With these findings I further conclude that the element of culture is imperative to a BPR change initiative and that the future users/writers of the notion need to give greater emphasis and further integrate this element with their future BPR thinking and practice.

Having said that, this thesis proceeds with the third part which aims to produce a number of suggestions that will be put forward for BPR managers to use when dealing with culture, since it is my belief that culture is a contributing factor to the success of a reengineering activity. This is also because the literature covered indicates that this concept has not been given the right attention, which perhaps could lead to one of the missing pieces of such initiatives success. Now the question is *what* can be done about it. A first suggestion will be for the currently examined literature to make a broader reference to the concept of culture and blend the issue with its own literature. This could lead to a discussion of the element of culture in relation to reengineering, providing an

opportunity for the BPR literature readers to become aware of it, which the current literature does not provide. An example of how that can be achieved is also given in this part. Here the notion of culture will be unfolded in order for the BPR reader to refer to it in a degree of depth and see that is not just 'what people believe' but a range of other interlinked ideas that BPR managers should use as pointers and place those into their BPR context (initiative and perception at the same time) in order for their future decision making to be improved. By providing a range of ideas linked to this concept I hope to give the BPR manager of the future a choice of views and a broader and multi-dimensional way of dealing with arising situations (something which at the moment is not provided to him/her by the literature).

When this is accomplished, I believe BPR readers/practitioners will also have a much improved BPR literature to refer to for direction. Given the above, these peoples' perception on the cultural concept related to the BPR initiative, I believe, will be different - in other words, they will view the notion of culture in a broader context, which will enable them to take into account a number of concepts that might affect, positively or negatively, their future decision making (refer to suggestion # 2). One example here could be the Timing factor, which was extensively discussed in chapter 4. In addition to the earlier suggestion the consideration of other dimensions related to culture for the improvement of the current BPR literature would allow for suggestion # 3 to take place. A suggestion, which looks at how cultural change can be achieved, and how problems could be solved when doing so.

The fourth part is next. It collectively reflects on the BPR and the culture element after the above suggestions have been made for further reinforcement of the topic discussed.

This chapter will be concluded with the fifth part, a summary.

8.1 The BPR and the Culture Element: Current Positions

This part will reveal what the major BPR readings say in the culture element. This is based

- on whether they refer to this element or not (if they do what they do say about it)
- and also, what they suggest it needs to be done about it in an activity such as BPR.

For Hammer and Champy, culture is 'what employees value and believe' (1993). This concept is one of the four points of their *business system diamond*; the first is the company's processes - the way the work gets done, the second is job structure, the third is management and measurement systems and the fourth, is culture - what the employees value and believe (1993 : 81). They further suggest that, in order for this to be effective, all four need to be linked. Out of the four cases presented in their book, the reader can see this element emerging from the Hallmark example only. We do not see Hammer and Champy (1993) commenting directly on it, but the notion derives from Robert L. Stark's (Company President's) narratives which are based on his company's experiences on the matter. Hallmark Cards Inc. felt the need to challenge the cultural status quo of the non competitive environment that the company was in; the reader here is also presented with a number of effective ways (that were successful for this company) in which the messages were communicated to their employees (1993 : 163). In this example (which is claimed to be successful) though, there is no indication of what the response of the company's employees was. Rather, we have the case given from management's point of view, a view that argues that 'things were coming as planned' and employees 'understood' clearly the situation the company was in.

Another point of reference regarding the notion of culture in Hammer and Champy's writings, is the one they make in the concluding part of their writings. In succeeding at reengineering, amongst other things, they state that 'people's values and beliefs need not be neglected' and that 'existing cultures and management attitudes should not be allowed to prevent reengineering from getting started' (1993 : 207). This is very well acknowledged by these authors (Hammer and Champy 1993) but very little explained, as

this analysis shows. How can they mention it but when it comes to the practice is neglected? Perhaps a more precise or deeper meaning of the notion and how it can be inserted in the BPR initiative, how it can be dealt with, could have been a starting point. After exploring Hammer and Champy's writings, it is my belief that this element has been taken for granted. Although an important issue, because of the above assumption, it has been hidden somewhere in those companies' change initiatives and most of the time causes problems if ignored it or not explained clearly to people.

How, then can 'a fundamental rethinking and radical redesign of business processes in order to achieve dramatic improvements...' (Hammer and Champy 1993 : 32) be achieved, if culture and cultural change is not even noted in any of the current BPR definitions or even in what some call, BPR methodology? How will the barriers and resistance to change (Martin 1998, Wheatley and Parker 1996) be tackled? What are the basic assumptions underlying culture (Hunt 1992) that managers need to consider before embarking on any change initiative ? What are the levers managers can use to reinforce culture (Hunt 1992) in a BPR initiative? In what sort of context (e.g., social, political, economical) (Kast and Rosenzweig 1970) does culture need to be put, in order for results to be beneficial for all the members involved in such an initiative as BPR? Questions that raise a number of linked issues that fall under the notion of culture. These are the questions that this chapter will be posing to the writers of the current BPR literature concerning this element, with the aim of challenging what has been written and in what depth.

According to Davenport (1993), culture is one of the 'organisational enablers of process innovation' (1993 : 96). Culture here is not defined, but is seen in the direction of greater empowerment and participation in a company's decision making. 'In a process innovation context, these cultural changes are intended to empower process participants to make decisions about process operations' (1993 : 104). The author here talks about a participative type of culture which, according to his beliefs, could 'even lead to self-

design of smaller, restricted processes by employee teams' (1993 :104). A type of such a culture, he argues, could emerge from the customer-facing processes, such as order management and customer service. He also believes that these are 'well suited to empowering front-line employees to satisfy customer demands' (1993 : 104). Even though he takes the notion of culture a step further compared to Hammer and Champy (1993), his work is IT oriented which, leads to control-oriented process cultures. The example that follows will also indicate the point made above.

The 3M Corporation is used as an example here to illustrate the above stated relationship.

The company's president, William McKnight says,

'it becomes increasingly necessary to delegate responsibility and to encourage men and women to exercise their initiative. This requires considerable tolerance. Those men and women, to whom we delegate authority and responsibility, if they are good people, are going to want to do their jobs in their own way. Mistakes will be made. But if a person is essentially right, the mistakes she or he makes are not as serious in the long run as the mistakes management will make if it undertakes to tell those in authority how they must do their jobs. Management that is destructively critical when mistakes are made kills initiative' (Diebold 1990 : 68).

Despite the fact that Davenport (1993) shares the above ideas and believes that '...even after broad process designs have been implemented, an innovative culture can inspire minor improvement that benefit the day - to - day process performance' (1993 : 105), on the same point he states that, '...by no means are all organisations moving toward greater degrees of empowerment - nor is it necessarily appropriate that they do so' (1993 : 105). Is this caused because, perhaps, there is no room for any initiative or is it because the current system is not efficient and flexible enough to accept these ideas and blend them effectively in the whole system? I believe this could be the case. In an earlier chapter, it was suggested that pre-assumptions on BPR initiatives should not be made (refer to chapter 7, see also the processes and IT chapters). This was suggested for the simple reason that there is a need to allow for flexibility and holistic thinking to flourish in a BPR activity.

Furthermore, in practice and with the support of IT, Davenport (1993) states that control-oriented process cultures are mostly to be seen in contemporary industries. One example of such culture, it is stated can be found in the service industries or fast food and lodging. Under this type of culture, 'low levels of employee commitment, slim profit margins and the need for consistency and quality make a controlling culture likely if not inevitable' (Davenport 1993 : 106). This is probably an element of the critique the literature is receiving and that is due to the mechanistic way in which BPR agents approach their clients' problems, something which I believe the current BPR literature has to overcome. Driven by the advent of IT, Davenport sees culture as an enabler for the IT in *implementing* and *controlling* processes. He mentions,

'One hotel chain, for example, is planning to use in-room television to display step-by-step instructions for cleaning and preparing rooms. McDonald's in-store computers plan, monitor and control many aspects of store operations, for both employees and managers, and Mrs Fields Cookies relies extensively on information technology to control key processes' (1993 : 106).

I detect a paradox here, though. How can empowerment and participation in decision making take place when, in the above examples, we see low levels of employee commitment to govern (as stated earlier by the author) and a scenario of controlled culture? The author does not make any further reference to any of those responses, nor to any types of resistance (from the employees' perspective), when imposing this kind of culture at the work place. Clearly, there has been no further attempt by this particular author, like Hammer and Champy (1993), to try to explain or discuss the cultural notion further in those terms.

Johansson et al. (1993) believe that before a company embarks on a change programme it should discover (amongst a number of other things) 'the values and culture of the business' (1993 : 93). It is suggested that this needs to take place in order for the company to 'begin planning the scale of organisational change that is required before launching a detailed analysis' (1993 : 95). The problem is that these writers do not provide any

specific guidelines on how this is to be done. This set of authors though, are more specific in what they mean by culture compared to the earlier ones (Hammer and Champy 1993, Davenport 1993). Firstly, they recognise the fact that 'change management requires a clear understanding of the existing culture and behaviour patterns of the people in business, and a deliberate attempt to change this into some other form of behaviour' (1993 : 196). This, I believe, is the first step in acknowledging the importance of such a notion. This assessment of any current organisational culture will result in an understanding of the company's need for readiness and capability for change. In addition, that would spark the need for the company to think about its cultural norms and determine the most appropriate ways of carrying out its tasks and take advantage of the positive forces in the culture while looking at cultural barriers.

Secondly, they refer to other writers in defining the concept and thirdly, they reveal to the reader, that changing cultures is not an easy task to do. Culture, they say, is usually defined as 'the commonly held values and attitudes that determine behaviour' or 'the way we do things around here' (Johansson 1993 : 196). Whatever the definition, they argue, 'organisational culture is a powerful determinant of how everyone behaves in an organisation' (1993 : 196) which in the end will be reflected in the performance of employees.

As previously stated, for Johansson et al. (1993), culture 'is the most difficult to change' (1993 : 191) when an organisation is going through a BPR initiative. This is because of the 'involvement of the behaviour of all employees as the company migrates from the one that can be described as command and control functions to a delayered environment that emphasises process excellence through teamwork' (1993 : 191). [Is culture, then, a prior element to their initiatives and is it seriously taken on board? Does that reflect reality though? As seen in the comments of the two previous sets of authors, this is not the reality and certainly what has been said does not reflect those above comments either].

Although they make a more extensive reference to the salience of culture in a BPR environment, and what has been noted about it, compared to the rest of the current BPR literature authors, still we see them accepting the weakness of the fact that, 'BPR does not connote a specific set of values' (1993 : 197) when the initiative is undertaken. Perhaps, they state, 'the goals of such initiative (e.g., breaking down functional barriers and thinking of business activities as processes) do force many companies to modify their values' (1993 : 197), a point that this thesis challenges as well. Again we find evidence, to support this thesis' initial view that there are no specific values that are drawn in the current BPR literature to indicate what lines need to be followed when a matter such as this arises. Further research and development is evidently needed.

Like the previous authors discussed, there is no indication of how resistance to such changes could be tackled and, even more, how managers could overcome this element which is obviously most of the time overshadowed by other elements such as IT and/or process designs. What about the scenario of any newly imposed culture in an organisation which is not working? What can managers do about it (Wheatley and Parker 1996) in this case? These critical questions seem to be left untouched by what is currently written about culture in the BPR context.

Morris and Brandon (1993) in their *Reengineering your Business*, approach this specific notion from a 'paradigms' perspective. For them, if those 'paradigms' were to change, perhaps the reengineering efforts would have higher rates of success (1993 : 50). Their justification for analysing paradigms is their belief that this 'is an essential foundation element of the reengineering method and it represents a dramatic improvement in the way companies manage themselves' (1993 : 50).

In their writings we see a broad coverage of ideas related to *paradigms* and *change* (e.g., why would companies want to change), and based on that, the question why peoples' paradigms sometimes resist change (e.g., uncertainty, additional workload, risk of

criticism) is answered. It seems that these particular authors view paradigms in an individualistic way rather than in terms of a whole, a system. They say,

‘In business, paradigms might be seen as sets of unquestioned subconscious business assumptions. These assumptions..., certainly contribute to the paradigms of business people’ (Morris and Brandon 1993 : 49).

They do not talk about industrial, organisational culture, which cuts across a range of matters related to the notion itself but they prefer to talk about it on the personal level. I believe in order to understand culture fully and correlate it with how people in BPR initiative react to this particular concept, it has to be placed in a more generic terms. The BPR literature has to modify itself and incorporate this element in its writings (this will be shown as suggestion # 1 unfolds in this chapter). Morris and Brandon (1993) also value the importance of corporate culture and present to the reader some general characteristics that can be found in the notion. If we were to reveal their dispositioning in simple terms, it could be said that, they are commenting on the notion of culture in terms of itself. That is to say that this element is lacking in being placed in any sort of BPR - organisational context (refer to Figure 7.1).

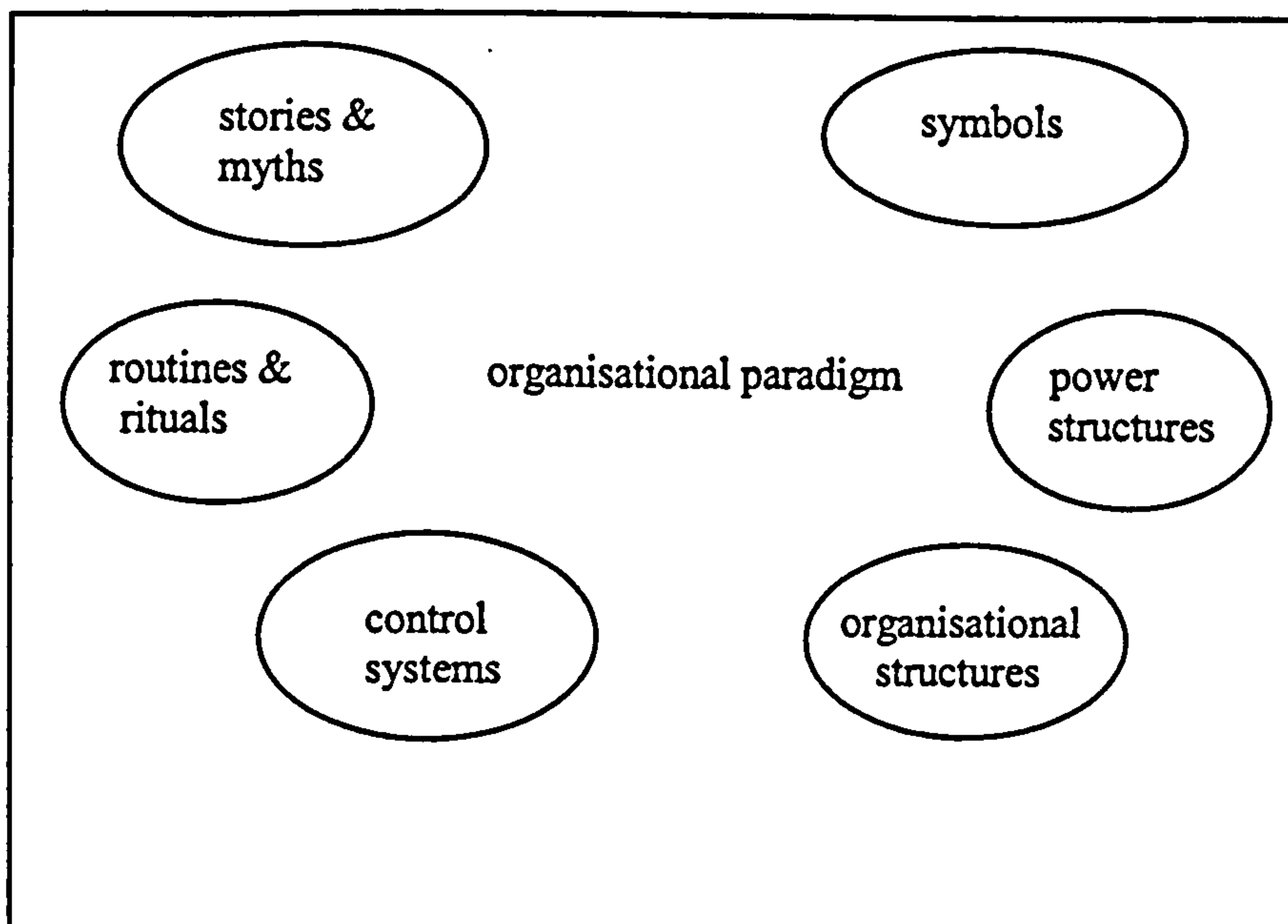
In recalling their dispositioning on how to reengineer, we see that it is suggested that any such initiative should be based on the principles of industrial engineering. How can their views in what they are saying be consistent, then? On the one hand they praise culture and change and paradigms shifts, and on the other hand we see them proposing a mechanistic approach and a controlled type of reform in dealing with their reengineering cases. How can these conflicting views be coherent? It seems that the paradox I detected earlier on (refer to Davenport's 1993 reading), is justified once more by the latter set of authors, in their ideas on a mechanistic culture.

In attempting to integrate and reveal the perspectives, whether similar or different, on culture amongst the current BPR literature authors' writings, Armistead and Rowland's (1996) perceptions on the matter will now be considered. The notion is briefly mentioned

and that is in conjunction with the role of the people in the process. The fact that 'culture is important' is also established, and like Morris and Brandon (1993) they see a correlation between change programmes and the cultural notion, which, as they note, based on their experience, can justify the 'natural reactions to change' of the people belonging to organisations that go through a change such as this one.

It is also argued that their intention for referring to change and culture is 'to summarise what we [they] see as being some important points, particularly when relating culture and its importance to BPR and managing by processes' (Armistead and Rowland 1996 : 69). While exploring what has been written, they found that organisational culture is described in terms of a 'cultural web notion' (see also Figure 8.1).

Figure 8.1 Cultural web



(From Armistead and Rowland 1996 : 70)

They do not define what they believe culture is, but in borrowing the webnotion, they try to highlight the areas that managers should pay attention to, in order to reveal to them from where the 'barriers to change may originate' (Armistead and Rowland 1996 : 70). This is not different from what Morris and Brandon (1993) say, but I believe the

graphical way they used to represent what they say here, makes it easier for the reader to grasp. Although they accept the fact that people's behaviour is difficult to change, they also pursue the view that 'to underlay values takes [even] more time [than changing people's behaviour] or may not be possible at all' (Armistead and Rowland 1996 : 71). Their recommendation is for managers to use the cultural web to identify the different aspects of organisational culture, which it is believed, shape both values and behaviour in an organisation. '... these are areas which are likely to be affected by a BPR project and require on-going consideration as the organisation shifts to managing its processes' (1996 : 71). I agree, but I do not think that just referring to the cultural web gives a holistic picture of how culture might be affecting a BPR initiative. What about any types of culture or any basic assumptions a BPR manager could face in the reengineering process? (These are issues that are analysed in the following section of this chapter).

A good point to build on and to challenge at the same time. How will, what has been recommended here aid any BPR initiative(s) to solve its/their created 'cultural behavioural problems'?

The authors' perceptions discussed so far do not present anything specific to the reader that will make this aspect unique in terms of how the BPR notion will radically transform their organisational cultures. As already discussed, most of the writers hardly mention the notion and the rest acknowledge the fact that the above stated dimensions are to be considered when change takes place; but practically, the reader can make no specific reference to any related direct action taking scheme for tackling the problem.

Perhaps Armistead and Rowland (1996), in directing their thoughts to the cultural behaviour, partially answer some of questions raised earlier on, about the overshadowing of this notion in the BPR literature. That, though, does not change the fact that the culture element, even though considered important to the process, has not been given a place in any current BPR definition, principles, or even methodology in the current literature

(refer to chapter 3) which would suggest that is vital for its contribution and unique for its attributes for the BPR initiative. A number of suggestions are given throughout this thesis which, I would like to believe will reinforce this element's usage and vitality in BPR initiatives as a part of the BPR literature which at the present seems to be missing.

As a concluding remark and as already revealed from the BPR literature covered in this thesis, the above set of authors has borrowed most of its ideas from Hammer and Champy (1993) and Davenport (1993). They do not seem to refer to anything new, apart from a clearer direction about the thinking on culture in the existing BPR scenario, as they perceive it.

Regarding the writings of the other authors on which this thesis has commented in earlier chapters (e.g., Davenport and Short 1990, Obeng and Crainer 1994, Jacobson et al. 1995) we see that there is no direct reference made to the cultural element. There are no chapters or subsections of chapters directly related to this contributing factor for a BPR success. Based on that, I would like to believe that for the current BPR literature to be complemented, it requires further inputs from a range of other disciplines, both to improve itself and to provide BPR managers with the ways to deal with culture. Thus, based on the findings of this part which are: (i) culture has been neglected and not really discussed in literature terms within the current BPR literature in the extent that this thesis believes it should have done; (ii) the authors that refer to it are not specific and are quite uncertain as to what it means, (iii) the current perception of the notion also lacks a direction in terms of what managers should do, and how to deal with it in the future, I shall proceed by suggesting ways to tackle those problems. Prior though to giving these suggestions I would like to further substantiate the idea that if culture is neglected in a changing organisation it can indeed cause problems to the initiative undertaken.

8.2 Why Culture is important to a BPR initiative and a Practical learning for BPR: an example of how a whole industry failed to change when it disregarded its cultural needs

In this part I will explain why I believe culture needs to be considered in a BPR initiative. I will also justify what I argue here with a number of studies (practical examples). These will show the link between culture and change something which underlines the fact that if culture is not acknowledged in a changing organisation it would certainly lead to poor communication, profit minimisation and finally failure to achieve the desired changes. Since then BPR initiatives have been in majority failing I would say that it would be very wise if the future user of the notion takes into account what it is argued here and further consider it.

I view culture as the way people perceive the events around them and based on these perceptions/paradigms they behave accordingly (see also part 8.3.1). These perceptions I see related to peoples' likes and dislikes, agreement and disagreement, positive and negative feelings towards what is happening in their environments. Environments that deal either with their working place or are already attached to the individual's prior beliefs and values carried forward from their personal (e.g., family) environments. If therefore I assume that indeed there is a link between the human element and its perception(s) then undoubtedly the BPR change initiative when it takes into account the human element it has to take into account its culture as well. In case it fails to do so and in case it fails to understand that this relationship exists then is it highly possible that they will fail to manage the human element which consequently will have negative effects on the change element pursued by the overall BPR initiative.

Therefore I see culture as imperative to BPR initiative because (a) culture is presented as a 'unique powerful tool in directing change' (McLaughlin et al. 1999 : 127). Thus, since BPR is a form of change, like any other change tool, it would be a miss-a weakness for the initiative not to fully consider it while reengineering. What I am arguing here is also noted by Handy (1985 : 188), 'the customs and traditions of a place are a powerful way of influencing behaviour'. Morgan (1997 : 132) in his book uses several case studies

which detail the successful completion of change through building a corporate culture and while summarising on one of those cases he comments 'it is probably no exaggeration to suggest that, in this case, corporate culture may have been the single most important factor standing between success and failure' (1997 : 132). Other cultural theorists like Hofstede (1991) have also identified this link⁷⁸ between culture and change. This particular author believes 'that cultural influences play an enormous part in the way employees behave in organisations' (1991 : 17). Thus, me supporting that culture needs to be greatly incorporated with the BPR literature and practice is not unjustifiable but on the contrary this is a very important issue which the BPR user needs to incorporate in his/her thinking and future practice to maximise its success rates. Of course this approach to culture needs to be considered from a holistic point of view which will further incorporate all the imperative elements a BPR change initiative should have.

The second reason why I believe culture should be fully acknowledged while reengineering is that a BPR manager can not use it only as a tool to direct change but also as a tool for *monitoring* and *managing* change. For example let me reflect on the case where a number of people attend work, they are imaginative and display enthusiasm when working on projects they enjoy. They will therefore throw themselves into activities, which interest them and give them a level of satisfaction. A good BPR change manager would see that and make sure that he/she creates a number of activities, which will reflect these people's perceptions of job satisfaction. A number of these people may show interest in the IT field, others may have an interest in the quality of the produce of that particular company. Thus, a BPR manager should allocate each group of individuals their responsibilities and every week or so has to go back and evaluate their work. Evaluation could be done in terms of what has been achieved in comparison to what was the objective to be achieved. Evaluation could take the form of what else needs to be considered to promote the achievement of the pre specified outputs. Perhaps training, finance or professional-outside aid to enable the advancement of this monitoring of events. If this takes place, I see that indirectly a certain type of organisational culture will

start developing. In other words the promoting of job satisfaction is achieved, peoples liking towards their working environment is high, the understanding of each other ensures high communication levels and financial rewards to be gained (see Kotter and Heskett 1992 case below). These events will make it easier for the future BPR manager to monitor in appraisals and in financial terms the change initiative undertaken and to better manage the people and their needs in such a demanding change activity as BPR.

Now that I have explained why I believe culture is important to a BPR change initiative let us take a look at a practical example of an industry, which failed to change when it disregarded its cultural needs. This is not a BPR case but nevertheless it is a change initiative that points out that in any change programme culture has a major role to play and need not be neglected. It is also my belief that by presenting the following practical example I can illustrate and establish that culture is a crucial component when changing organisations, therefore the BPR users/thinkers can learn from that and better their own change initiatives. This study was initiated by thinkers like Trist and Bamforth (1951) and later Trist et al. (1963) who belong to the 'early stages of sociotechnical systems thinking' (Jackson 1991) group of writers. These authors *used sociotechnical ideas to study the mechanisation of the British Coal Mining Industry*. Let us see what really happened.

In the traditional method of coal getting, the 'hand-got method', small groups of skilled men worked in an essentially self-regulating and autonomous way on their own part of coalface. The workers could choose whom to work with, each developed multiple skills, they were responsible for their own pace of work, and supervision was internal. Each group made its own contract with management. This form of work organisation seemed to provide for a social system that suited the underground situation. With the advent of mechanisation, however, the traditional form of work organisation was abandoned, and the 'conventional long-wall' method of coal getting was set up. This was a factorylike system of work organisation with forty or fifty specialists, on different part of the overall task. The whole system was co-ordinated by constant interference from management.

The conventional long-wall system was introduced to get the most out of the new technology and, indeed, looked optimum for that technology. However, it was introduced without a thought for the social system and had extremely dysfunctional social and psychological consequences. Productivity was disappointing, absenteeism and turnover were high, and there were constant problems for management, especially in handling the changeover between shifts.

In the later study, Trist et al. (1963) found that some miners, unable to tolerate the conventional long-wall system, had originated and won acceptance by management of what was called a 'composite long-wall' system. This form of work organisation was able to operate the new technology efficiently, but also paid attention to the needs of the social system. Demarcation between shifts disappeared and, on each shift, self-selected groups of forty or fifty men took on responsibility for the whole task. These groups allocated work, allowed individuals to become multiskilled, and were self-regulating. They were paid on a group bonus system. Where the composite long-wall form of work organisation was introduced, the miners produced more went absent less, and were generally more satisfied with their work.

(Adapted from Jackson 1992 : 62)

The above studies have just indicated to the BPR reader that while an organisation is going through change (any type of transformational change) and the element of culture is neglected, it would certainly lead to problems. Therefore for me as a researcher it was unimaginable to discover that the major BPR readings do not heavily stress and practically apply what the cultural element attributes have to offer to them. I also believe that in integrating culture with the rest of the elements, which I consider as imperative to the BPR initiative, it could enable the minimisation of BPR failure rates.

I will also refer to a study by Collins and Porras (1994) of Stanford University where they set out to discover what makes truly exceptional companies from all the others. They examined 18 organisations that were premier in their own industries, were widely admired, belonged in the business nearly 100 years and had outperformed the general stock market by a factor 15 since 1926. They then compared each one of these institutions to their top competitors. Their findings have shown that exceptional companies have shared several timeless qualities like *having core values, they are driven by more than making money, they focus on continuous improvement and they learn from their failures*. These qualities combine to form an organisational culture that is conducive to success and profits.

Another study by Kotter and Heskett (1992) this time also demonstrated that there is a relationship between culture and profitability. Their study took into account not just 18 companies but 200 companies and their results indicated that culture (visionary

leadership etc.,) has a significant effect on long-term economic performance. In financial terms they have given numbers like companies with a constructive type of culture increased their revenues over an 11 year period by 682% and improved their net income by 756% compared to 166% and 1% respectively for those companies that were not adoptive to change.

The above studies have also been used by Eisenberg to criticise the way BPR notion treats culture. He states,

‘Given these studies figures it is ironic that many executives regard values and culture as *soft* factors. Most likely, these executives also do not understand the real value of the knowledge resource in their employees. Companies more often focus solely on making a short-term profit, view employees as disposable commodities, and create unadaptive cultures. A stark example of this is the recent trend of reengineering’ (Eisenberg 1997 : 5).

Thus, with the above discussion and cases on the importance of culture in a change initiative it is not unjustifiable from my point of view to argue that culture is an imperative element and that the future BPR user has to further consider and integrate it with his/her future reengineering practice. Now that I have established that indeed there is a strong connection between culture and change in organisations I will proceed with specific suggestions on how the BPR literature and practice could improve their future thinking concerning the cultural element.

8.3 Suggesting ways for resolving BPR's problems with the Culture Element

While looking back at 8.1 part of this chapter I can now say that culture has never been the strong point of the BPR change programmes. However it seems to me that in any management of change programme, culture is important and in fact a few BPR writers (e.g., Hammer and Champy 1993, Armistead and Rowland 1996) do agree with me to a very limited extent. Therefore this part of the chapter (8.3) will be arguing that the whole of change literature is about culture change and will present the topics which prove that culture is important and therefore suggest to the BPR people to take them into account

and include them in their future BPR activities.

Parts 8.3.1 and 8.3.2 will be mostly concentrating on what needs to be done in the literature to include the element of culture. By doing so I would like to believe that I am directing the future BPR thinkers/users to the points (e.g., dimensions, types of culture etc.) they need to consider and apply most when dealing with the element of culture in their changing organisation. In making the case that the future BPR thinkers/practitioners need to integrate culture in their activities, Part 8.3.3 shows how the above can be applied in practice. Therefore not only the literature problem is tackled but the practical side of it as well. Briefly here I suggest a formulation of a strategy that familiarises people with culture in relation to the BPR activity and I also provide a number of techniques to do that.

8.3.1 A new cultural perception in the future BPR literature

The suggestion here relies on directing the current BPR literature to look at the concept of culture within the organisational theory, its features for example, and to integrate those with its own writings. This could result in the improvement of the BPR literature and the further addressing of the case by its future thinkers that this contributing factor called culture might be one of the factors that is missing from the equation for a successful BPR (a suggestion which tackles the first and second of the findings outlined above: (i) culture has been neglected and not really discussed in the extent that this thesis believes it should have done in order to be integrated with the rest of the important factors of a BPR initiative and (ii) that the authors that refer to it are not specific and are quite uncertain in what it means).

The sub-parts that follow draw on a number of ideas regarding culture in organisations. They present, discuss and integrate the notion of BPR with the types, definitions, dimensions, basic assumptions of culture, a number of factors that influence organisational culture and the resistance of people to change when an organisation is

going through a change activity. Firstly, I look in general terms what is behind this concept and how that can benefit us, the future BPR researchers, if we acknowledge its attributes and integrate them to our future BPR activities. Secondly, I reflect on how organisational culture can make this integration happen in a BPR activity. This, I consider important because it provides the BPR reader with a range of factors that she/he might have to be faced to deal with while reengineering. If they are not aware of these factors and they do not know how these influence and get influenced by their environment, I believe they will make the same mistakes as the people in the coal mine studies made and lead their initiatives to failure. For these reasons I believe is important that the future BPR literature recognises its importance and should try to enrich its readings in those terms for its future readers 'cultural guidance', I would call it.

Briefly the suggestion for the current BPR literature is to examine further the above stated features of culture and see how they react within a reengineering activity. This, I would like to believe, could make the start for further research in the field of BPR, since there are a number of issues that cannot be further analysed within the scope of this research.

- *The Cultural Concept and how that can benefit BPR activities*

The culture concept has borrowed heavily from anthropology where there is no consensus on its meaning (Choi and Keleman 1995). Therefore, it is not surprising that there are so many perspectives and interpretations when it is applied to organisations. The challenge, as Choi and Keleman (1995) put it, is to 'critically evaluate the significance of culture to the study of business and to attempt to synthesise all these views in a holistic model that could prove useful to the international business strategy and organisational field' (1995 : 121). Although the concept of culture began to make an impact on organisational thinking in the late 1970s and early 1980s (Martin 1998), the debate about the nature of culture has been at the heart of sociological, historical and anthropological debates about the relationship between individual action and the nature of society.

One aspect of this debate that has implications for managers concerns the very way in which culture has been defined in terms of different and often conflicting theoretical perspectives (Neal 1998). The major contributors to the debate on the nature of culture include Marx (1975, 1976), Marx and Engels (1946), Weber (1958, 1968), Durkheim (1938, 1961), Dahrendorf (1959), Parsons (1951), Kluckhohn (1951), Kluckhohn and Strodtbeck (1961), Schutz (1967), Schutz and Luckman (1973), Garfinkel (1967), Sharrock (1974), Hall (1974) and Coulter (1979, 1983). Within this debate, the reader can identify two broad levels of analysis, the first being the analysis of the interrelationships between the nature of culture and the nature of a society's institutional, economic and natural environment and the second the interrelationship between individual action and collective nature (Neal 1998).

Based on these two levels, we researchers, for the last two decades, have tried in social science to make sense of what is meant by the term culture. Within management studies, different theoretical perspectives are employed (and the debate continues), and the literature is replete with different and often contradictory definitions (Neal 1998). Martin (1998) also states that 'unfortunately there is no one dominant view of how culture should be conceptualised' and according to Allaire and Firsirotu (1984) there are eight separate schools of thought on what the term culture means. Talking of definitions, there are over 160 definitions of 'culture' alone, as documented by Kroeber et al. (1985) and there is a great deal of new material that has been published recently. A widely accepted anthropological definition of culture is that of Mead (1951); where culture is described to be 'a body of learned behaviour, a collection of beliefs, habits and traditions, shared by a group of people and successfully learned by people who enter the society' (Darlington 1996 : 33).

Despite the variety and ambiguity surrounding the cultural concept, the BPR literature and eventually its readers and practitioners, if exposed to this coverage of material, would

benefit in two ways. As a first positive point, I see for the BPR literature to integrate its material with the cultural change in the organisation. The acknowledgement of the fact that organisational culture literature exists, and needs not to be ignored, since it is a multi-diversified concept, could enhance the learning of the future BPR literature reader. Secondly, culture is a concept that emerges and needs to be dealt with when an organisation is going through any type of change. Therefore, if the future BPR literature makes a greater reference to it, it will be an aid for future users - an educational tool that they can go back to and use as a guideline whenever necessary, instead of having to deal with a chaotic situation and not knowing what to do.

In the early 1980s, culture was defined by Hofstede as the *collective programming of mind and the software of the mind*. In 1997 Lewis defines culture as *the customs, beliefs, art and all the other products of human thought made by a particular groups of people at a particular time*. Deal and Kennedy (1982) look at it as *the way we do things around here*. Other influential definitions of culture in the 80s include Peter and Waterman's (1982) characterisation of culture as *the dominant and coherent set of shared values conveyed by such symbolic means as stories, myths, legends, slogans, anecdotes and fairy tales*. Ouchi (1981) also views culture along the same lines; for him it is a set of symbols, ceremonies and myths that communicate and underlay values and beliefs of that organisation to its employees. For Trompenaars (1995), culture is simply *a shared systems of meanings*. A system of meanings which for Watson (1987) *are shared by members of a human grouping and which define what is good and bad, right and wrong and what are the appropriate ways of members of that group to think and behave*. This is a very similar approach to the one that Schein (1985) takes.

There is, however, one thing that we can say about culture that transcends the debate without taking sides in it. That is, that culture is a concept. As nicely argued by Neal (1998), culture is a concept that is used to make sense of, and explain, the world in which we live [I would add - and interact within]. Taking a step back from the discussion it is

clear that culture is used to integrate and explain a variety of social phenomena. 'It is used both at the academic level and at the management level to explain differences in the plethora of social factors ranging from values, mores, predispositions and organisational structures, to management styles, consumer preferences, worker motivation and negotiating practices. The concept of culture then, is a neat and useful resource in the discussion of social differences' (Neal 1998 : 19); and definitely we cannot deny that it exists and choose to ignore it, especially in BPR practices. Thus, it is my belief that, since BPR is an operating notion in the management world, it should embrace the above ideas, reflect on them and use them in its future literature principles and practice. An example of how that be achieved (where and what the BPR literature needs to look at to enrich its readings) is shown next.

- *Organisational Culture (blending its definition, types, dimensions, basic assumptions, factors influencing culture, and resistance to cultural change with current BPR literature)*

Corporate culture is not a new concept, in terms of the recognition of the influence of organisational characteristics on the way employees think and behave. For Wheatley and Parker (1996), though, what is comparatively new is the idea that an organisation's culture can be shaped or changed by planned, managerial action.

These authors identify three major factors in justifying why this awareness of culture within organisations is an intangible but potent phenomenon, which increased during the 1980s. The first they believe, is the handful of published books that linked organisational culture to company performance (e.g., *In Search of Excellence* by Peter and Waterman in 1982, *Corporate Culture* by Deal and Kennedy in 1982 etc.). As a second factor they view the high performance during the 1980s, of Japanese companies where the focus was on employee involvement and participation (which necessitates deep and lasting changes in structure, management approaches and employee attitudes/TQM, JIT techniques, a trend to which the West was not accustomed at that time). Thirdly, in the authors' view, forces such as recession, privatisation and increased commercial imperatives in every

field have forced almost all organisations to improve efficiency levels, reduce costs etc. Cultural change, in the form of increased empowerment and team-based working, is often sought as a part of those changes (Wheatley and Parker 1996 : 1/2).

This is to indicate that organisational culture is not something that managers have to deliberately design and implement. That is not to say that, because it occurs naturally managers should adopt a passive stance towards it, either. Nor does it imply that managers cannot and should not attempt to create specific cultures. Martin (1998) on this point argues that managers can also have an influence on the form of culture within their organisations. In addition, he takes the view that there is an active relationship between managers and culture (Martin 1998 : 351), something which he sees as an *organisational opportunity* which manifests itself in three main ways : the *control*, the *norms* and the *commitment* advantage elements, which culture can offer to managers if approached in an effective way.

Of course the above can be challenged in terms of other processes that need to be in place as well and the fact that these need to be maintained, which can also be problematic. Overall, though, BPR managers are faced with the dynamic aspect of culture (within which it exists and evolves) which ultimately reflects the political and situational reality, that they have to manage; therefore they need to be aware of how culture is defined, its types, the several dimensions it takes, how it revolves round people and other elements, in order for them to be able to manage it as best they can, under these circumstances.

· Having further established that indeed there is a strong relationship between management and culture this section will continue by revealing and reflecting on the above issues separately.

Definition of Organisational Culture

At a very general level, culture has often been described as the *glue that holds the actors*

together. 'It provides people with a continuing sense of reality. It gives meaning to what they do. Beliefs and values are transmitted visually and orally. Over time, beliefs and values about structure are also documented and transmitted through written or electronic media. However, language is the vital ingredient of culture in that it provides sense and order to infinitely complex contexts' (Hunt 1992 : 115). Culture for this author interprets behaviour, explaining, giving direction, and sustaining energy, commitment and cohesion. It is based on impressions about what matters. Thus, he concludes, this is a topic many 'rational managers' avoid, for it is not concrete or classifiable. Indeed, he adds, 'the managerial obsession this century with order and structural rationality tended to neglect other values of a corporate culture. This obsession was based on the assumption that values about structure and bureaucratisation must be strengthened if large organisations were to survive. Yet this belief in order failed to explain so much about how we feel and know of organisations' (Hunt 1992 : 116). This, I believe, is one of the reasons why BPR writers ignore this element as well. It is a fact that, for example, Davenport (1993) is a BPR - IT oriented author and Johansson et al. (1993) are BPR process oriented authors. This type of thinking, I believe, leaves out the cultural and human contributing factors in the BPR initiative that is undertaken.

Despite the fact that culture has become such a fashionable topic (beginning in the 1980s with the work of Allen and Kraft 1982, Deal and Kennedy 1982, Peters and Waterman 1982, Allaire and Firsirotu 1984, Handy 1986) academics like Eldridge and Crombie (1974), Turner (1971) and Silverman (1970), had drawn attention to its importance much earlier. For instance, organisations were seen by Silverman (1970) as societies in miniature and can therefore be expected to show evidence of their own cultural characteristics. Allaire and Firsirotu (1984) showed that over two decades prior to the work of Peters and Waterman (1982) there was substantial academic literature on organisational culture and they argued that it is the product of a number of different influences (including the ambient society's values and characteristics, the organisation's history and past leadership, and factors such as industry and technology). Culture for

Eldridge and Crombie (1974 : 70) refers to the unique configuration of norms, values and beliefs, ways of behaving and the characteristic manner in which individuals behave in a given set of circumstances. Their view is also supported by Turner (1971) who also observed that cultural systems contain elements of 'ought' which prescribe forms of behaviour or allow behaviour to be judged acceptable or not. This is not to say that this thesis takes a particular view on the matter but to indicate that the BPR writers, whether they like it or not, will be dealing with culture, since is a part of the organisation, part of their employees' lives. Therefore the future BPR readings, I believe, need to see this element as part of their BPR principles and express a view on it. At the same time, a collective reference to the attributes of culture could create an improved view on what culture is and how is formulated for enhancing the BPR activities. The cultural concept could also be a contributing factor to the BPR initiative in case the organisation proceeds with the suggestion to change based on a contextual emergent approach.

This particular approach to change, amongst other perspectives (e.g., bottom up initiatives decision making), promotes the idea that major change in the role of senior managers needs to take place (Burnes 1996). 'Instead of directing and controlling change, their role becomes one of ensuring the organisation's members are receptive to, and have the necessary skills and motivation to take charge of the change process' (Burnes 1996 : 186). Wilson (1992) believes that in order to achieve that, senior management must not only change the way they perceive and interpret the world but achieve a similar transformation amongst everyone else in the organisation as well. A statement that I believe in and I hope that by suggesting it to the BPR literature could make the reader think in broader terms and be able to perceive and interpret things differently from what it does now (e.g., one should not make assumptions on culture but see what is really happening in the organisation and take action).

Discussing this a bit further, we can recall Pettigrew and Whipp (1991) who they contend that 'the degree to which organisations can achieve such a difficult task as

emergent contextual change and create a climate of receptive to change is dependent on four conditioning factors' (1991 : 6). Prior to our reference to those, I would say that this is a good way for BPR managers to correlate culture and their reengineering change in the organisation. This type of thinking could be one of the many ways on how BPR literature could view culture and how to try and improve its peoples' receptive mode when reengineering organisations in relevance to this element. The four conditioning factors described by Pettigrew and Whipp are:

- the extent to which key players in the organisation are prepared to employ environmental assessment techniques that increase openness;
- the degree to which assessment occurs and how effectively it is integrated with central business operations;
- the extent to which environmental pressures are recognised, and
- the structural characteristics of the organisation (1991 : 6).

For other writers like Wilson (1992) and Pettigrew (1990c), corporate culture has remained 'a seductive concept, imbued with a seemingly elixir - like quality for facilitating corporate change and renewal' (Wilson 1992 : 69). Wilson, in his writings, specifies that he cannot give any definition of organisational culture for two primary reasons. Firstly he says, culture lies partially in the difficulty of precision ['seems to be everything in the organisation' – 'is a useful catch-all incorporating broad aspects of organisation including control, commitment, socialisation, manipulation (of groups and individuals) and structure, design and corporate performance (at the organisational level of analysis)']. Secondly, the author states that the notion is not able to resolve the inherent differences which abound in the current definitions in the literature. 'Such incompatibility lies along a number of dimensions, including tangibility - intangibility (culture is viewed as something which is directly manageable, or something much deeper and more symbolic); or culture is viewed variously as an analytical construct or as an applicable variable (culture can only be understood in terms of symbols, subjective meaning, language and context or is a set of identifiable factors which can be managed

directly towards a given end' (Wilson 1992 : 69).

I believe it is important that the BPR literature provides its reader with this range of views concerning the element of culture. This will create a clearer picture on the matter, and according to this diversity they can draw their own conclusions. At the moment, I see most of the BPR writers viewing BPR in terms of something 'tangible' based on analytical terms. I would suggest at the moment that should also be viewed by the BPR literature as an applicable variable. If this were done, I believe BPR readers could gain greater understanding on what culture is, how it is perceived by the people in the organisation, how it affects the BPR initiative; and why people resist it most of the time. This will also lead to placing the notion in a holistic field of thought, where the collection of both perspectives (analytical and applicable considered simultaneously) would be pulled together in order that valuable inputs should not be missed out. This is a helpful contrast since this thesis poses the challenge to the BPR initiators (and authors' readings) to look around, become aware of the cultural element, and see how it is perceived in this context, which will help them in the future with their strategic element in the BPR field. This is also suggested because there are no attempts from the currently examined BPR writers to categorise their views in any way as Wilson (1992) or Pettigrew (1990c) or Pettigrew and Whipp (1991) do, and that is by explicitly defining and indicating types or dimensions of culture (or what to do with them) when reengineering.

Now the question, *how culture is experienced in an organisation and how it is observed and detected*, emerge. A number of authors (amongst them Handy 1986 and 1993, Ouchi 1981, Peters and Waterman 1982, Deal and Kennedy 1982, Trice and Byer 1984, Hofstede 1990) have attempted to answer the above question. Before we take a look on what they have commented on, I would say that these peoples' contribution is great to the organisational literature. Thus, I consider it as a useful and a very powerful information pool (types of culture, basic assumptions and factors influencing culture, etc.,) for BPR learning as well. If the BPR user knows how culture affects and its affected by BPR's

activities, I believe he/she will be ready or at least be prepared to tackle any problems that might arise in future situations.

Types of Culture

Handy's (1986 : 182-191) observations gave the reader four main types of culture; the power, person, task and role types of culture, found in the organisation (these are further explained in the following part of this section). He also believes that the role and task cultures are the most frequently found in today's organisation. One criticism of Handy's categorisation of culture, though, is the fact that it fails to give sufficient emphasis to the influence national cultures have on the types of culture which predominate in particular countries (Burnes 1996). The remedy to this criticism came from Hofstede (1980 and 1990) who suggested that national cultures could be clustered along the lines of their similarities across a range of dimensions. He defines culture as the mental programming on the basis that it predisposes individuals to particular ways of thinking, perceiving and behaving. His work was based on extensive questionnaire-based research data, derived from the analysis of responses of 72215 IBM employees working in 40 countries (Hofstede 1980 : 411). In these questionnaires he asked employees about their work, their organisation and the relationships with superiors and subordinates. The contribution to knowledge within the book came in the form of statistical analyses of these questionnaire responses.

Dimensions of Culture

Pulling together certain key questions, Hofstede developed four dimensions of culture: (a) power distance (the degree of centralisation of authority and autocratic leadership), (b) individualism - collectivism (this relates to the degree of integration between the individual and society), (c) masculinity - femininity (the division of society here can be based on the gender of the individual or can be gender free), (d) and uncertainty avoidance (a dimension which describes the degree to which uncertainty is tolerated or avoided by the people) (Hofstede 1980 : 315). For example in Denmark, Sweden and

Norway the cultures are based upon values of collectivity, consensus and decentralisation. In countries like Switzerland, Austria and West Germany (before unification), cultures are grouped together largely as valuing efficiency and seeking to reduce uncertainty. In other countries such as Australia, New Zealand, USA, Canada, Netherlands and UK, the culture is placed on strong individualistic values and achievers in society. Lastly in nations like Japan, France, Belgium, Spain and Italy we see bureaucratic tendencies, the pyramid structure, favouring a large power distance (Hofstede 1990 : 403).

Hofstede's work has been heavily criticised by Dorfam, Howel and Bautista (1986) and Robert and Boyacigiller (1984). This is not to say that we should not acknowledge his contribution to knowledge; rather we should examine his work further. This chapter's aim is not to identify what went wrong in the above author's findings and research but to explore them within the notion of BPR and point out to the reader of the current BPR literature and the BPR manager that there has been much written on corporate/organisational/national culture of which it would be beneficial for them to be aware, with the hope that if they do so, it will be easier for them to handle their BPR initiatives. This is a view that the current literature neglects to present.

A research similar to the IBM studies but focusing on organisational rather than national cultures was carried out by the Institute for Research on Inter - cultural Cooperation (IRIC) in the Netherlands (Hofstede 1995). Data were collected in twenty work organisations or parts of organisations in the Netherlands and Denmark. The Units studied varied from a toy manufacturing company to two municipal police corporations. As mentioned above, the study found large differences among units in practices (symbols, heroes, rituals) but only modest differences in values, beyond these, due to such basic facts as nationality, education, gender and age group.

As stated by Hofstede (1995 : 160-162), six independent dimensions can be used to

describe most of the variety in organisational practices. Those six dimensions can be used as a framework to describe organisational cultures, but the above research was based in 20 units from two countries, a sample, which is too narrow to consider the findings as universally valid. For describing types of organisations, additional dimensions may be necessary or some of them may be less useful (see also Pumpin 1984). Prior to mentioning these dimensions, this thesis shares the critique Hofstede imposes to this research but, considers this research important in terms of indicating to managers of a BPR initiative some of the issues they have to look for/or expect to find when engaging themselves and their companies in a cultural change activity. This can also be a valuable pointer towards their future decision making on their organisational strategies.

According to Hofstede (1995) then, those dimensions reveal,

- process - oriented versus results - oriented cultures (The former are dominated by technical and bureaucratic routines, the latter by a common concern for outcomes. The degree of homogeneity of a culture is a measure of its 'strength' : the study confirmed that strong cultures are more results-oriented than weak ones, and vice versa (Peters and Waterman 1982)
- job - oriented versus employee - oriented cultures (The former assume responsibility for the employees' job performance only and nothing more; employee-oriented cultures assume a broad responsibility for their members' well-being)
- professional versus parochial cultures (In the former, the usually educated members identify primarily with their profession; in the latter, the members derive their identity from the organisation for which they work)
- open system versus closed system cultures (This dimension refers to the common style of internal and external communication and to the ease with which outsiders and newcomers are admitted)
- tightly versus controlled cultures (This dimension deals with the degree of formality and punctuality within the organisation)

- pragmatic versus normative cultures (A flexible or a rigid way of dealing with the environment - it measures the degree of customer orientation, which is a highly popular topic in the management literature).

Our reference to Hofstede's work, as stated earlier, is not to take his work further but to build on to it, in relation to BPR. In other words if the BPR literature were to refer to his work (as we have briefly done) it would be beneficial in two major ways. Firstly, BPR managers would be exposed to the above stated dimensions and it would be easier for them to identify which category their organisation falls into before and after a BPR initiative (irrespective the country) takes place. This would help them to plan and manage the initiative based on those findings relevant to their organisational structural analysis. Secondly, the organisation undergoing a BPR initiative could engage itself in a small scale research to identify what type of culture it has and decide what can be done about it [e.g., if it has a multi national group of people, a proposal could be to tailor the company's needs (people, IT, timing needs etc. - refer to the relevant to this thesis' chapters)] to the BPR initiative's objectives.

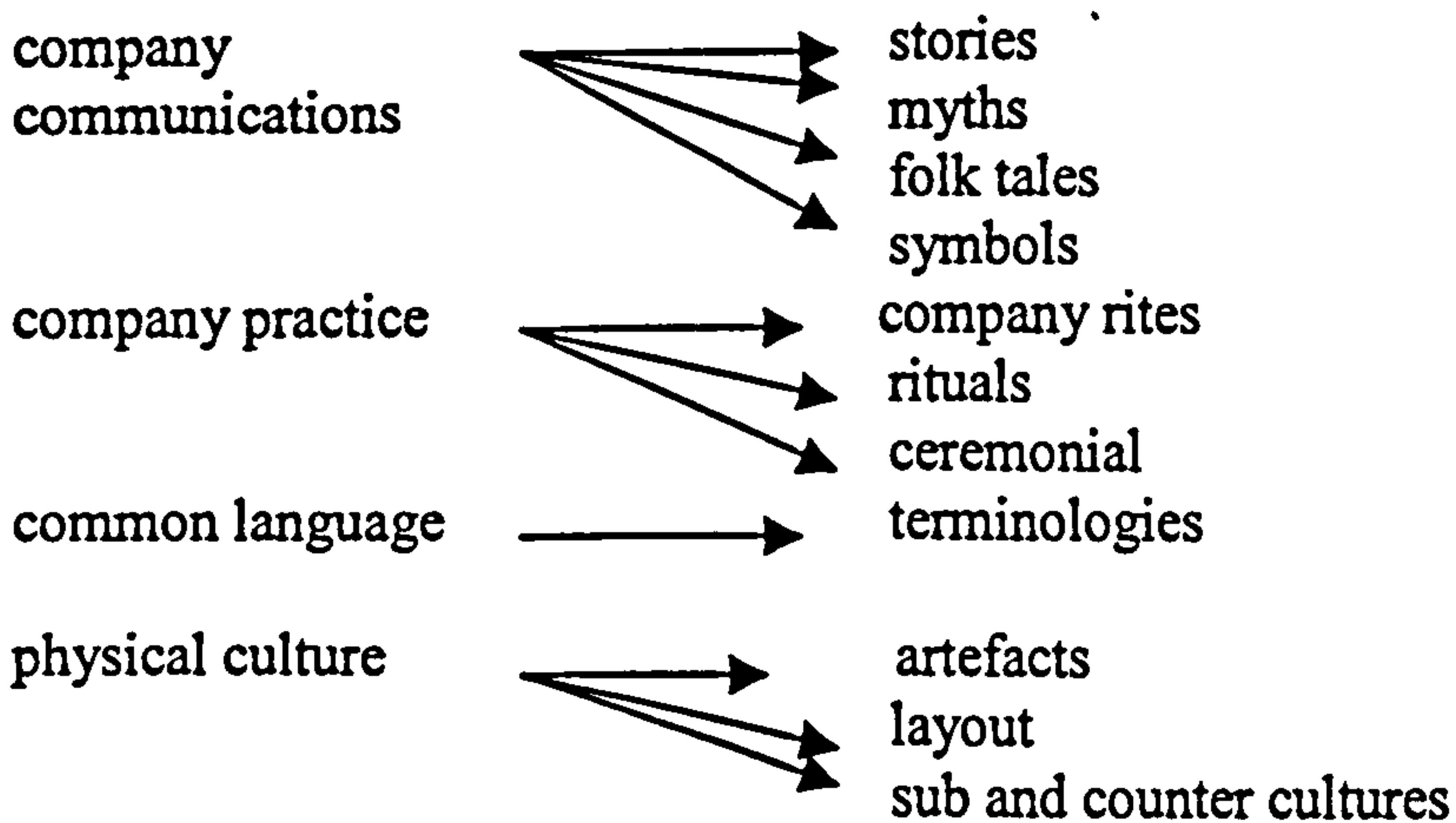
Basic Assumptions

Hunt (1992) indicates that there are also some basic assumptions that underlay culture (see also Kluckhohn and Strodtbeck 1961). Referring to those it will provide an opportunity for the reader/practitioner/manager of the BPR literature to find out that even when two organisations are in the same line of business, they still differ in cultural terms but they should note that the following can be common for all organisations, so they can be prepared for what to look for, and where:

- the issue of our place in society

- the issue about time and space
- the issue about human nature and
- the issue about human relationships (Hunt 1992 : 117).

I believe that this categorisation can also find further support in Trice and Byer's (1984) organisational culture description where they describe eleven elements that go to make up an organisational culture. Martin (1998 : 340-342) suggests that those can be grouped together under four categories;



Factors influencing culture

Despite the use of the above categorised cultural elements, when managing organisations and when management is getting things done through (other) BPR people (Hofstede 1995 : 150), it is necessary to be aware of the several factors that exist and influence culture. Handy (1993 : 192-200) indicates a number of determinants of culture. The principal ones, in his view are:

- History and ownership of the company (evolving cultures due to norms, preferences, procedures, policies adopted by the organisation)
- Size of the company (e.g., small organisations - less formal, large organisations - formal)
- Technology used by the company (emphasis on technical skills versus personal service towards the customers)
- Goals and objectives (what is set out to be achieved will also affect the culture of the organisation)
- The environment the company operates in (economy, market, competitive scene, geographical and societal environment) and
- The people in the company (style of management and acceptance or

resistance to it).

These are factors that will affect culture in their own particular way. Thus BPR managers should be aware of their existence and, I believe, incorporate them into their future strategies. An example of a company⁷⁹ that was undergoing a considerable amount of cultural change can be found in Watson's (1994) *In Search of Excellence*. This example also illustrates that managers or, in our case, BPR initiators, in attempting to modify culture are bound to receive a number of reactions (e.g., resistance to change - see the section that follows) to the process from people within the organisation. Whether those are positive or negative, is not our concern. What this thesis is concerned with, is the fact that managers should be ready to deal with those (since they will be expecting them to take place), rather than passing on the responsibility to others (as seen at the beginning of this chapter based on the current BPR literature reflections and findings on the matter).

Resistance to Cultural Change

More specifically, Watson's (1994 : 109-134) findings in relation to peoples' reactions to this process were not very encouraging, either for ZTC Ryland and its employees or the author himself. To begin with, resistance from all levels was occurring, in the senior managers' lever, lack of commitment, understanding and ability to manage were identified; there was no specification what culture was and generally a degree of confusion regarding this element was detectable. Lastly and quite sadly, there was a shared belief that changing the culture was just another initiative to secure the senior members of the company a further career.

This is where a knowledgeable manager (leader) takes charge. Such a cultural change involves changes in people - in their behaviours, attitudes and values - which depend upon their willingness to learn about themselves and the way they think and work. This is the point this thesis is stressing to BPR initiators, based on the highlights of the natural and sometimes inevitable nature of resistance to change. It also considers the above to be of a vital importance to the BPR procedures (because people are able to vent their feelings, and have their problems heard). Culture has to become a part of the important elements that need to be transformed/or tackled in an initiative such as BPR; that can only be done if the literature on the topic endorses this element, in

addition to acknowledging its importance, also comments further on it and addresses how it can affect those procedures and how managers could deal with it. In doing so, culture will be placed in a broader context (this is one of the suggestions this thesis makes to deal with this problem - see also following part) and BPR managers would be able to deal with it more freely and with greater success (more efficient in those terms). This view is supported mainly because a change in culture asks for much more than compliance or pretended agreement. If the managers' objective is merely to change behaviours in the sense of obtaining compliance, as Anthony (1994) points out, that is comparatively easy to achieve through a combination of communication and training programmes, together with the implementation of appropriate structures and procedures. This is not enough, though. In a BPR context, I would argue 'a culture in change would seek the involvement and commitment of employees in building a successful and responsive organisation. In return it will offer them, job satisfaction, autonomy, career development and recognition and achievement' (Wheatley and Parker 1996). How can a BPR manager achieve that?

An interesting view on how individuals react to organisations that undergo major cultural change is also given by Hopfl et al. (1994). After examining British Telecom's Case⁸⁰, they present the reader with exceedingly interesting insights. Their view is in contrast to the whole notion of cultural change in organisations. It is one which considers the cultural changes brought in that organisation as a barrier instead of an enabler to the change initiative undertaken. This particular reading may also be viewed as shedding light on why resistance occurs in a BPR case.

The reading from Hopfl et al. draws together on work culture and quality, reviewing briefly the literature and reporting the experience of managerial attempts to change culture and introduce TQM. Such programmes, they argue, are likely to evoke quite contradictory feelings, with employees vacillating from *excessive commitment* to *excessive resentment*, in a confused and painful questioning of their own identity. Naturally, the question why this happens arises. Hopfl et al. explain this by arguing that the introduction of change programmes in companies 'have promoted debate, scepticism, evaluation of corporate meaning versus the personal meanings challenged espoused values' which in their turn 'had the effect of raising issues which had previously taken for granted' (1994 : 378). According to this phenomenon, individuals

are able to explore antithetical views in their working environments, analyse and understand their role in the process, and reflect on these relations and their subjective experiences. Such processes, as stated by the same authors, are 'inevitably painful and employees may vacillate between excessive commitment, where the company is perceived to be the source of all disjunct experience' (1994 : 378) a situation which, according to these authors, would result in 'a confusion because the corporate survival and meanings are confronting the individual meanings and the awareness of mortality which raises questions about the issue of their very identity' (1994 : 350). This is an area which definitely requires further empirical research on a greater scale, since it allows the reader to view how a change programme might affect a number of employees at the workplace and in what extent. This is though, beyond the limits of this particular thesis. For Hopfl et al. (1994 : 379), culture change programmes have also opened up the distinction between *management development as a motivational technique* and (Vs) *the management development as a development of a person*. They indicate that if this is recognised by today's management, the debate that has been taking place for a number of years now, will also still be a challenge for the management development of the 90's. The reason is that, 'this way of thinking fosters a more balanced style of management, a more critical perspective, a healthier appreciation and greater awareness of the performance aspects of work' (1994 : 379).

This thesis contends this challenge as well; the above can also make a great contribution to the cultural ideas that exist in the current BPR literature. The development of management and the development of the person need to be brought forward, discussed and dealt with sincerity. In what other terms and how BPR literature could approach culture, in order to remedy this problem and overcome its deficiencies are considered next.

8.3.2 Placing BPR in a Sociological context

Adding to the above suggestion, this part will give another suggestion on how the BPR thinkers should think of culture and that is deriving once more from the findings in the BPR major readings which indicated that, (i) culture has been neglected and not really discussed in the extent that this thesis believes it should have done in order to be integrated with the rest of the important factors of a BPR initiative and also

because (ii) the authors who refer to it are not specific and are quite uncertain in what it means. This is demonstrated by drawing mostly on Wilson's (1992) analytical way of managing change in the organisation.

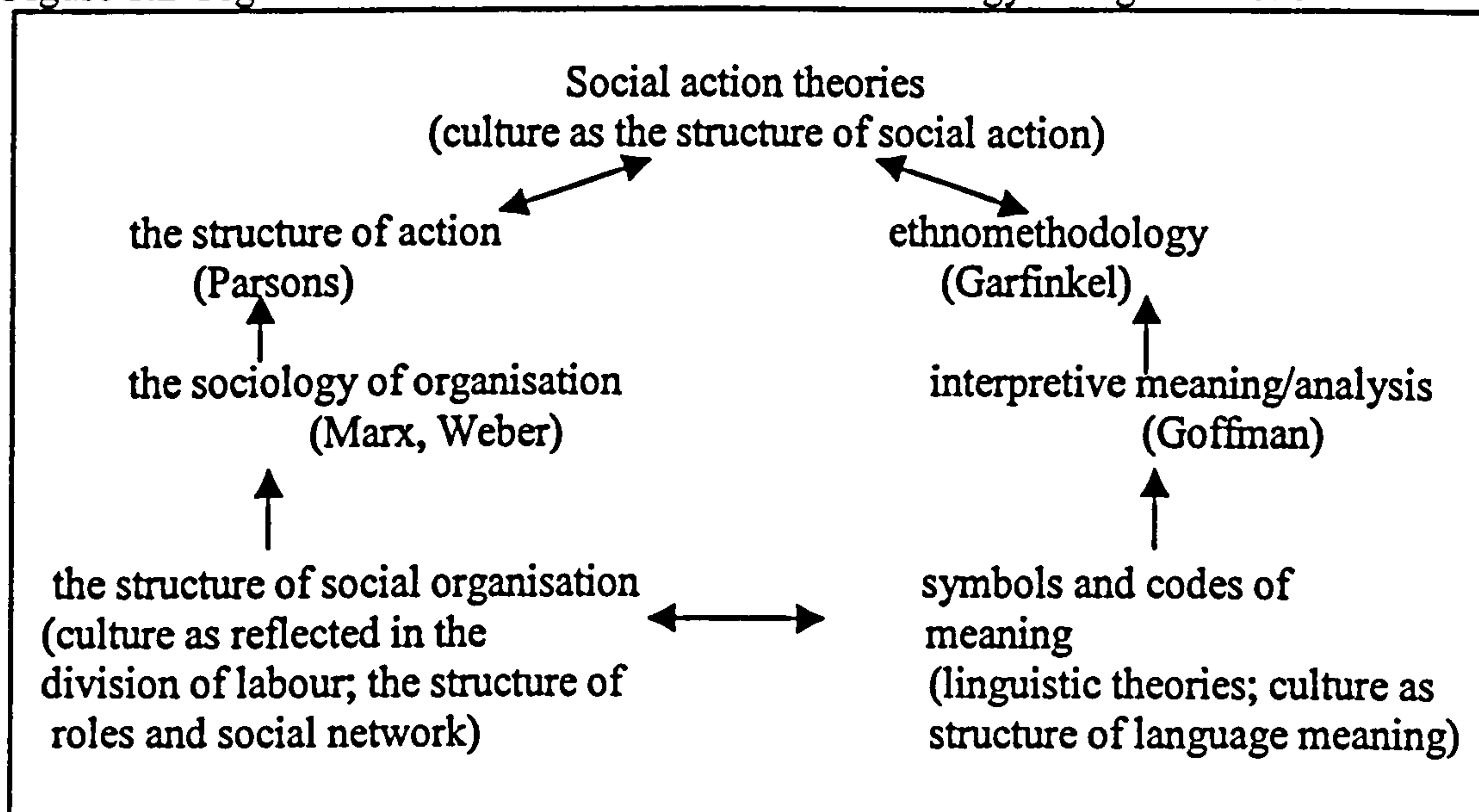
This is a way, which I believe if adopted by the future BPR users will benefit their thinking and practice in two ways:

- (i) they will be able to see their activities not only in structural terms (processes, responsibilities, IT infrastructure) but in terms of culture and symbols, peoples needs in the organisation;
- (ii) in achieving the above they will be equipped to think into integrated and holistic terms for a BPR initiative. In other words they will be able to combine what these two analyses have to offer them and translate that into an efficient decision making (for example that might determine their weaknesses, and strengths) that strives towards a successful BPR initiative.

Thus, the reason why I use this extensively is because I felt that this particular reading reflects on ideas drawn not only from a structural point of view but ideas from cultural change point of view in organisations. A set of ideas which I am trying to present, explain and suggest that they can be beneficial to the future BPR literature and its practice to integrate with (e.g., how cultural organisational change is perceived and how BPR literature is viewing and could view this concept).

Wilson (1992), in his book *Strategy of Change*, examines a number of theoretical and empirical approaches, each of which has arisen and been developed under the banner of organisational culture. This was an attempt to lead to a critical evaluation of the concept as it relates to organisational change. Firstly, though, he felt the need to locate the concept of culture within some overall framework, in order to see how it fits in relation to other theories of organisation. This, according to the author, was not an easy task to carry out but he achieved his objectives; the reason why this thesis makes a reference to this reading, at this point in the research, is to correlate his way of analysing and perceiving culture, with how BPR literature - thinkers/writers/managers should think and approach the notion (see Figure 8.2).

Figure 8.2 Organisational culture in the context of sociology in organisations



(Source : Risto 1990)
(Adapted from Wilson 1992 : 71)

Wilson (1992) draws on Wilson and Rosenfeld's (1990) writings, where the reader can find the distinction between the applicable and the analytical approaches to organisational culture⁸¹ (see also Wilson and Rosenfeld 1990). That distinction, though, only illuminates one facet of the concept and distinguishes primarily between the different uses to which organisational culture is put. It does not locate the concept in sociological space (Wilson 1992 : 70). In building on that point, Wilson borrows a framework and an analysis given by Risto (1990), which provides the reader with a framework within which it is possible to locate the main cultural approaches to organisations (refer to Figure 8.2).

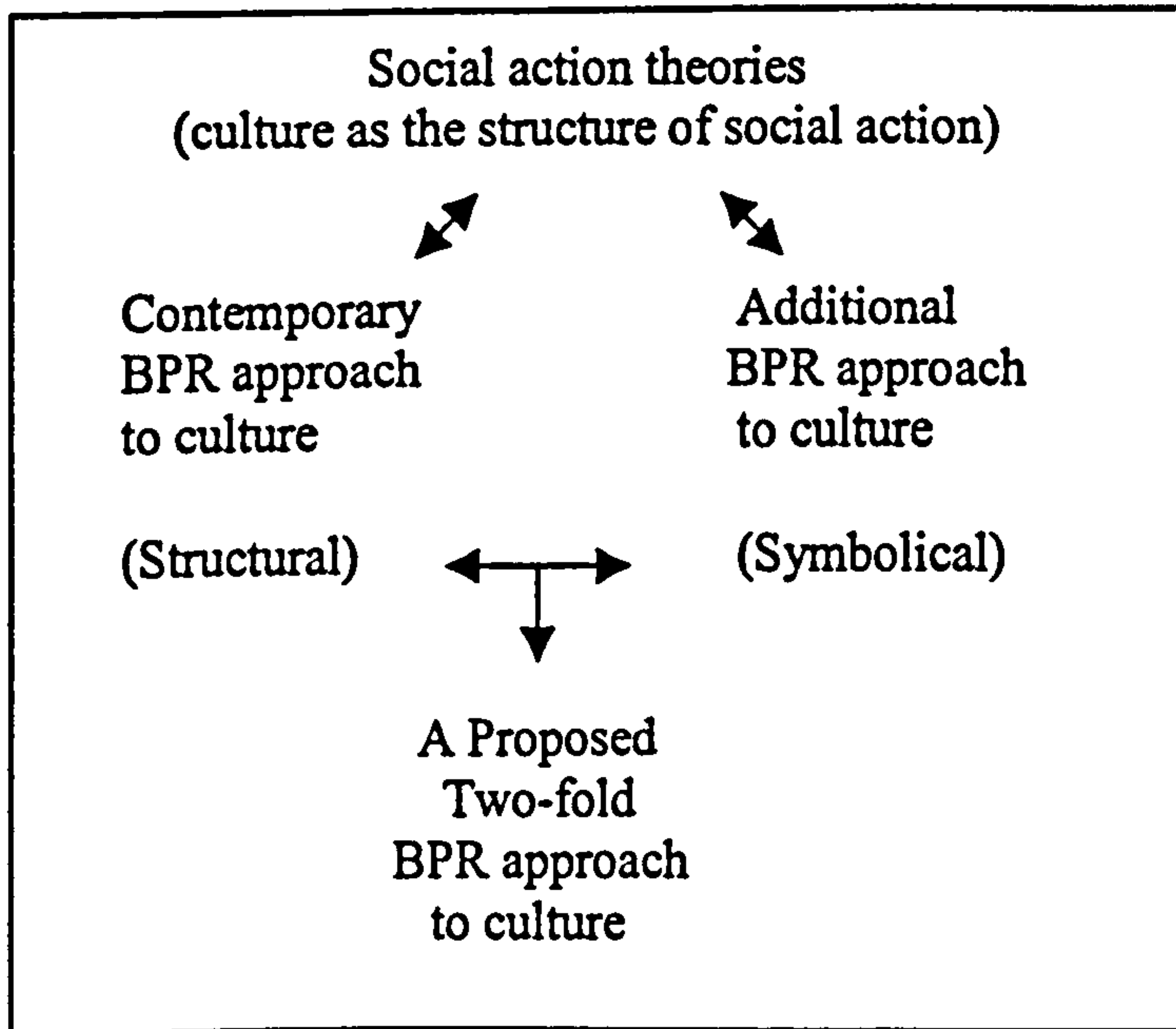
Placing organisational culture in the context of three distinguishable approaches to the sociology of organisations (the structure of social action - refer to Burrell and Morgan 1979, symbols and codes of meaning and theories of social action) (Wilson 1992), allows different approaches to culture to be analytically separated as well as considered at different levels of analysis. This point, I believe could make a good suggestion in the way BPR literature thinkers and users should look and approach culture in the BPR field. It would be easier to deal with it, if they were aware within the BPR literature itself how culture can be analysed and perceived. In doing so, the current confusion regarding culture in BPR could be eliminated. Expanding the literature that is reflecting on the cultural element, would also make it easier for the

managers involved to identify what types of action need to be undertaken to redress this problem.

What this thesis considers as most important when looking at Figure 8.2 is the distinction between *interpretive* and *structural* view(s) on culture. This is because, in doing so, we will summarise the above stated sociological approaches into these major categories; these will then point out how culture is best viewed and perceived in organisations. This can be correlated with the way BPR literature currently views culture and how it could possibly view culture and endorse this way of thinking, in explaining how that element affects its initiatives. From the study of the current literature, this thesis concludes that the majority of the writers' readings examined, fall within the structural way of dealing with the concept of culture if placed on Figure 8.2 (bottom left). A suggestion here would be to consider culture also in terms of codes of meaning (e.g., based on language). This could result in the broadening of the way people in organisations (readers and practitioners of the BPR literature) think and react to the concept of culture. The use of both categories, I believe, would also allow for a field of diversity of opinion and action taken at the same time in the BPR process of change, which would result to greater consideration of a number of concepts which I believe are contributing factors to the BPR initiative if thought through properly - e.g., Culture, Humans, IT/IS, Time etc. This approach could also lead to higher rates of success for the BPR initiative, since more positive oriented factors will be collectively contributing to its success. This is also a way for the current BPR literature to 'fight back' against the critique it receives concerning its mechanistic way of thinking and applying BPR.

If we were to incorporate BPR graphically within Risto's (1990) sociological context of organisations, I believe it should look as follows:

Figure 8.3 BPR literature's perception of changing culture in a sociological context



Let us now, though, examine two major categories to which we referred earlier on. For Wilson (1992) there is a major distinction between *interpretive* and *structural* views of culture. *Interpretive* views hold organisational culture to be something created through symbols. Goffman (1982) gives a number of examples here and Mangham (1986) takes it a bit further by applying the behaviour created from such views in decision making. For both authors, though, the key identified factors in doing this are the performance itself and the individual's belief in his or her performance. Wilson (1992) argues that following an interpretive view of culture lead us to a very different analytical and methodological perspective on how sense may be made of organisational change. Instead of looking for clues in the structural and strategic patterns of organisations, it is noted, an interpretive view requires that change is analysed from the perspective of the individual's definition of the situation as he or she interprets it.

'It is no longer sufficient to account for change as a sequence of processes sustained by a friendly and supportive organisational culture. What fundamentally matters are the cognitive and interpretive processes by which individuals either support change, facilitate it for others, or seek to destroy it. Thus interpretation, symbols and language lie at the heart of this view' (Wilson 1992 : 78).

Of course this interpretive view of culture can be challenged in being more obscure

and less readily analysable than the structural perspectives. This is not inevitably the case and good and solid evidence of the potency of symbols can be found in almost every organisation (e.g., individual dress 'codes', corporate logos). A good example here was the BT controversy over its new corporate logo (what did it signify, and what was wrong with the old one?) and also about the cost of changing the company's logo (£50 million) (Wilson 1992 : 78/79). Contrasted with the shedding of almost 11,000 jobs between the years 1990-1991 trade unions appeared to be convinced that the new symbolism was worthwhile and that it was taking primacy in the context of change rather than the issues of labour relations, organisational structure and strategic decision making (Wilson 1992).

The same occurs to the language aspect of this view (more can be found in Kilmann 1976, Pettigrew 1979). What was used previously in the literature of change management as vocabulary certainly differs from that used today. The work of Lewin (1951) can be quoted here. He focused on the social psychology of organisations, i.e., he was primarily oriented towards examining the relevance of theories to organisational practices (taking concepts such as small group behaviour and seeing to what extent it helped explain what was going on in a specific organisational change exercise). In today's researching environment, what is found is colourful metaphors,

'Virtually everything that moves within the organisation is subject to metaphor: organisations are no longer described by what they produce or do; they have mission statements instead, organisations are no longer run by managers but by heroes...' (Wilson 1992 : 80).

This, it is noted, is not to say that using metaphors is not beneficial but to alert to the reader the dangers of employing metaphor as a substitute for knowledge and as a shorthand device for describing an assumed consensus (Wilson 1992). The above transition of language example clearly indicates that language is something that should be considered as an area with its own distinctive characteristics, which needs to be dealt alongside the structural perspectives in the BPR organisational initiative. Thus, structure, language and symbols all need to be given emphasis when reengineering. Otherwise, as seen from what has been written so far, concepts like culture will be neglected and problems (e.g., resistance to the change, communication problems) will more readily emerge.

Despite the fact that interpretive studies of change in complex organisations are relatively rare there are particular areas of human activity that the interpretive approach has well researched (Wilson 1992). Deaths, hospital, suicides, police activity in dealing with down-and-outs, dental practice and gynaecological clinics have all been focuses of study (see also Garfinkel 1967, Sudnow 1967). In examining the history of publications on the matter, we see Silverman (1970) and Clegg (1974) pleading for understanding organisational phenomena from a common-sense perspective (and that is from the individual's perspective) and empirically studying that. During the 1980s it seems that structuralists virtually dominated all aspects of strategic change but the work of Pettigrew (1985) and Hickson et al. (1986) gives a new breeze to the movement (for instance Pettigrew analyses the change factor in terms of interaction between individual perceptions of managers and more macro - contextual factors, and Hickson combines the above with the strategic element of the decision making of these individuals).

By the early 1990s researchers started linking organisational change and interpretation more explicitly. It is relevant to refer to this, because the BPR literature could see how this influences peoples' way of thinking when cultural change occurs in the organisation and take a much more pro-active approach accordingly. Based on that, and because I consider BPR as another form of change (which of course carries its own distinct characteristics), is something which could make the reader of the BPR literature familiar with such a (future) possible scenario as the one shown and discussed in Isabella's work back in 1990; a work which is based on Quinn and Kimberly's (1984) reading. Isabella views organisational transition as itself subject to change. Therefore interpretation is vital, since acceptance of any change confirms what was previously novel and ultimately turns innovation into routine. In this reading (1990 : 7-41) four key interpretation stages⁸² were identified; a. anticipation, b. confirmation, c. culmination and d. aftermath. Wilson (1992) here argues that these findings of interpretive approach anchor the notion of corporate culture into personalisation, which this thesis would like to take and introduce to the BPR thinkers.

Indeed, there is criticism unfolding for this subjective interpretation [Wilson (1992 : 72) here says, 'As has been the case throughout the history of organisational theory,

the structuralists have emerged with a greater volume of empirical research at their disposal (compared to the interpretivists), often coupled with an overriding normative conviction that certain cultures and structures supported organisational change whilst others hindered or detracted from its realisation'], yet, it would be unwise to dismiss the interpretive approaches as unattainable or as any less useful than structural approaches in analysing organisational change. As already stated above, the 'personalisation' factor can nicely blend and correlate with the BPR notion. Based on Isabella's (1990) findings, the question for BPR thinkers/users would be reflecting 'what the changes will mean for them'; in order for that to be answered though, individuals need to make sense of the information they have and piece it together within the context of current and past organisational events.

'Predictions can also be made, therefore, by individuals about how they will fare in the future scenario. They can decide whether or not to see the change through, or perhaps look for alternatives within the same or different organisation' (Wilson 1992 : 82).

Interestingly, the counter - positioning of structural approaches to culture against the interpretive analysis leads to 'something of a dilemma'. Wilson (1992) mentions the above in order to point out to the reader that the two are at work simultaneously and both have to be considered as key factors in explaining both the processes and the outcomes of change. In sharing this view, I strongly believe that firstly, future BPR literature should indeed indicate that cultural approaches exist and that its users and readers need to be aware of them when engaging in a BPR activity. And that is not only to deal with peoples probable resistance to change but also advance their knowledge and understanding on issues like organisational values, teamwork, the purpose of being multiskilled. Secondly, that both structural and interpretive analyses can bring to light key factors that could be valuable to BPR managerial decision making.

When analysing culture in terms of *structure* 'the whole issue relies on how roles are structured together to form particular organisational designs. Therefore the shape or configuration of an organisation becomes an important facet of its culture' (Wilson 1992 : 70). There is not really much to say about this, since it is a very simple and straightforward element. The author also believes that organisational culture and

organisational change are inextricably linked with each other that they are cast in a linear fashion and that they are unidirectional. One could also say that the above statement and comments by Wilson are similar to Tom Peters' (Peters and Waterman 1982) approach of achieving organisational 'excellence' through the management of organisational culture, something on which I agree. Certainly, that movement (in the last decades) was also aided by the whole consultancy industry which apparently sprang up overnight to help a variety of organisations to achieve that excellence (Wilson 1992).

Handy (1986) can also be quoted here, and that is because of his widely known distinction between four typologies of organisational culture. We refer to those in order to explain what is meant by the structural approach to culture within the sociological context as it has been put to us by Risto (1990), and also indicate to the current BPR literature that this amount of information exists and it would be useful if it were to be incorporated in its writings in the future. This could prove beneficial to the reader of the BPR literature as the literature would then be in a position to provide to its readers with a guide to different points of view that exist in the sociological world regarding organisational cultural change in relation to a reengineering change.

Handy here (1986) draws on Harrison's (1972) reading to describe those cultural roles found in the organisation. The first author represents a specific attempt to describe the division of labour, the structure of roles and social networks. Take, for instance 'power cultures'. These are those cultures which, according to Handy (1986 : 183), are those controlled by a single individual or a group. This power centre determines the culture, since the structure of the organisation allows the all-spider⁸³ to control key organisation processes (e.g., decision making) in whatever way is deemed suitable. The second type of culture is the 'role culture' which is often stereotyped as bureaucracy (Handy 1986 : 185). This culture works by logic and by rationality and is appropriate to organisations with mechanistic, rigid structures and narrow jobs. 'The role organisation will succeed as long it can operate in a stable environment. In essence role cultures create situations in which those in the organisation stick rigidly to their job description (role), and any unforeseen events are referred to the next layer up in the hierarchy' (Burnes 1996 : 113). This is followed by 'task cultures'. Handy (1993 : 189) here observes that the task culture is job or project oriented and

accompanies a structure that can be best represented as a net with some of the strands of the net thicker and stronger than others. The focus here is on getting the job in hand done, rather than prescribing how it should be done. This type of culture is appropriate to organically structured organisations where flexibility and team working are encouraged. The task culture, therefore, thrives where speed of reaction, integration, sensibility and creativity are more important than depth of specialisation or any adherence to particular rules or procedures and where position and authority are less important than the individual contribution to the task in hand. The last type for Handy is the 'person culture'. It is argued that this is an unusual one and rarely found. Despite the fact that it is not found to pervade many organisations, yet many individuals will cling to some of its values. In this culture, the author believes that the individual is the central point; 'if there is [he states] a structure or an organisation it exists only to serve and assist the individuals within it' (Handy 1986 : 189). Furthermore, this type of culture is also associated with a minimalistic structure, the purpose of which is to assist those individuals who choose to work together. Thus, a person culture can be characterised as 'a cluster or galaxy of individual stars' (Burnes 1996 : 113).

In addition to the above, Wilson (1992) notes that both the interpretive and the structural views of organisational culture lead towards very different interpretations of the process of organisational change. This is something, which this thesis acknowledges, supports and suggests (by pointing it out to the BPR readers/users) that if BPR managers know that this is happening (the two analyses - interpretive and structural - taking place simultaneously), they can now, view culture from a completely different perspective. Thus, a *twofold suggestion* here would be firstly for the future BPR literature to cover both of these analyses in order to point out to the BPR reader that they are in existence, waiting to be put into practice. An example how to do that is by incorporating the discipline of culture (use a number of pointers like the types of culture etc.) in the BPR literature to see how BPR reflects on that as I did in the previous section of this chapter. Secondly for the BPR practitioner to strike a balance (in perception and at practice) between the two approaches to achieve greater results when dealing with the cultural change factor (its attributes, features and its effect on the people that reengineer or will be doing so) in the organisation. This can also be achieved if for instance the BPR manager himself undertakes a short

training course on how culture affects his/her organisation's change initiatives in structural and analytical terms. I am sure that provided the finance to do so, many professionals like academic institutions or culture consultants can offer their services to the needy managers. In doing so I also believe that these managers will be equipped with the right knowledge to enable them to make the right decisions for culture in a holistic BPR change initiative. Thus, in suggesting the above it solves the earlier problems identified in the examined BPR literature.

8.3.3 Formulating a strategy that familiarises people with culture in relation to the BPR activity and a provision of a number of techniques on how to achieve that

This suggestion reflects on the third problem identified at the early stages of analysis of this factor; the idea that the current BPR perception lacks of a direction in terms of what managers should do and how to deal with culture in the future. The suggestion here is to formulate a strategy that familiarises people with culture (their own in relation to that of the organisation) and provide a number of techniques for achieving that (e.g., provision of necessary training within specific time limits), and also to adopt a scheme which identifies and enhances employee competencies. A next step for those managers, could be to think on the alternatives that will help them to deal with individual BPR cases and also aid the process of modifying culture in the organisation, if that proves to be necessary [this, according to Neal (1998) can also be done through human resource policy, training and language schemes - (1998 : 96)]. If, then, BPR managers are going to take seriously the possibility of work organisations in manipulating and shaping those cultures in their organisations, Watson (1994 : 18) could be useful to look at, since he suggests that they should fully recognise the significance of the 'variables' they are/will be dealing with (as already stated in part 8.3.1).

Firstly, Watson argues that managers - people have to consider their *understanding of human nature*. This is because without doing so they will have little appreciation of the role that culture plays in human life. Secondly, they have to *recognise how limited or bounded individual's human rationality is*. Much of the time in the workplace and in life generally people navigate their way in the dark. What helps them to navigate and provides resources for them in finding their way through in the dark is culture.

Thirdly, people here *need the key role played in it by story - telling*. As a fourth point Watson suggests that *the importance of language should also be considered*, and by that he means not only human communication but the very process of human thinking and decision making (Watson 1994 : 18). This thesis suggests that BPR managers think of the above four elements as a 'four - part strategy' (analysed below) that they can endorse in their initiatives and further adopt, in dealing with the practical side of managing/trying to manage the culture in their organisation; and of course these are in addition to the overall suggestion to the BPR literature of viewing culture not only from the known aspect of structure, but from the interpretive view as well.

The four elements of this 'suggestion' offered by this thesis can be further broken down; firstly in terms of *time* (time allocated to the specific activities undertaken by each element), secondly in terms of *material covered* (for instance, an induction course by an academic on the culture and its dimensions could be an answer to solve the non awareness of the term culture in relation to BPR and how it affects this specific initiative) and thirdly, in terms of people's motivation. The management of a company could also introduce *an integration team*, which could deal directly with any current or potential cultural problems in the organisation. This is suggested because, within such groups, subtle but pervasive socio-cultural dynamics can be dealt with openly, honesty and directly. On the top of that, it is a cheap and an effective way of dealing with culture. Neal (1998 : 59) asserts the effectiveness of such integration based on his experience of trying to manage international cultures for more that two decades. However, since this is just a suggestion, more research needs to be applied to see what are the benefits of that part of this strategy.

In addition to the above I would also suggest to a company which would undertake a BPR change programme, a sort of a scheme which enhances its employees competencies. Such a scheme could look like the one introduced in ZTC Ryland described by Watson (1994 : 225-228). Such scheme could be broken into three parts and direct not only the managerial staff competencies (as indicated by Watson 1994) but also the rest of the employees in the organisation as well. Table 8.2 gives an indication of how that can be accomplished.

Table 8.2 A suggested scheme for identifying and enhancing employee competencies in a BPR initiative

I. Personal Orientation (what a person currently is)

- a. Achievement and results orientation
- b. Initiative
- c. Decisiveness and self-confidence
- d. Commercial orientation
- e. Adaptability and capacity to learn

II. Cognitive Style (how a person thinks)

- a. Vision and strategic thinking
- b. Information search
- c. Use of Concepts
- d. Credibility
- e. Judgement and decision making

III. Interpersonal Style (how a person relates)

- a. Sensibility and listening
- b. Impact and persuasiveness
- c. Planning and organisation
- d. Presentation and communication
- e. Leadership, team building and maintenance

(Adapted from Watson 1994 : 225-228)

If BPR practitioners could adopt this table and guide the people involved in reengineering based on the above lines on gaining competencies, understanding and reinforcing a certain type of culture, then I believe it would add to the overall success of the change initiative. I see it as directly related to the concept of culture, since this type of insights could also lead to the identification of their strengths as collective individuals and as collective cultures. Such an activity will result in the shaping of their perception and the bettering of the BPR initiative in general.

As a starting point, there is the need to identify what a person currently is and does. That can be achieved when examining a number of issues relevant to this initial objective which could indicate whether the person is result oriented one, initiative oriented, self - confident, commercially oriented, adaptable and capable to learn. If the findings in relation to the above elements tend to be more negative than positive (e.g., if people are unsure of themselves, if they are risk averse, they react to situations not in a proactive manner, and they passively follow the initiatives of others, if even they panic and they believe that they know all they have to know), then I would suggest that these need to be addressed by the consultant and ways to boost their morale

should be found (e.g., take holiday breaks, enrol in a two week training scheme that stresses the above-stated problematic areas, as important issues). This is to enable the individual (or the group of individuals) to realise the importance of their personal orientation when working for the 'about to be reengineered' company and start thinking differently to support that.

The next part of this recommended competence scheme would be to see how people perceive and think about things that surround their activities in the organisation. Watson (1994) refers to it as the *cognitive style*. Under this heading a number of elements could be found, that again, if they are emphasised to people, will lead to a clear and coherent future state of affairs for the organisation would be created. There should be a reflection on vision and strategic thinking. This is where the people in the reengineering activity would 'appreciate the global context of the business and the need to work within an international cultural perspective' (1994 : 226). Illusions should not be created here and there is no room for people thinking in short term perspectives. People need constantly to gather information from different sources and updating is important when trying to maintain this data system. A suggestion here could involve technological advancements, if the company has not introduced them before, and the familiarisation of the people with them, if considered necessary by the company. Although the collection of data is a valuable activity, there is also the need to conceptualise trends that these types of data form which will indicate the market positioning of the organisation. If this particular exercise reveals that the people are not articulate enough to follow these new data systems a good suggestion would be once more to follow the educational route (e.g., send the managers on a part-time MBA course) or bring new people into the organisation to help the team achieve that.

The style that follows is a much more interpersonal way for people to relate themselves with the company environment. Are they sensitive enough and can they listen to the attitudes and the feelings of those with whom they work, or do they have little regard for that? What about their impact or persuasiveness on matters rising in their departments or the managerial decision making level? If these people are proven not to be influential enough then, again, action needs to be taken immediately to modify this situation. The consultant has to deal with the reasons *why* that is happening and give alternative solutions to the organisation [e.g., intensive training or

removal of that person from that leadership post to one he/she is capable of handling, if that is going to hinder the reengineering operational activities - of course here the priority is the development of the skills of the person or of a group that seems to face that problem]. Furthermore, planning and organisation along with the presentation and communication of all the elements involved in a cultural change need to be redressed at all levels in the company, to ensure that the teams will work together for plans to be accomplished on time and for support to be available if necessary. There is no room for ambiguity and misunderstanding on the part of the audience (Watson 1994). If, though, the findings of this exercise identify such problems, they could be tackled once more by seminars (based on the time available) on communication skills and how to develop them. As far as the managerial leadership skills that a manager possesses are concerned, they can be reinforced when an identification of negative attitude is noticed. If, though, a case like that arises, then the suggestion would be the rethinking of the initiatives objectives and I believe a few days of a simulation workshop could give the BPR managers the answers they will be looking for.

The Table described above reflects on a set of competencies which BPR literature (and its readers and users) could adopt and modify according to its/their individual cases' needs when reengineering. My suggestion is for the elements of this Table to be applied in a form of an interview, directed to all employees involved in the reengineering initiative before the initiative even starts (an estimate of three weeks to identify the elements could be set as a prerequisite) and also an additional follow-up appraisal while the duration of the BPR initiative. This is a proactive approach to the identification and the development of people's competencies in the organisation, a suggestion which will enhance the importance of this contributing factor of culture in shaping the way BPR people think and perceive change in organisations in general. It would also be a mechanism for raising the self-awareness of the people involved, leading them to recognise their strong and less strong points, which of course it will be easier for them to accept than having them pointed out by someone else. This is a schema that I would like to believe can be further improved, tailored, and adjusted, by prospective BPR users, to fit each company's reengineering programme separately, in order for greater results to be achieved.

Therefore, the element of culture as shown above can be tackled, and there is no

reason for the BPR literature not to give more emphasis to it, since it can prove to be very relevant to the success of an initiative such as BPR [e.g., resistance towards cultural change (or any type of change) in the organisation]. This could also be the starting point of another research that will complement this one by implementing the above and by assessing the results in relation to the success of several BPR initiatives.

8.4 A second look at BPR and the Culture Element

In presenting what has been mentioned in the current BPR literature, this chapter established the fact that the cultural element needs to be further explored in relation to how it affects any BPR initiatives (refer to part 8.1). On the other hand, complementing the current BPR literature regarding this element is not a very straightforward task to accomplish, and that is because of the social dynamics of organisational relations (refer to parts 8.3.1 and 8.3.2). This could engender enormous costs in terms of impotence within the business environment, bad decision-making, industrial unrest and suppressed profitability (Neal 1998 : 96). Despite the above, though, the reader of the BPR literature has to be aware of those dangers (the literature should provide an exploration of them, as shown in the previous parts), and acknowledge the issues that can cause cultural impacts on such an initiative as BPR.

The first part provided the reader with a retrospection of the notion of culture, to illustrate that the current literature does not talk extensively⁸⁴ about this issue and to raise issues that affect this initiative that need to be tackled in one way or another. This led to the unfolding of the first, second and third suggestion on how the future BPR thinkers and literature could approach such a theme as this in order to learn more on how to tackle culture. This took place in order for the BPR literature to acknowledge the fact that the cultural concept and its features in an organisation, in relation to a BPR activity could result in:

- an integration of a range of ideas on how culture could relate to the reengineering activity and its decision making,
- something specific and clarified that the BPR practitioners could go back and fourth if they need to for further guidance and consultation,
- a guideline for related concepts to look at when reengineering, and
- a collective amount of views on how culture is perceived in the

organisational world and what BPR managers have to consider to minimise barriers when trying to modify culture.

Earlier on in the chapter, a number of questions were raised reflecting such issues as how the BPR literature could solve its created cultural behavioural problems. I believe that the intention of suggestions # 1 and 2 (*a new cultural perception in the future BPR literature* and *placing BPR in a sociological context* respectively) is to guide the current BPR literature to integrate its readings with the features of the elements of an organisation, which could lead it to a step in that direction. The intention of suggestion # 3 (*formulating a strategy that familiarises people with culture in relation to the BPR activity*) is to provide the ways on how to achieve that. In doing so I believe that the future BPR literature and practice would be able to provide clarity and direct emphasis on the contributing factors (e.g., the Time element - refer also to chapter 4) that make BPR a holistic activity.

More generally making the 'people' in organisations understand their surroundings, and especially their own culture will broaden their paradigms so that perhaps in the future they may view change differently from the way they do now. In doing so BPR managers will also develop the ability to sense changes in the environment, which is important because 'perceived changes in environmental influences signal the possible need for changes in strategy; they throw up opportunities and warn of threats' (Johnson and Scholes 1993 : 107). As Norburn (1974) would also put it, 'the evidence is that organisations which are better at sensing the environment perform better than those which are poor at it' (1974 : 37). If this is managed, Alvesson (1987 : 205) argues, the company involved in change can achieve efficiency, integration and commitment from its workforce. Thus, BPR has nothing to lose in considering, in its literature and application what has been stated in this chapter, but on the contrary, it has everything to gain. Therefore, a suggested set of guidelines for Culture in addition to the human element ones would be as follows:

- The element of Culture needs to be further incorporated in the current literature and practice of BPR. This can be achieved in a number of ways; for instance future BPR writers can incorporate this factor into their writings. Companies on the other hand can provide seminars and short courses (training by professional academics related to the culture field) for their managers and employees at the same time, in

order to make them more aware of this element's importance to their daily organisational procedures. These courses for example need to teach the people how to use culture or even provide them with seminars on reskilling. For instance if some of them used to do something manual they need to also know and understand how processes or IT works and how that affect their own jobs. As a result, participants' perception, learning, and ways of thinking will allow for changes to be accepted, promoted and adopted with less reluctance and also;

- the BPR initiative must be guided and supervised by external consultants specialist in the above fields for a maximum harvesting of holistic and integrated knowledge towards a successful intervention (whether over a short, medium or long period of time). The hiring of a number of management professionals on a short, medium or long term basis, to address the fields in which the organisation is facing weaknesses, will enable its people to understand and orientate their thinking towards a BPR activity.

8.5 Conclusion

The aim of this chapter was to stress that in a BPR initiative, the element of culture is an imperative factor to this type of holistic intervention and it needs to be recognised when reengineering.. This was achieved by presenting to the reader what has been discussed in the currently examined BPR literature regarding the element of culture. It was found that the element was not explored in depth, nor was it placed in any kind of BPR context. This section takes the initiative to cover retrospectively the element of culture in relation to how firstly, the literature and secondly, the users of BPR, should be approaching the two interlinked notions. The suggestions given are not intended as a universal solution to what is neglected by the current BPR literature concerning the cultural aspect, but at least, point to a direction which, with further research, will enable BPR literature and practice to be enhanced in this area.

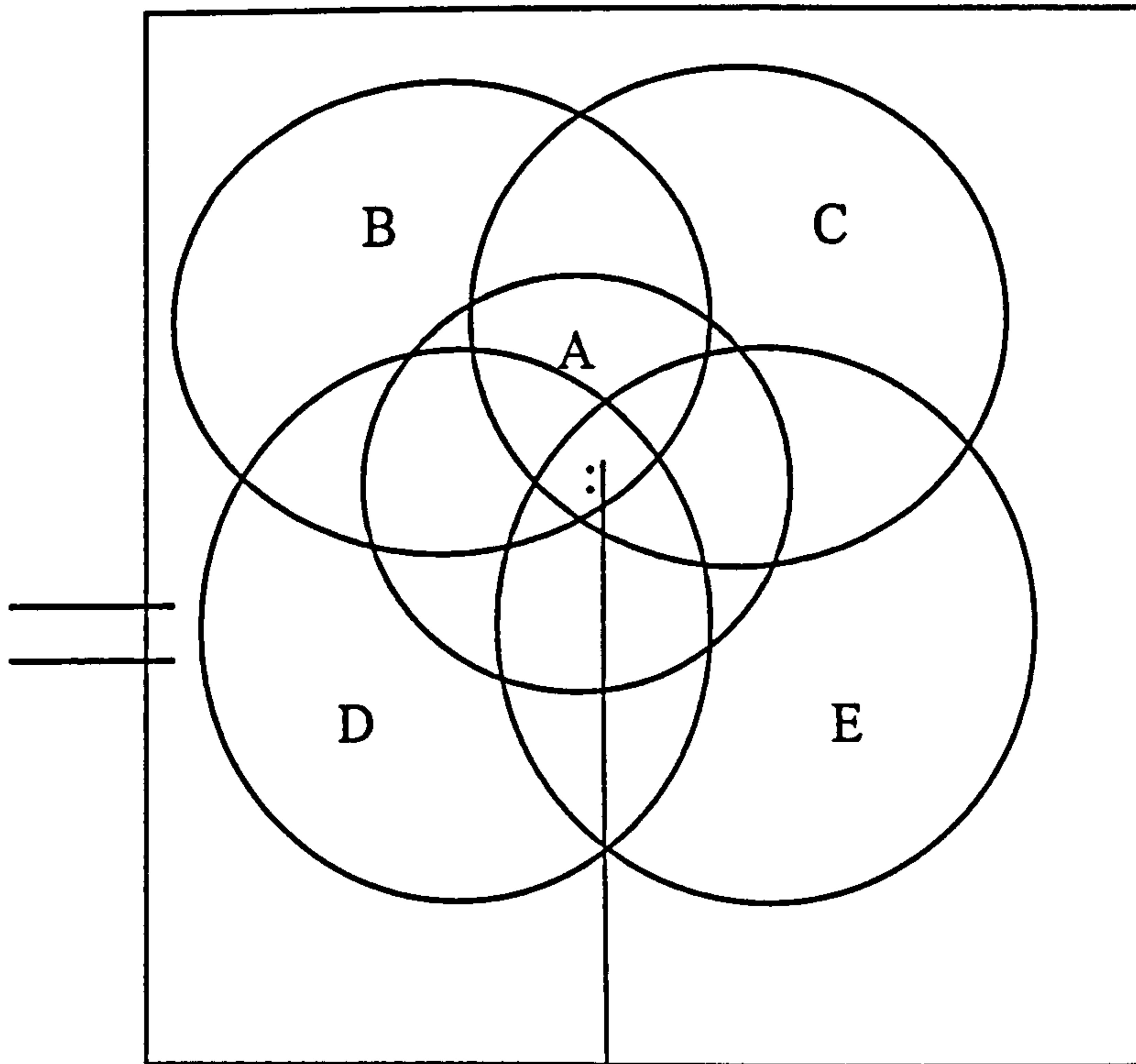
'Solid empirical evidence that certain cultural recipes lead to strategic success', according to Wilson and Rosenfeld (1990 : 236), 'is limited'; but that does not stop us from looking and further examining a number of contributing factors when changing organisations in relation to a BPR activity. For that purpose a multi-dimensional suggestion has been put forward (as suggestion # 1) for the currently examined BPR

literature to consider, along with the effects that might have towards the organisation that is going through a reengineering type of change. Several definitions, types, dimensions, basic assumptions and factors influencing the notion of culture were introduced to indicate to the reader, the broad coverage this element can undertake in the management field and how it can affect an initiative such as BPR. This was then used as a foundation to build upon the relationship of this element with BPR organisational change in order that further suggestions to improve that relation may be proposed. Suggestion # 2 added value to the above by exploring further the opportunities the BPR literature and its users could acquire by placing the notion in a sociological context. Suggestion # 3 was next and it reflected on the ways how BPR managers could approach and solve the problem of cultural change in their organisations. A strategy that familiarises people with the culture in relation to their BPR activities was suggested.

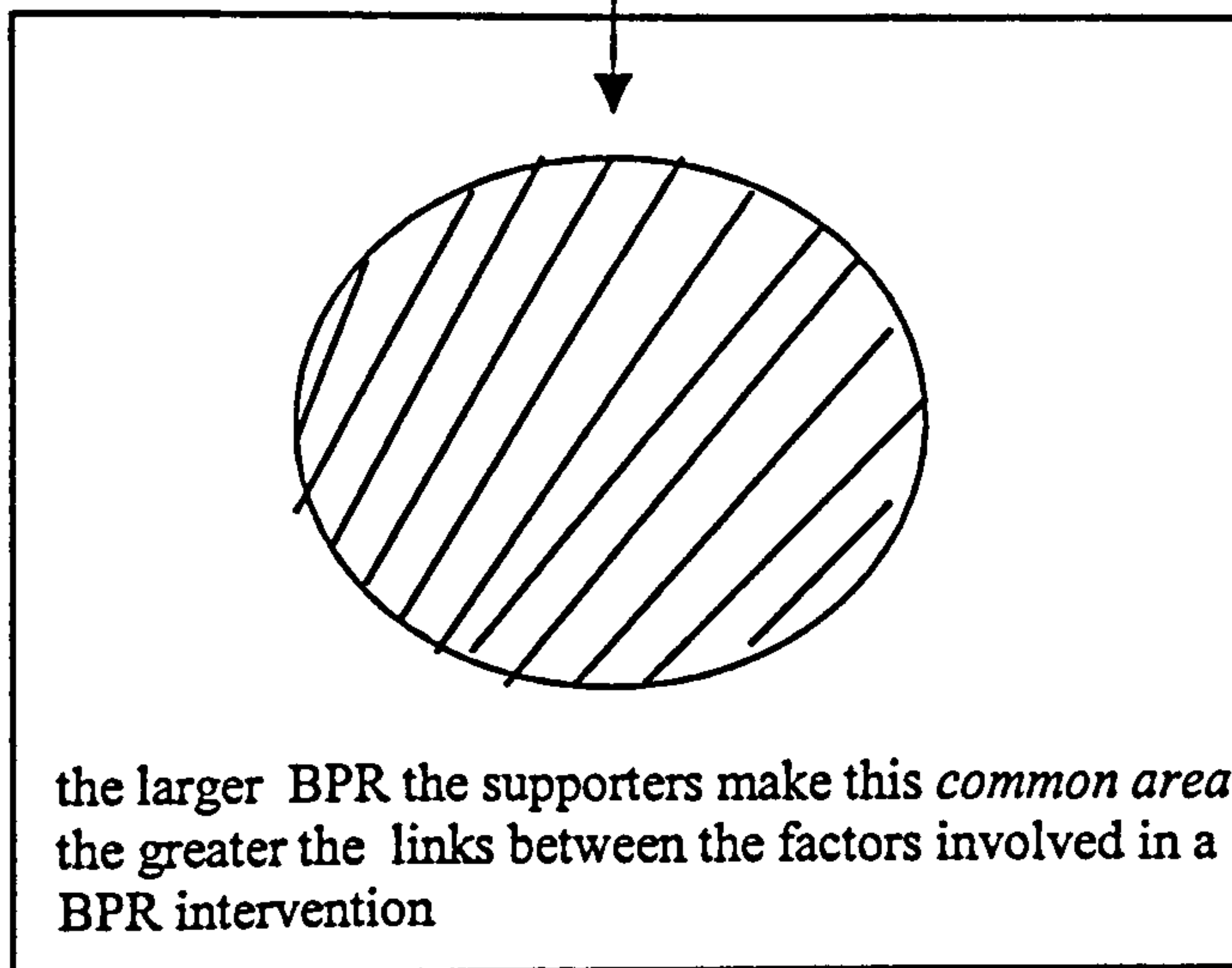
This was followed by a collective reflection part and a conclusion where all the interlinked ideas of this chapter are resumed and guidelines regarding the element of culture in relation to a holistic BPR initiative were put forward.

The exploration of this element brings us to the point where all that has been discussed in this and all the previous chapters need to be summarised and concluded. That is the objective of the chapter that follows.

Evaluation and Reflections Chapter



(:):
overlapping and need for common
area to grow bigger for an enriched
BPR intervention



*In one way or another we are forced to deal with complexities, with
'wholes' or 'systems', in all fields of knowledge. This implies a basic re-orientation
in scientific thinking*

(Cited in Kast and Rosenzweig, 1970 : 2)

Ludwig von Bertalanffy

CHAPTER 9

9.0 Introduction

This chapter aims to achieve two things: firstly, to present to the reader a synopsis of the guidelines that should be addressed when doing a BPR and secondly to evaluate those guidelines.

First, however, I will recapitulate the weaknesses of the current understanding of BPR which I found to exist in this BPR research journey, and which these guidelines are designed to remedy.

The next part will deal with the first objective of this chapter. In order to give a synopsis of the suggested BPR guidelines I will go back to the earlier analysis chapters and collect all the guidelines given in them. This will also satisfy the third overall objective of this thesis, which is to provide guidelines, which enable the future thinker to reengineer, based on a redefined holistic BPR change approach.

The third part will deal with the second objective of the chapter, which is to evaluate the BPR guidelines I suggest above. In order to evaluate these, I will use case study material to demonstrate that what I am arguing here can be operationalised as well. The case studies used as examples here are the USPS-ExM (Carr and Johansson 1995), LRI (Bevan 1996) and GTO Inc. (Prahalad and Hamel 1994). These were presented and analysed in earlier chapters in this thesis; however, a brief overview of each will be given in this part to remind the reader of the current status of these institutions in relation to the suggested BPR continuum (found also in chapter 4). In doing so, the last overall objective of this thesis, which is to show that what I am suggesting can work, is achieved as well.

The fourth part explains the reasons why this 'case study' framework was used as a complementary framework to demonstrate my argument, which supports that what I am suggesting via these guidelines, can be plausible as well. This will be achieved by reflecting on certain research methodology literature, which justifies my decision to use such a method, and also presents my awareness of possible criticisms of this

method of validation.

The last part of the chapter will *present a systemic model* (see Figure 9.1) for the future BPR change initiative and it will also conclude with the summary.

9.1 Justification for Guidelines

Three of the four aims of this thesis were to redefine BPR as a holistic activity and explain why that is necessary (seen in chapter 3), and to provide guidelines to do that (a list of those is presented in the next part of this chapter). To achieve these objectives, prior critical investigation of the notion of BPR took place (see chapters 4-8), in order to reveal the elements that influence the process of a transformational change such as BPR and to identify major weaknesses in the current understanding of the notion (shown later in this part).

From a preliminary scanning of a great amount of core BPR literature reflecting on the topic, a number of critical factors emerged, which I have used as the basis of constructing a field of comparative analysis (refer to Figure 2.4). I see these factors playing an important role in the thinking and implementation of a BPR initiative, for reasons presented earlier in the analysis of this research. Surprisingly, I noted a tendency in the core contributors' publications (Hammer 1990, Davenport and Short 1990, Davenport 1993, Johansson et al. 1993, Hammer and Champy 1993, etc.) not to approach such interventions in an integrated and systemic way. For example IT might be over emphasised in a BPR initiative, for a number of reasons (Davenport 1993). For other writers like Hammer and Champy (1993) factors like the human element might be acknowledged as important to what they do, but their actions (cases used in their 1993 publication) show that they give less attention to them or completely neglect them.

My purpose throughout the analysis of these elements was to initiate the full integration of the factors (Processes, Radical Thinking, IT, human Element, Culture etc.) seen to be involved in a BPR initiative (also refer to Figure 3.4). In other words, to see them in a form of an 'Olympic type of circle' which gives the ability to each and every individual factor-circle to overlap and integrate its actions with the rest of

the involved factor-circles. The difference here with the metaphor described just now is that the future BPR reader/writer/practitioner will take that a step further by trying to extend or make the overlapping bigger and the need for the common area to grow larger for an enriched and successful BPR intervention.

For each and every one of the elements discussed in this thesis, I have drawn on a number of suggestions with their subsidiary guidelines, which I believe makes it possible for the reader to see why I arrived to those conclusions. The reader of this thesis has also the opportunity to see and be exposed to a collective set of data which deals purely with the roots of the notion of BPR, another contribution which, I believe, reflects the uniqueness of this piece of work. Based on those data, the elements were presented and discussed in depth and in a critical mode, whereupon I was able, in a subjective manner, to draw a number of conclusions resulting in suggestions which bring this thesis to the fulfilment of its three earlier stated aims: to redefine BPR as a holistic activity, to explain why that is necessary, and to provide a set of guidelines that BPR users/researchers/readers can address when reengineering.

Based on the BPR's current positions on issues like its current principles, overall definition and on issues like Time, Processes, IT, human element, Culture the following weaknesses were found:

- overall its definition and principles are vague and do not include many details on what BPR managers/users should actually do (chapter 3)
- time/radical change – timing constraints are missing (chapter 4)
- processes – this orientation leads to a mechanistic BPR approach (chapter 5)
- IT – overemphasis of this element leads to technocratic situations (chapter 6)
- the human element is mentioned but not given enough emphasis while practising (chapter 7)
- the culture factor is seriously neglected (chapter 8)
- guidance – this is missing and more specifically, there is no code of practice (chapters 3 & 9)
- integration of all the above elements is hard to find because of the extreme orientations, which prioritise some elements over others (chapters 3 & 9).

Therefore, based on the above set of weaknesses identified throughout the analysis of the BPR notion in this research journey, I go on to provide a set of guidelines to tackle them. This is the theme of the part that follows.

9.2 Synopsis of the suggested Guidelines

The guidelines which I suggest will help to remedy the above BPR weaknesses are as follows:

1. In chapter 4 I have made a powerful case for the timing element to be stressed while reengineering. I concluded that the Timing issue needs to be emphasised by the BPR initiative, as an important element, because Time can act as the means of measuring their performance, based on each company's individual needs. Table 4.2 shows how to categorise a BPR initiative so it can be used as the tool for integrating activities within a specific period of time; for example does it fall into a short, medium or long term BPR? In doing so, companies can specify whether what they have achieved is radical or not. I would also say that a number of practical points to achieve the above can also be derived from the suggestions I give in this particular chapter. For instance
 - Firstly I say there is the need for managers to collect information regarding the amount of change and the time required for their employee teams to accomplish certain tasks. This collection of data can be achieved via questionnaires, which would be designed accordingly (questions with relevance to time scales and amount of change in different departments within the organisation) and these should be given to the different teams involved in the project.
 - After the data are disseminated (e.g., SPSS-IT management packages can be used to analyse statistical information gathered from the questionnaires above), the managers of the BPR projects should categorise their BPR initiative according to the time horizons: short, medium or long term BPR.
 - This will further enable them to foresee the future of their companies via simulation (CASE tools can be used here) for allocating pre specified time and pre specified types of activities to the individuals and teams involved.

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NOT

AVAILABLE

- The dissemination of such information can then be used to guide further actions in the reengineering activity (e.g., finance allocation, acquisition of new IT systems, provision of training etc.).
4. In chapter 7 I have shown that the human element in BPR practice and literature, generally is not given enough attention and I concluded that this is probably one of the reasons why so many BPR initiatives fail. Thus, a logical step forwards would be for future BPR users to consider the contribution of the human element to the same extent that they do with the rest of the elements that might affect their intervention. One way of doing so is by actually involving people in the processes (not say that they will but actually do it) and at the same time provide them with the knowledge they need to carry that out. This is a route to opening the communication channels between the participants in such an initiative. Thus, when managers get the message that the human element plays an imperative role in their BPR initiative they can take the following practical/action steps, as also derived from this chapter's suggestions.
- Managers should identify how their initiative changes will affect the people involved in the programme. One way to do so is for them to request their department heads to provide them with a list of all involved parties' (individuals', teams') job descriptions prior to the proposed changes and another list with the same requirements after the implementation of those changes. In doing so, it would become clear that some people will still be an asset to the organisation, while a number would have to face possible release. For those staying with the company, then proposed Plan B of Figure 7.6 I suggest should take place. If, on the other hand, the company will have to release people, then proposed Plan A of Figure 7.6 should be adopted.
5. In chapter 8 I also presented a powerful case for the cultural element to be stressed while reengineering. I concluded that the element of Culture needs to be further incorporated in the current literature and practice of BPR. This can be achieved in a number of practical ways, for instance:

- Future BPR writers can incorporate this factor in their writings (via future publications). Companies, on the other hand, can provide seminars and short courses (training by professional academics related to the culture field) for their managers and employees at the same time, in order to make them more aware of this element's importance to their daily organisational procedures. These courses, for example, need to teach people how to use culture or even provide them with seminars on reskilling. For example if some of them used to do something manual, they need also to know and understand how processes or IT works and how that affects their own jobs. In doing so, participants' perceptions, learning, and ways of thinking will allow for changes to be accepted, promoted and adopted with less reluctance.
6. A second guideline derived from chapter 8 is that any future BPR initiative must be guided and supervised by external consultants specialising in the above element fields (academics from universities or independent professionals with relevant background), to facilitate maximum harvesting of holistic and integrated knowledge towards a successful intervention (whether it is done over a short, medium or long period of time). The hiring of a number of management professionals on a short, medium or long term basis regarding the fields in which the organisation is facing weaknesses, will enable its people to understand and orientate their thinking towards a BPR activity.
 7. Since I argue for a holistic BPR (chapter 3 and 9) which recognises and integrates all the above-mentioned elements imperative to such an initiative, it would be a remiss to conclude this set of guidelines without including a guideline which puts everything together in such a form. Thus, in chapters 3 and 9 I argued that in future, all the above-mentioned elements need to be featured in an integrated form when writing, and thinking about or practising BPR (also refer to Figures 3.4 and 9.1). I shall therefore conclude that in doing so a combination of BPR balanced-element activities will be achieved.

The above brings us to the evaluation method used to validate what has just been suggested. This is the topic discussed in the next part of this chapter.

9.3 Validation of the applicability of the suggested guidelines made for the purpose of this thesis

The question here is *how do I know* that what I am suggesting as guidelines can be applicable in a BPR scenario? To answer the above question, I have divided this part of the chapter into two subparts. The first subpart will refer to the continuum of case studies I have used earlier in this thesis. That is done for three reasons:

- (i) to remind readers of the case material used earlier,
- (ii) to demonstrate that this continuum of case studies can stand alone, since it can be further substantiated by literature and
- (iii) to set the scene for the next subpart of this chapter.

All this leads to the second subpart, which discusses on the feasibility of the suggested guidelines as seen via this BPR continuum. This will be achieved when I reflect on the weaknesses I identified from the BPR literature and relate them to the weaknesses these companies faced while reengineering. In doing so I demonstrate that resolution to the problems/weaknesses these companies faced could have been derived from my suggested guidelines. This will also satisfy the fourth aim of this thesis, which is to demonstrate that what is suggested in the previous part, can be plausible as well.

To begin with, I shall say that this thesis' overall argument is for a BPR to become holistic and systemic. There are a number of elements (time, processes, culture, human element and IT) that the BPR thinker needs to consider, to achieve that. By being able to think holistically, the neglect or overemphasis of some of these elements (e.g., IT, human element, etc.) is avoided, or at least minimised. Thus, assuming that what is missing at the moment from all these BPR interventions is the notion of systemicity and ways of achieving it, I believe the guidelines suggested can fill the gaps that this thesis has identified. The following discussion will not reflect on these guidelines individually; rather, I will be mostly concentrating on how these can be applied collectively to a change programme such as BPR while using examples to illustrate that.

- *Brief reference to the three case studies used in relation to the suggested BPR*

continuum

Earlier in the analysis it was shown that the closest case to what I call a successful BPR (by successful I mean a case which can be categorised at the best end of the BPR continuum) was the case of US Postal Service-ExM (Carr and Johansson 1995). In operating in such environment as that of US Postal Service-ExM, the fulfilment of the guidelines suggested in the previous part would not be hard to achieve, because of the clear vision the company has on most of the above elements. Thus, if companies think in these terms and depending on which end of the BPR continuum (discussed in chapter 4) they see themselves belonging to, they can then consider how badly they need the usage of those five imperative elements and their related guidelines, for their future BPR operations. If we have an organisation which tends to be more similar to US Postal Service-ExM, then with minor redirection (but with great effort) what the company has set to achieve can be done within a short period of time. Thus, it can be seen to achieve a short-term reengineering programme (also refer to Table 4.2).

If, on the other hand, the organisation that decides to undergo a BPR is more similar to the LRI Trust (Bevan 1996) (discussed also in chapter 4) then it will need great redirection and great emphasis on all the guidelines suggested for such an initiative, which obviously under those circumstances will take longer to be accomplished. That, I believe, is because of the many weaknesses the organisation has to cope with; e.g., lack of clear definition of processes, bad timings, and being unaccustomed to IT systems, let alone BPR. Therefore because of its weak infrastructure and the possible longer time it would take the company to get the above elements right (for which they can use the suggestions of the guidelines found in the relevant chapters) the reengineering change programme will fall under the worst end of the BPR continuum (the long-term category, refer also to Table 4.2).

In the scenario of having a company that identifies itself with GTO Inc. (Prahalad and Hamel 1994, refer to chapter 3) then it is my belief that it can categorise itself in the middle of the BPR continuum, as a medium-term BPR (refer to Table 4.2), because its situation is not as bad as that of the LRI Trust. Certainly, if such an organisation already has half of what is required for a successful BPR, then it would not take it long to achieve its objectives while following the rest of the suggested guidelines (this

is further discussed below).

Once again, though, I look back and I question myself. Is the continuum of case study material I refer to enough to say that the best BPR practice includes the five elements I have identified and the worst includes only one or two of those? Someone else might ask what other evidence I have that people who are doing BPR practice fall at the worst end of the continuum? Certainly, three case studies should not be the limit of my justification for that continuum. However, various BPR authors have done BPR work and published that work. I can locate them at different points on of that spectrum.

I have drawn evidence from the published BPR literature that (for example) Hammer (1990), and Hammer and Champy's (1993) BPR practice is falling towards an IT and Processes thinking orientation and therefore it should not be suprising that only 30% of what they do is actually successful because other elements like timing, people, and culture are not seriously considered (out of the four case studies presented in their book, only one mentions the human element and that briefly).

Another example, which falls into the worst end of the continuum, would be the case of LRI (Bevan 1996), an organisation which after a number of trials could not eliminate 'red tape' and asked for the help of an external consultant, a leading figure in the BPR field; Professor M. Hammer (information extracted from a telephone interview that I had with the manager of the LRI BPR programme, May 20th, 1997). In this case, we have an organisation facing not only a BPR challenge but also a challenge from its own fragile and weak infrastructure (poor communication lines, lack of IT knowledge, etc.), a case, which as mentioned earlier, can be classified at the worst end of the BPR continuum.

Let me take this a bit further, though. How does the work of Davenport and Short (1990), Morris and Brandon (1993) Davenport (1993), Johansson et al. (1993) (since I classified them as major BPR proponents) relate with this BPR continuum? Having looked at these authors' work and their BPR practices, I believe I can relate them to the BPR continuum and thereby further substantiate my position.

For instance Davenport and Short's (1990) and Morris and Brandon's (1993) work is heavily influenced by processes, which are driven by engineering principles (refer to chapter 3). This leads to mechanistic ways of changing an organisation. Furthermore Davenport's (1993) work emphasises IT as the core orientation when reengineering and that is also something which was also shown in the Rank Xerox case study presented in the IT chapter. Overemphasising IT, as I have shown in the relevant chapter [via a case published by Caldwell (1994)] can undermine the BPR activity instead of aiding its activities. The orientation of Johansson et al. (1993) on the other hand, favours processes once more. It is an area, which they overemphasise and it is open to further negative criticism from authors like Eisenberg (1997) Harrington et al. (1998) and Case (1999). This bias towards processes was drawn from their BPR practices given in their 1993 publication which indicate that their major focus is on processes while reengineering (also refer to Processes chapter/chapter 5). Therefore, if I were to place the above readings in that BPR continuum, it would not be surprising if their practices were considered as belonging to the worst end of the continuum.

Thus, in reflecting on a number of different types of evidence found in the literature, I believe I can substantiate the position I am arguing for regarding the best and worst ends of the BPR continuum.

- *Discussing the feasibility of the suggested guidelines*

Now that I have reminded the reader of the situation with this continuum of case studies, and the current 'BPR weaknesses' identified in the above BPR readings' extreme orientations, I will proceed by using those to identify similar problems/weaknesses found in these three cases examined. I doing so I will demonstrate to the reader that solution to these companies' weaknesses while reengineering could be derived from this thesis' suggested BPR guidelines. Let me illustrate the above while recalling once more the case studies used in earlier parts of this thesis' analysis, in order to justify that indeed the suggested BPR guidelines are valid. As also stated earlier, when I reflect on these three cases I will not make a reference to all guidelines in each and every case. My intention is to draw on a number of them to show that in different organisational entities, circumstances differ; something which has an impact on companies' identified weaknesses and needs.

Thus, if we assume that each and every case differs, then there is a need for different guidelines to be applied.

I would start by firstly looking at GTO Inc. (Prahalad and Hamel 1994). The company here, I believe, was faced with two major weaknesses: the fact that (a) its human element was not given enough emphasis while practising (refer to chapter 7) and also that (b) its cultural factor was heavily neglected (refer to chapter 8). These seemed to be causing the company problems (financial, etc.). When the company had assessed its situation and realised that its weaknesses lay in the human element and cultural areas, it had to act on that. Therefore in order to reengineer it had not only to focus on its existing good command (as a manufacturing organisation) of processes and IT but also clarify the human element and cultural elements as well. This, I also believe, allowed them to (i) arrange their initiative's timing boundaries - by pre specifying them and also (ii) decide how their new developments could be further integrated in the overall success of the initiative. Overall though, the company had to consider how to tackle its weak points and that was by building on its strengths. Therefore the company, in taking steps to rectify the situation regarding these elements, I believe, demonstrates not only that the culture and human element guidelines I suggest should be considered by the BPR user, but also that what these guidelines suggest can be plausible and extremely useful.

The next case I will refer to is the LRI (Bevan 1996) one which, as indicated earlier, I have categorised at the worst end of my BPR continuum. From this case it can be seen that the organisational infrastructure of LRI was in a very bad state. There was no process specification, IT was a stranger to their administrative operations, and people's morale was low and generally a very weak foundation to bring in changes; let alone BPR. Briefly it can be said that this weak organisational status would have an impact on how BPR change would be approached. The company realised that it had to do something about all these weaknesses it was facing and as drawn from the case study material it started placing timing constraints on its operations, started clarifying its processes, talked about teamwork, communication and performance of people involved, even considered the use of IT/S to assist in carrying out such a change as BPR. Thus, indirectly, I see what I suggest via these guidelines as taking place to enable this organisation to adapt to change. This also indicates that what I

suggest here is based not only on a theoretical background drawn from the BPR literature but on real and pragmatic organisational needs. To be more specific I see that all the suggested guidelines referred to in the previous part, becoming an extremely useful code of practice/tool for resolving the weaknesses that LRI or any other similar organisation might be faced with.

Therefore if any organisation like LRI (Bevan 1996) or GTO Inc. (Prahalad and Hamel 1994) needs to fight any weaknesses similar to the weaknesses these institutions have, then firstly they need to identify them and discover the current status of 'the five elements imperative to BPR' in their organisation. A second step, I suggest, would be for them to collect information regarding the needs of their company based on these imperative elements and find ways to satisfy those needs. The guidelines listed in the previous part would show them how to do that.

Above all, though, we can see that a successful BPR intervention can only be achieved when there is great integration of the elements stated earlier. A good example of that is the first case presented regarding this BPR continuum; the USPS-ExM (Carr and Johansson 1995) case, which I believe, can further illustrate my argument. This is not to say that this particular case undermines what I am suggesting in this thesis but on the contrary I believe it strengthens what I am trying to say.

USPS-ExM (Carr and Johansson 1995) as seen in chapter 4 was an open and well-structured company, which does not face weaknesses such as the ones of LRI organisation. This was a company, which had intact almost all of BPR's identified imperative elements. It did not face any weaknesses but was determined to increase its customers' satisfaction and its profit margins in the competitive environment it was operating in. Thus, despite a very good command of the elements of IT, processes, human factor, culture status and timing issues, it tried to improve them by giving these factors greater emphasis while reengineering their cooperation. That should indicate to the reader that the suggested guidelines for BPR as seen here via the USPS-ExM example do not only apply to companies that are in a bad state as far as their infrastructure is concerned (facing too many weaknesses) but are also applicable to companies like this one which want to reengineer in order to become better at what they do in their field.

Even in such cases, though, it is my belief that there is always room for improvement. Let me explain. If I was to further advise this company on how to advance what they did, there are a number of issues that I would address to them to enhance their portfolio in such an integrative mode (satisfying the last guideline which focuses on integration when reengineering and also the human element guideline). These would be to design a more specific and detailed strategy that reflects on communication packages, learning exercises and provision of education concerning managerial techniques (e.g., J-I-T) that could be capitalised on not only in the short run but in the long run of a BPR initiative as well. A search for a capable leader, if not within the company itself from elsewhere could have also led to a more detailed analysis of each team's responsibilities and completion times (something like a project management activity) and could also have provided a clearer direction and assertiveness for the people involved in such intervention. This could also have resulted in greater levels of empowerment and commitment.

Using the GTO Inc. (Prahalad and Hamel 1994), LRI (Bevan 1996) and the USPS-ExM (Carr and Johansson 1995) cases as examples to illustrate my argument that the guidelines I suggest are plausible, I believe achieves the completion of the fourth overall aim of this thesis. It also indicates to the reader that what has been noted by this thesis as the weaknesses/gaps in the currently examined BPR literature are starting to be taken into account in the BPR practice field. This is also something that makes me think that what I am suggesting is indeed plausible and extremely beneficial when reengineering.

Hence, resulting from the above collection of evidence found in the BPR literature it is my belief that the guidelines I present in this thesis can be practical and constructive if followed. These have also been proved to be plausible by making a reference to a continuum of real life case studies. I also have to say that these guidelines are not a set of rules to apply but a set of suggested guidelines that look systemically at the BPR notion, and allow for different perspectives to emerge, be examined and be further considered. These are not to be imposed for use, either, but based on the analysis of the BPR literature examined, it is my belief that they would be beneficial to follow if the BPR user wants to have a greater chance of succeeding

in his/her future BPR change intervention.

9.4 Evaluation method (why did I choose case study evaluation?)

In my attempt to discover, collect, interpret and review the core BPR literature through the perspective of documentary and comparative techniques I believe I have sought to reveal BPR and related management concepts, insights and issues from these fields, from a critical perspective. By adopting this type of methodology I also believe that I remained as subjective as possible while referring to those research frameworks and their findings. The interpretivistic approach followed allowed me as a researcher to examine the literature of BPR in depth and consider its foundations, while reflecting on a vast BPR literature material. This acted as a source of ideas that I could feed into my understanding of the problematic issues I encountered while researching the notion. Of course, that resulted in my motivation to deal with this relatively new field in management consultancy and suggest ways of improving it; in literature and implementation terms. To evaluate the effectiveness of the suggestions and guidelines I put forward as a result of this BPR critical exploration, I chose to use the case study technique. My decision to do so is discussed further below.

I am also aware of the critique (also discussed below) this thesis might face due to the particular choice of mine to adopt such a combination of techniques for this thesis' methodology. The applicability of my suggestions and even the validity of such a combination of methodological frameworks need to be assessed, a point which, even though I do not consider myself belonging to a positivistic paradigm, I acknowledge since I wish, as most qualitative researchers do, to justify my interpretations of my data in some way. Bearing in mind the difficulties I have experienced while trying to collect data and also in trying to join an organisation either as an action researcher or as an observer of an ongoing BPR programme (refer to Section A) I had to find an alternative way to test my suggestions. While having in mind what Wolcott (1990 : 1) suggests, 'the real mystique of qualitative inquiry lies in the process of using data rather than in the process of gathering data', I went ahead and used case studies to evaluate the guidelines suggested in this thesis.

Thus, the reasons for choosing a case study methodological framework for the validations of the suggestions given are:

- I see my work gaining the best out of the *interdisciplinarity* and *integration* of ideas from different sciences (Ragsdell 1997) - disciplines that emerge in a change programme like BPR (e.g., the culture, the human element, etc.) and need to be considered. What better way to gain those, than by using case studies which offer this diversity and integration of ideas?
- This specific attribute of *interdisciplinarity*, I also believe has given this thesis a critical and constructive character when dealing with the issues surrounding the BPR notion, especially when these are drawn from case study work.
- The above have also added to the systemic nature I argue the BPR supporters should be developing in order for them to acquire the best out of the information flow within, and from outside the organisation, in relation to their BPR change intervention;
- This type of thinking also enabled me as a researcher to minimise the temptation to adopt a single partial view on the dissemination of the relevant data gathered for this analysis. A holistic view was applied and the same is expected of future readers/writers/practitioners of BPR.

Cavaye (1996 : 227-242) can also be recalled here to justify further my decision to use case material to validate my work. More specifically, he provides a review of the different uses of case studies and he also reminds researchers that case study research can be used in the positivist and interpretivist traditions for testing or building a theory with single or multiple case design, using qualitative or mixed methods. Therefore I do not see any reason for not using such a technique to achieve the overall objectives of this thesis.

The case study method I used here to validate my work can also be correlated with the methodology work of other sociologists like King (1998), under the name of 'Template Analysis'⁸⁵ (TA) (King 1998 : 118-134). I believe a similarity can be found if we recall how TA presents its material. It is done either through '(i) a set of individual case studies followed by a discussion of differences and similarities between cases (ii) an account structured around the main themes identified drawing illustrative examples from each transcript (or other text) as required or (iii) by combining the two previous ways' (King 1998 : 132). The last I see as the way, which

is similar to how I have chosen to proceed for this thesis' evaluation. I could also refer to the greatest advantage the TA approach offers to its users, which I believe is very similar to what the case studies I have used offered me as well. King argues that TA 'resides in the fact that it is a highly flexible approach that can be modified for the needs of any study in a particular area' (1998 : 132-133). Not only I have modified, or better clarified BPR's needs in such change programme as reengineering, but I see 'flexibility' as an attribute, which I argue that the future systemic and integrated BPR thinking should have, since it occurs in a contemporary dynamic organisational environment.

- *Critique that the case study technique might raise*

I validated my suggestions by recalling and reflecting on case study material that I presented at earlier stages in this thesis analysis. Can I do that though? According to Stake (1994) I can, but at the same time I have to be careful of the critique this might receive (discussed below). There are different types of cases that can be studied in social science research: individuals; attributes of individuals; actions and interactions; setting, incidents and events, etc. (Brewer and Hunter 1989). Based on the above Punch (1998 : 152) argues that there are also different types of case study as well. He cites Stake (1994) who describes three of them. One of those three he mentions, is called the 'instrumental case study type' (the other two being the intrinsic and collective types - Stake 1994 cited in Punch 1998 : 152) and that is the one I am using here. Under this type, 'a particular case is examined to give an insight into an issue, or/and to refine a theory'. In my case firstly I have used three cases (a continuum of BPR cases and not just one case). Secondly I have tried to give an insight into the BPR issue and explain how it can be redefined in order to be clearer and of further help to its future users. Something, which at the moment also discourages the generalizability criticism Punch (1998 : 153) points out, could be happening, when using this type of technique to evaluate your work.

He argues that 'if the cases used in the analysis of an event can provide understandings of the important aspects of a new or persistently problematic research area then this critical attitude can have validity, especially when the cases presented are standing alone, not integrated with other approaches to its subject matter and

simply descriptive... .' (Punch 1998 : 156). Thus, in assuming that the continuum of cases presented stands alone, I believe is a good way to tackle the criticisms it might receive as an approach and also be the means used to validate the suggested of this thesis guidelines.

9.5 Conclusion

This chapter has acknowledged that a system of evaluation could prove a beneficial accompaniment to the theory and practice of the notion of BPR, as seen to emerge from the publications of relevant material to BPR covered. Such a system would be an addition to the documentary and comparative methodological approaches used to analyse the data collected for the completion of this thesis. I have gone some way towards suggesting a complementary method (the case study) of evaluating my suggestions and I have demonstrated that they can also be valid when thinking in terms of a BPR continuum. To illustrate in a schematic way what I have achieved in this thesis I have drawn Figure 9.1 (shown below). Prior to that though, I will refer to the achievement of the objectives of this chapter.

More specifically in the first part of this chapter I have outlined the weaknesses I found to exist in the BPR notion as derived from the earlier research analysis. I have used these weaknesses to justify that in the future the BPR user/thinker should not consider them in isolation but as the stimulus for the creation of the guidelines which will make a future BPR initiative a holistic one.

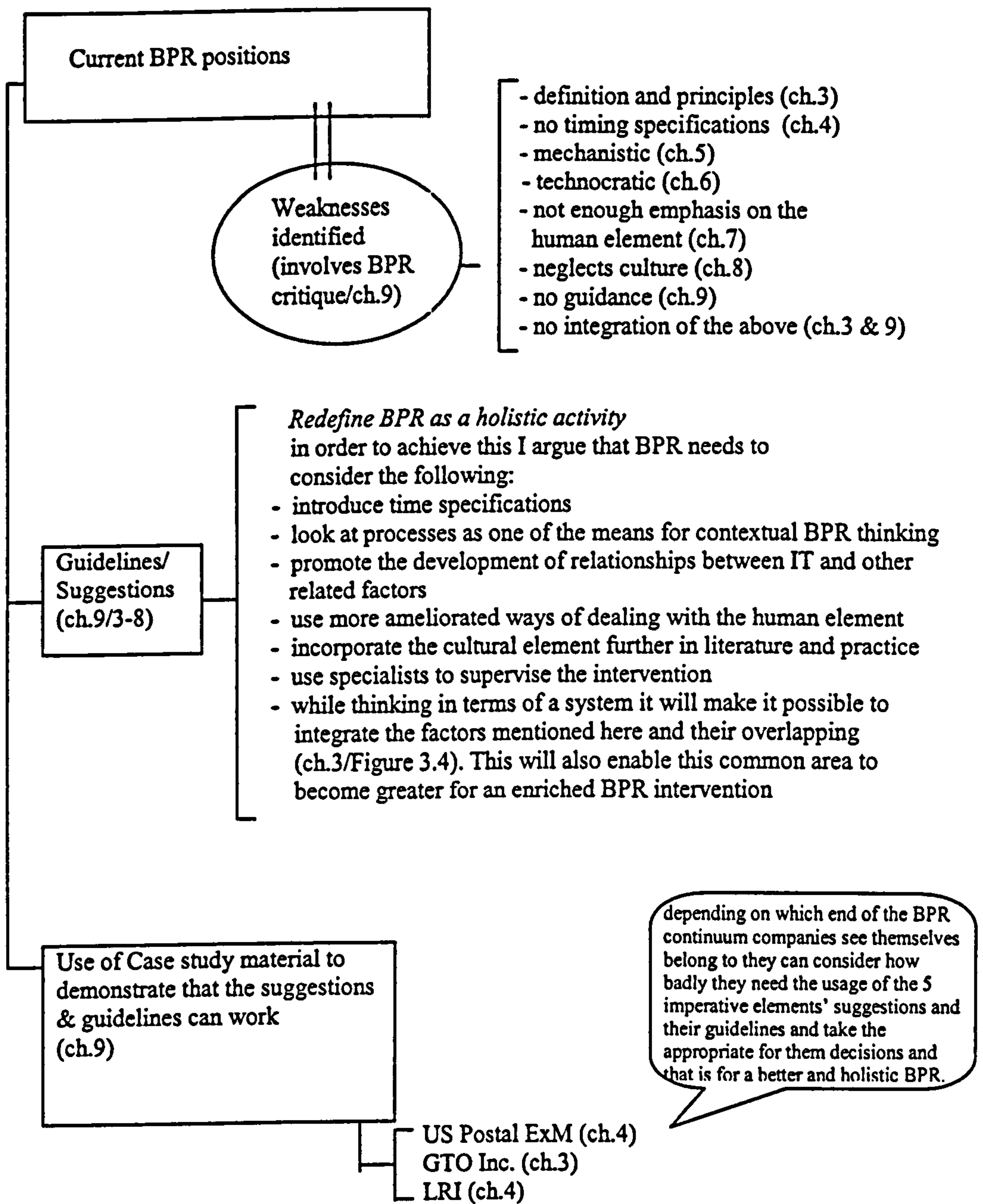
Thus, based on the above weaknesses I created a set of guidelines which reflect these weaknesses and I suggested that future BPR users/writers consider them while thinking/writing and practising BPR. The listing of those guidelines has also met the third overall objective of this thesis.

These were followed by the third part, which dealt with the evaluation of the suggested BPR guidelines. To demonstrate that I reflected on case study material that has also been used in earlier parts of this analysis to illustrate the points this research was making. While using a continuum of case studies to argue my case I have also shown that what I am suggesting here can be plausible as well, thereby satisfying the fourth main objective of this research analysis.

The fourth part of the chapter provided the reasoning why I have chosen the case study technique to demonstrate the validation of my suggested BPR guidelines. It also draws on the issue of criticism of the use of such a technique and discusses that further.

Thus, in establishing the case that all the objectives of this thesis have been achieved I will proceed with the last point of this chapter, which brings together *a systemic BPR model* to change for the future BPR user. As also can be detected, the following figure describes schematically what this thesis has achieved.

Figure 9.1 A systemic BPR model



BPR is a management tool, which I believe until now and as shown in the above model has not been taken full advantage of by its users. I therefore end this chapter with the premise that, at present, a contextual and integrated BPR type of thinking paralleled with efficient managerial temperament holds promise for improved pursuit of the future success of the notion, in both literature and application.

*New times demand new measures and new men; The world advances, and in time
outgrows The laws that in our father's day were best; And doubtless, after us, some
purer scheme Will be shaped out by wiser men than we,
Made wiser by the steady growth of truth
(Cited in Kast and Rosenzweig, 1970 : 625)*

James Russell Lowell

CHAPTER 10

10.0 Introduction

This concluding chapter *acknowledges the achievement* of the original aims of the thesis. These were to explain why BPR needs redefining and to redefine BPR as a holistic activity, to provide the BPR user with a set of guidelines for conducting a BPR and also to show that this approach can work. Chapter 10, then, *consolidates the information conveyed in earlier chapters and emphasises the contribution* that this piece of work makes to the BPR movement. While the reengineering movement was the foremost-intended beneficiary for the learning gained during this research process, it is clear that other disciplines and movements could also be enhanced by the insights I have generated. The use and combination of techniques as managerial tools and the general study of systemic/holistic thinking in the reengineering theory and practice are the focus of this thesis. Impacting on more than one field cannot be declared to be an unintended consequence, for what I see as the multi-disciplinary nature of BPR has been embraced and exploited throughout this thesis.

This chapter also acknowledges that the findings from my research are but additional stepping stones in the investigation, enrichment and development of the notion of BPR. The nature of the strategy I adopted and the nature of the topic do not allow one to claim that the findings are conclusive. The learning goes on. Iteration is welcome. So, once the original aims of the thesis have been re-examined and the contribution defined, I look to the future. Ideas for future research in this area are put forward. There is potential for further enrichment of the BPR literature and, at the same time, for its development as a practical tool for drastically transforming an organisation.

10.1 Revisiting the Aims of the Thesis

The main aims of the thesis were to give a justification why BPR needs redefining, to redefine BPR as a holistic activity, to provide a set of guidelines/suggestions for the BPR researcher/practitioner to do that and also to demonstrate the feasibility of the approach suggested. These aims were set out in chapter 1. To address the above aims I have drawn from current BPR literature, its practices and critiques which enabled me to construct this thesis' story line (refer to Figure 3.4). In redefining BPR as a

holistic activity I did not consider just one or two elements but I equally considered and integrated a number of factors (IT, Processes, Humans, Culture, Timing) that could strive towards a richer BPR initiative. These elements and their individual attributes as well as 'what they can do' for such an initiative as BPR are presented through the several chapters of this thesis. The individual aims of each section were portrayed and their synergistic interconnectedness was drawn out as I addressed the overall aims. Once more, I derived the overall aims mainly for three reasons: (i) my interaction with people involved in BPR projects made me believe that they were not able to define or even be sure of what they were saying they were doing; (ii) the admission of major BPR proponents such as Hammer and Champy (1993) that their BPR initiatives are failing in some 70 per cent of cases indicated to me that there must be something wrong with what they are actually doing; (iii) and also when I started researching the BPR studies I discovered that writers were not consistent (examples of such inconsistencies appeared in chapters 3-8) about BPR's definition and practice. They were confusing it with other types of change initiative and, above all, they seemed to base what they were doing on their own inspirations and not on any specific code of practice.

Thus in Section B, BPR was redefined and in Section C the suggested guidelines were discussed and outlined. Section D evaluated the above and reflected on the feasibility of this holistic and integrated approach. I demonstrated that indeed this approach could be operationalised.

It might be wondered what else remains to be done. I would say that for each of those aims, I have made progress towards them, but I have not entirely completed them; other people (e.g., other BPR researchers) may want to take them further. I have made significant steps towards organising a more holistic view of BPR but on the other hand the following need to be addressed too:

- Certainly, in the feasibility area, somebody should do a BPR and try some of the frameworks that I suggested in this thesis;
- On the question of guidelines I believe it should be said that, within the guidelines there are some potential contradictions that need to be further explored. For instance, trying to get the BPR done in a short period of time is not conducive to

being sensitive to people's culture (e.g., trying to complete a project in an Arab country while 'Ramadan' takes place and people do not want -by religion- to work). Here, there might be a trade-off between speed and culture.

I am arguing that there are five things that have to be considered when doing a BPR. I have not really explored in all cases the links between different ones and the fact that progress in one might be offset by weakness in another. If each of these five elements is analysed in those terms, then in a way it is necessary to make compromises with the other four. Therefore getting any of the elements right implies that one will get others a bit less perfect. For example, if a process oriented approach also wants to take account of the human element, it might be found that taking account of the human element leads to a less clear process view. Simply one cannot be perfect in processes analysis if also trying to be sensitive to people's culture and equally it is not possible to be perfect in a cultural analysis if trying to take account, to some extent, of the processes; a cruel reality which might be seen as the other side of the 'holistic coin'.

10.1.1 Section A: Research methodology

BPR is a complex subject matter that has been tackled from many different perspectives with individual authors' howing their own preferred approaches. Section A considered the various approaches that could be taken in understanding what BPR is and set out the chosen approach. Given that BPR is such a complex entity, the decision to embark on a thorough documentary analysis was further substantiated by the case study work in chapters 4 and 9.

10.1.2 Section B: Defining BPR

This Section's objectives were to *provide the reasons why BPR needs redefining, redefine BPR*, reveal whether any common BPR principles and methodological guidance surrounding BPR and subsequently familiarise the reader of this thesis with the notion of BPR. Is there any universal definition of BPR? How do its major writers who are also practitioners of the notion perceive it? It was found that there are very few definitions around (e.g., Hammer and Champy 1993) and as seen in the analysis, they are very vague ones. It was also intriguing to discover that no certain methodological guidelines existed but each individual core contributor was acting

based on experience to practise what is called BPR.

My intention here was to review the *relevant BPR proponent's publications* and advocate a more explicit pursuit in what was found more commonly mentioned in these readings; to *make a list of elements* that I believe can be used in the future for bettering what BPR is/does, by providing the user/reader/practitioner with a number of suggestions as a guidance tool towards their thinking and implementation of the notion. This I called a conceptual framework which also indicated this thesis' story line (refer to Figure 3.4). I came up with the above list of elements after I looked closely at selected readings of the BPR authors whom I also categorised as the proponents of BPR (refer to chapter 2). This is what I found out: (a) A reading of Hammer and Champy (1993) gives a clear idea that their major concern is about Processes and IT (refer to chapter 3). (b) Davenport (1993) is also interested in Processes but really he seems to see all of BPR in IT terms. (c) Johansson et al. (1993) in addition to the IT element, are interested in Processes but do not seem to spend very much time even looking at the Timing element, which Hammer and Champy (1993) briefly mention. (d) Following on from the above discussion from Davenport (1993), Johansson et al. (1993) and Hammer and Champy (1993), the article of Jones (1996), amongst others, makes a critique of the mechanistic approach BPR uses to transform organisations. That indicated to me that the human element needed to be surfaced, included and also be an equal candidate of the BPR initiative and part of this thesis' analysis. (e) I have also looked at Culture because I saw it as an additional attribute beyond the human element, which could complement such an initiative as BPR.

Drawing from the above collection of ideas, I realised that overemphasising one or even core elements and undermining others while reengineering, is not actually helping the above authors but most of the time drives their work to failure. Therefore I arrived at the conclusion that it would be beneficial to reflect on the factors given by these individual authors in the BPR field and reflect on *what else needs to be done* with them which could give the company which is using them, the best in a BPR activity. Also, at the back of my mind, the question 'what are the essentials for a contemporary organisation to survive in the turbulent and dynamic environment of the 1990s?' was directing my thinking. I concluded that: *IT* is of extreme importance to

the BPR activity because (i) it is the means of feeding the organisation with what is happening outside and inside the organisation at amazing speed (that is for processed and non-processed information). That can enable the BPR decision makers to create and predict SWOT (Strengths, Weaknesses, Opportunities and Threats) situations regarding the present and the future of an organisation; (ii) it can also be 'used as an enabler' to any of the other factors involved in changing the organisation to the better. For instance IT can enable the company's marketers (the human factor) to internet-sell the organisation's products or create awareness if it is a service provider; IT can also work along processes to better the company's production lines (via computerised quality control units).

The second element, which I see of major importance to such an initiative as BPR, is the *Processes* factor. It is already considered as important by other BPR authors and I share their view on the matter. The difference, between my approach and, for example, that of Johansson et al. (1993) is the fact that I do not see this particular factor as the only core factor while reengineering but I would consider a number of core integrated factors acting as a whole (also I am not arguing that they completely neglect, for instance, the human element but it is my perception they do not give it the same emphasis as they give to the process factor). I believe that processes need to be considered because *they simply describe the ways an organisation is conducting its daily operations* something, which is of vital importance to its survival and long term existence. An organisation needs to have a clear view on what is done, how, when and by whom, at all times; so does the reengineering activity. This is not to appoint failure reports at the end of the day, but to facilitate appraisals, recognition of training needs, ordering of raw material for reproduction, quality controls over the production or services offered to the customer, etc.

The *Timing* element is next. I consider it vital to a BPR initiative and that is because of two reasons: (i) in timing the BPR programme, the organisation can head towards its completion target. It is a way of distinguishing BPR from other managerial tools that have no completion date - I discovered that when timing is not specified in such a change programme as BPR, people tend to confuse BPR with other managerial tools like TQM; (ii) adding to the above, I see timing to act as a performance tool against the initiative's priority set objectives [an issue that I find can be very well integrated

with the process elements given above - reproduction times, control times..., all added together can give an estimated (pre specified) BPR completion time].

It is my belief that the *Human* element is of equal importance to the above stated factors to a BPR initiative. I also see the human element as one of the reasons why BPR has been failing and that is because it underemphasises it and most of the time neglects or takes it for granted. It is also the reason why the notion of BPR has been heavily criticised as a mechanistic approach to changing organisations. The human element is very important to a BPR initiative *because I consider it as the brains of such initiative* and of the organisation overall. Simply, if it does not function (or functions sub-optimally) it can cause 'paralysis' to the rest of the organisation. Why do I believe so? Let me remind the reader that we have just entered the 21st century. Organisations are made from people that are not robots but human beings, living and preparing themselves for the new century. People that are educated or willing if given the opportunity to get educated. Human beings that are capable of thinking what is best for them and what is best for the organisation they work for and, most of the time, willing to take more responsibility in their hands. A human force whose life changes by the minute. They are not strangers to change, but sometimes it takes time and effort for them to understand why that is happening; or they might need someone to explain that change to them. This is where the company comes in; if an organisation fails to understand the needs and wants of its employees, then how can it be able to help them and also expect them to help it in return, to go through those changes? How can a company introduce a BPR programme unless it familiarises people with what that might require? How can an organisation create a vision unless there is somebody there to work towards that vision? People in today's dynamic environment cannot be ordered what to do because we are not in the 'Tayloristic era' anymore. People, if they feel they have been treated badly, can create confusion to the system - whether that is in a BPR initiative or anywhere else in the organisation, for that matter. Let us assume that the processes of a company have been redefined and the most advanced IT systems have been brought in for the people to use. If people do not know how to do so, how can change take place? Or even if people become aware of how to use those IT systems, they suspect that they will get dismissed after a period of time, how can they be expected to work efficiently towards the initiative's objectives? Thus, the human element can disable the organisation activities if not

considered seriously by the BPR initiative.

These are followed by another factor: *Culture*. This is a factor which I believe could add great value to the whole initiative if considered, in terms of acquiring further knowledge; for people to understand themselves, their jobs' requirements and also the reasons for making their organisation engage itself in a BPR change programme. I also see the notion of culture to complement the human factor, by providing the means for people to comprehend change and work towards achieving that change.

It might be asked why I did not use any other factors, apart from those five stated and analysed above. Why, for instance, did I not consider the size of a company, or the ownership of a firm, or the type of industry the firm is in? Why should not the fact of creating a new vision be as important as the five factors mentioned above? It is my belief that all these other factors can be seen as significant sub-divisions of the five main divisions identified earlier. For instance, I certainly see a value to having clear organisational visions but it seems to me that until one has got the culture sorted out, then the vision becomes a part of that particular process. The same goes for the ownership of the firm, which I see as part of the human element process. Therefore, I do not reject other factors that are part of the organisational process but I see them as sub-parts of those identified major factors for a BPR initiative. Simply, my argument is that if the reader/practitioner of BPR gets this variation of those five elements right, then in general the BPR will work, since they seem to cover most of the areas organisations rely upon when going through a change programme.

Going back to this thesis' storyline, I have argued that these are elements that seem to influence a BPR initiative. Therefore, why should users/researchers not make the best out of them, since this initiative can create greater chances of overall project success? Since these elements are noted by the supporters of BPR, to a greater or lesser degree, why should not we try and make their integrated relationships work towards a successful BPR intervention? Based on that, I also provide the reader with an advanced BPR definition. Furthermore, it is my belief that the more the above stated factors (IT, Human, Culture, Time, Processes) overlap, the larger the common area of their mutual impact is made and the greater the links between them. In this way, an enriched BPR intervention would have greater success in dramatically transforming

an organisation due to the systemic and holistic approach taken. At this point I believe I have convinced the reader that BPR faces a number of weaknesses and the way I proposed to deal with them was to approach this type of change from a holistic perspective. To achieve that, I have introduced a conceptual framework (refer to Figure 3.4) which I have used (via chapters 3-9) to prove to the reader that, if a number of elements are considered while reengineering, and not just one or two, the notion can become holistic and indeed make a difference in succeeding in the BPR field.

10.1.3 Section C: Concepts and issues in BPR - A review of the recent developments in the reengineering and management literature

While Section B had focused somewhat on the general idea of BPR, Section C originated from two interconnected arenas: the *reengineering* arena, in relation to the factors (of IT, Processes, Time, Human Element, Culture) I have identified as the important ones in such a change intervention as BPR, and the *management* arena.

Chapters 4-8 refer to the factors mentioned above. These were presented in separate chapters, analysed and critically evaluated from the reengineering and management points of view. This is where the benefits of pursuing a documentary review as the tool for critical analysis were clearly seen. This particular setting provided the grounds for identifying what weaknesses BPR currently has, which also led to suggesting what more could be done to improve the currently perceived notion of reengineering.

So Section C analysed in a critical way the different elements that could make an enriched BPR tool. More specifically in Chapter 4 I elaborated on the Radical thinking - Time factor as it was derived from the readings of the BPR proponents. I argued that if BPR interventions want to be radical and therefore be different and distinctive from other company-wide types of change programmes, they need to place Time constraints on the interventions that are conducted. I arrived at that after I demonstrated that the BPR readings researched were seeing radicality in different ways, something which I believe is confusing not only for the researcher but for any BPR reader who wants to learn more about this. For instance, I found three schools of

thought to exist which place radicality in different orientations. How, then, could I dissolve the confusion this created? For this I presented a suggestion for improvement and clarity on the matter. I introduced a 'three Chronological levels of BPR' initiative (see Table 4.2) which incorporates the element of time, in order to chronologically specify what radical could be. In doing so it is my belief that I managed to show that (i) Time is very important in organisational analysis especially BPR and that it can be very well linked with other elements in the initiative (e.g., the human element, in terms of appraisal and performance measurements); (ii) the use of Time can distinguish BPR from other change management initiatives like TQM.

In Chapter 5 I introduced the element of Processes and I explained that by having a purely process oriented BPR results in a BPR being a little more than a TQM intervention and consequently the process focus should be only one among several. Firstly I elaborated on what the BPR proponents said about it and I concluded that processes have a great influence on their writings. Despite their differences and especially differences of interpretation about the scope of processes, writers like Johansson et al. (1993) and Jacobson et al. (1995) seemed to take an extreme positioning on the matter. The element of processes I found to be prioritised over other elements, which led me to believe that if this element is overemphasised then the organisation could be led to other problems such as the non recognition of other equally important elements (e.g., culture, human element) which could enhance a BPR initiative. Most importantly, though, if BPR is purely process oriented, there is the danger that the organisation's activities could lead to incremental and tactical programmes for carrying out changes in the organisation.

To prevent the above from happening, I argued for a *systemic* way of looking at processes, for the development of a number of 'healthy process thinking relationships' (between Time, Human Element, Culture, IT, etc.) which are affected by and at the same time affect and add value to the creation of a successful BPR initiative (which also deals with radical and not incremental change). A diamond framework (refer to Figure 5.2) was drawn to show the readers how they can identify and keep healthy process thinking relationships in their future reengineering activities. Also this diversion from 'purely BPR process oriented thinking' to a systemic thinking, I argued, can aid the minimisation of the critique which sees current BPR process

thinking as a 'mechanistic' type of thinking.

In Chapter 6 I explained that IT is an important factor to a BPR initiative but BPR thinkers should not be driven by it while reengineering either. This is because, if they are, it becomes little more than the introduction of new management information systems in the organisation.

I demonstrated that the overuse and overemphasis of IT by BPR authors (e.g., Davenport 1993) can 'cause' disfunction to a BPR initiative as well and I suggested that a logical step for resolving this, would be to consider IT as one amongst several orientations. I particularly suggest that future BPR users/writers should promote the rise and development of 'a multidimensional loop of IT activity-relationships' (refer to Figure 6.2) with the several factors that IT works with, in order

- (i) to avoid the BPR initiative being IT focused and also
- (ii) to provide the opportunity to the BPR users to identify and understand their companies' needs.

In doing so (i) BPR's holistic and systemic thinking is reinforced and (ii) awareness and further integration of other factors equally contributing to a BPR programme are achieved.

In Chapter 7 I gave an account of how the human element is perceived in the researched BPR literature. I evaluated what the BPR proponents said on two terms: (i) whether they actually refer to the human element and (ii) how they deal with the so called 'side-effects' of the notion in relevance to the human element (for example, downsizing is seen by other critiques as a negative aspect). I found out that the human element is acknowledged by the BPR writers but not given enough emphasis while reengineering. In addition to these, there was a degree of confusion concerning whether BPR was causing any side effects and it was rare to find in those readings how to deal with them, should they occur. I argued that for a consistent resolution, the BPR followers need to look at other disciplines like the HRM and also learn from the way the organisational literature deals with elements like the human element one.

I argued that to overcome the problems identified above, the BPR needs to (i) place

itself in a dynamic context (ii) incorporate a multi-orientation assumption approach for its initiatives and (iii) consider a plan for effective decision making. In this way I further argued that the human element would not be underemphasised anymore, something which could contribute in minimisation of BPR failures; also by learning how to deal with the human element, more interaction could be initiated between all important factors involved in a BPR initiative.

In Chapter 8, on the element of Culture, I stressed the need for this particular element to be recognised when reengineering. I came to that conclusion after I studied the major BPR readings, which indicated that culture has been almost neglected and not really discussed in BPR literature terms. Also the authors who refer to it are uncertain of its meaning and fail to provide any direction to the user/reader on how to deal with it. I then argued that the cultural element, whether we accept it or not, dominates peoples' perception; therefore, it would be very useful if the future BPR thinkers/practitioners started learning and reflecting on the learning this discipline's literature has to offer. I also argued that to achieve what has been stated above involves a great effort from all interested parties within the initiative, which could lead to changes in how people think in the future and also how their learning process could improve in a changing organisation. All these would result in the recognition of the cultural element as an important and equal contributing factor to a future and, hopefully, successful BPR intervention.

Thus, my suggestions to the future reader/user/writer were (i) to place BPR in a sociological context, (ii) to create a new perception about the element of culture in the future BPR literature, and (iii) to formulate a strategy that familiarises people with culture in relation to the BPR activity. I also provided the reader with ways in which these suggestions can be achieved.

10.1.4 Section D: Evaluation and Reflections

This shorter, final Section *summarised the set of guidelines* (outlined below) made for each and every individual factor as seen to be having an impact on a BPR intervention. It also *put forward a process of evaluation* for the reliability and validity of methodology used in this thesis and alongside, that it assessed the operationalisation of the above made by this author's suggestions. The methodology

used was also complemented by the use of case study work, which enabled me to correlate and compare my suggestions with a continuum of real life BPR cases. In doing so I have achieved four things. Firstly I have explained the reasons why BPR needs redefining and secondly I have defined the BPR concept much better, by adding and clarifying issues like the human element and Timing. This is the new definition:

'the fundamental rethinking and radical redesign of a company's processes taking into account their relationships with four interacting forces: the human element, culture, time and IT for achieving dramatic improvements in critical contemporary measures of performance, such as cost, quality, service and speed. Radicality, though, should not be translated only in terms of the amount of change carried out but also in conjunction with the terms of a pre specified amount of time for the initiative's completion'.

Thirdly I have introduced to the BPR researcher/user a set of guidelines to follow when reengineering which also can be considered as a working tool for these people, as follows:

1. In chapter 4 I have made a powerful case for the timing element to be stressed while reengineering. I concluded that the Timing issue needs to be emphasised by the BPR initiative, as an important element, because Time can act as the means of measuring their performance, based on each company's individual needs. Table 4.2 shows how to categorise a BPR initiative so it can be used as the tool for integrating activities within a specific period of time; for example does it fall into a short, medium or long term BPR? In doing so, companies can specify whether what they have achieved is radical or not. I would also say that a number of practical points to achieve the above can also be derived from the suggestions I give in this particular chapter. For instance

- Firstly I say there is the need for managers to collect information regarding the amount of change and the time required for their employee teams to accomplish certain tasks. This collection of data can be achieved via questionnaires, which would be designed accordingly (questions with relevance to time scales and amount of change in different departments within the organisation) and these should be given to the different teams involved in the project.
- After the data are disseminated (e.g., SPSS-IT management packages can be used to analyse statistical information gathered from the

questionnaires above), the managers of the BPR projects should categorise their BPR initiative according to the time horizons: short, medium or long term BPR.

- This will further enable them to foresee the future of their companies via simulation (CASE tools can be used here) for allocating pre specified time and pre specified types of activities to the individuals and teams involved.

2. In chapter 5 I have shown that the process element should not govern any BPR programme and I concluded that future users should ensure that their BPR initiative should use the Process element as one of several important means to a successful contextual BPR thinking and decision making, instead of prioritising it over others. A simple mechanism to do that would be to approach processes using a 'diamond' model (refer to Figure 5.2) which identifies process related activities, points out the company's needs in relation to those and prepares the ground for the establishment of a number of healthy relationships to enable the success of the overall BPR initiative.

- An action point which also derives from the suggestion I give in this chapter is for the acting manager here to identify a number of process related activities and place them in the above diamond framework in order to see how these affect and are affected by the reengineering company. As the pros and cons of those emerge, the manager and his team should decide what to do next.

3. In chapter 6 I have extensively discussed IT and I have demonstrated to the reader that there is a need to promote the rise and development of a number of loop-activity relationships with the several factors that IT works with, so the BPR initiative is not only IT focused. This can be achieved, if for instance, the organisation identifies at the early stages of such an initiative as BPR, 'what is needed to enable its IT to operate efficiently'. In doing so the initiative will avoid being totally IT focused, and the prerequisites will be created for this element to integrate with other involved factors. Figure 6.2 shows how to structure this type of thinking. This Figure presents the reader a number of action points, which can

be adopted in any future BPR company situation. For example

- This Figure can be used to provide the reader with a map which shows how to correlate a number of loop activity-relationships that IT can set up for advancing a BPR initiative.
 - The schemas of Figure 6.2 are further complemented with a set of questions (given in part 6.3 of chapter 6) which a manager can use to gather information about his/her organisation regarding this element.
 - The dissemination of such information can then be used to guide further actions in the reengineering activity (e.g., finance allocation, acquisition of new IT systems, provision of training etc.).
4. In chapter 7 I have shown that the human element in BPR practice and literature, generally is not given enough attention and I concluded that this is probably one of the reasons why so many BPR initiatives fail. Thus, a logical step forwards would be for future BPR users to consider the contribution of the human element to the same extent that they do with the rest of the elements that might affect their intervention. One way of doing so is by actually involving people in the processes (not say that they will but actually do it) and at the same time provide them with the knowledge they need to carry that out. This is a route to opening the communication channels between the participants in such an initiative. Thus, when managers get the message that the human element plays an imperative role in their BPR initiative they can take the following practical/action steps, as also derived from this chapter's suggestions.
- Managers should identify how their initiative changes will affect the people involved in the programme. One way to do so is for them to request their department heads to provide them with a list of all involved parties' (individuals', teams') job descriptions prior to the proposed changes and another list with the same requirements after the implementation of those changes. In doing so, it would become clear that some people will still be an asset to the organisation, while a number would have to face possible release. For those staying with the company, then proposed Plan B of Figure 7.6 I suggest should take

place. If, on the other hand, the company will have to release people, then proposed Plan A of Figure 7.6 should be adopted.

5. In chapter 8 I also presented a powerful case for the cultural element to be stressed while reengineering. I concluded that the element of Culture needs to be further incorporated in the current literature and practice of BPR. This can be achieved in a number of practical ways, for instance:
 - Future BPR writers can incorporate this factor in their writings (via future publications). Companies, on the other hand, can provide seminars and short courses (training by professional academics related to the culture field) for their managers and employees at the same time, in order to make them more aware of this element's importance to their daily organisational procedures. These courses, for example, need to teach people how to use culture or even provide them with seminars on reskilling. For example if some of them used to do something manual, they need also to know and understand how processes or IT works and how that affects their own jobs. In doing so, participants' perceptions, learning, and ways of thinking will allow for changes to be accepted, promoted and adopted with less reluctance.
6. A second guideline derived from chapter 8 is that any future BPR initiative must be guided and supervised by external consultants specialising in the above element fields (academics from universities or independent professionals with relevant background), to facilitate maximum harvesting of holistic and integrated knowledge towards a successful intervention (whether it is done over a short, medium or long period of time). The hiring of a number of management professionals on a short, medium or long term basis regarding the fields in which the organisation is facing weaknesses, will enable its people to understand and orientate their thinking towards a BPR activity.
7. Since I argue for a holistic BPR (chapter 3 and 9) which recognises and integrates all the above-mentioned elements imperative to such an initiative, it would be a remiss to conclude this set of guidelines without including a guideline which puts everything together in such a form. Thus, in chapters 3 and 9 I argued that in future, all the above-mentioned elements need to be

featured in an integrated form when writing, and thinking about or practising BPR (also refer to Figures 3.4 and 9.1). I shall therefore conclude that in doing so a combination of BPR balanced-element activities will be achieved.

Fourthly I have presented a good case that demonstrates that what I am suggesting is a feasible approach to BPR. That has been addressed while using case study work.

10.1.5 Learning/Reflections

I have moved from a position where I recognised the need for a form of suggested guidelines for a systemic BPR to the position where I actually provide those guidelines to the reader. Next, I fully introduced the concept of BPR and analysed the different elements that were found to have an effect on the notion and suggested ways of improving those after critically analysing their relationships as seen via the work of the core contributors. In order for those suggestions to be tested and to gain credibility for my approach I have used a continuum of case studies and reflected on the material presented by them, in relation to what was under examination. By using a case study that was located at the best end of that continuum, I demonstrated that indeed the guidelines introduced can be applicable and can be used to direct such an initiative. This was also the last phase of this iterative cycle. Through my suggestions, I believe that I have provided a vehicle by which reengineering activities can be interactively and systemically guided; a means for critical, enriched and successful BPR intervention.

10.2 Limitations of the Research Methodology

The general problems attending research in the social sciences will not be repeated here. However, there were a number of limitations, which were peculiar to this study. These included:

- reliance upon publication, articles, conference material, case study material and in general secondary data to capture the evolution of BPR introduced over a period of a PhD. The major reason for this was the time limitation, which prevented me from joining a real life BPR programme. The ideal research method of paying visits while such a programme was in progress thereafter was not feasible; and access to information needed to be found elsewhere (these were drawn from the already

existing and published BPR literature).

- the controversy found in the material gathered, indeed, from time to time was discouraging to research, but I believe this was unavoidable because of the nature of the BPR framework. Nevertheless, it was encouraging to see the different authors' perspectives unfolding and emerging on the factors this thesis was dealing with, just after the reading of a few of those.

The methodology facilitated a subjective style of examining the relevant material, which also evoked considerable freedom of expression and critique from this author. Sometimes the manner in which comments were made and their context was as important as the actual words.

10.3 My Contribution

Having re-examined the original aims of the thesis, I now go on to emphasise the contribution that this thesis makes to the theoretical and practical arenas. The first section of this part will explain specifically the contribution I make to the BPR notion in terms of the way I have achieved each one of this thesis' pre set aims. This will be followed by another section which will reflect on the overall contribution I make to BPR in general and also provide some reasons why my contribution differs from the rest of the BPR critiques currently available to the reader.

10.3.1 Contributing to the definition, guidelines and application of BPR

At the beginning of this thesis I set out to achieve the following aims:

- to explain why it needs redefining as a holistic approach,
- to redefine BPR,
- to provide guidelines to do that, and
- to show that what I suggest is a feasible approach.

Presently I am in a position to say that I have achieved the above aims, which separately and together greatly contribute to the development of a broader BPR thinking. The first two objectives were to explain why BPR needs redefining and to give a new definition for BPR. An explanation why BPR needs redefining was given and this was possible after discovering that the major BPR readings mostly viewed

the notion of BPR in a partial way (e.g., IT oriented, process oriented), a tendency, which ignored and did not give enough emphasis to several other imperative factors that might have aided its practice. This status quo, I believe, disables BPR in identifying its weaknesses and inadequacies and further remedying them. In establishing the fact that there is ground for improvement for future minimisation of BPR's current failures I continued this research by further analysing these factors and at the same time suggesting ways in which future practitioners/writers could address them (Chapters 4-8).

This thinking led to the redefinition of BPR as a holistic approach to changing organisations which, as stated above, involves five elements; these are the Human Element, Culture, Time, IT and Processes. This has been achieved to the extent that I provided a new BPR definition (Chapter 3) which adds and further clarifies that not only IT and processes should be the main concern of the BPR thinker/user but other elements which I see of equal importance like the Human Element, Culture and Timing. What is more, the potential integrative relationship between these elements has pointed out that the current BPR literature and practice can learn and improve itself from that.

The above led to the achievement of the third objective which stimulated the rise of a number of guidelines for using the above stated imperative to BPR elements while reengineering. These are spelled out (Chapter 9) to give the future BPR manager/thinker/practitioner some concrete way of actually showing that they have taken into account the different factors involved and not been focusing on only one or two. This is also, I believe, a way of linking managerial practice with the basics that make up a holistic BPR change for the organisation.

To show further that the suggestions and guidelines I offer can indeed make BPR better in the future, I employed a continuum of case studies (Chapter 9) which has shown that the holistic approach I am suggesting in this thesis can work. It also strengthens the ground for BPR as an effective tool for change management. This also confirms the achievement of the last of the objectives of this thesis, which *was to show that this approach is plausible.*

10.3.2 Promotion of BPR

BPR is a major issue in its own right. An underlying contribution of this thesis is to continue the promotion of BPR as a management tool, or at least the promotion of a more thoughtful type of management tool for radical change transformation. This thesis as a whole, and particularly the suggestions made for each factor analysed, add to the momentum of the BPR movement. In other words my contribution *is in the development of a systemic BPR model which addresses all of the weaknesses that have been identified within the thesis; a model which provides guidelines and demonstrates that its suggestions can work (refer to chapter 9 and Figure 9.1).*

Let me make a distinction and support that what I am arguing in this thesis is different from what is being offered by other BPR authors found in web sites or who have published material. So far, I believe we have seen authors dealing with BPR in a 'directive way' and not in a 'holistic way'. For instance, one aspect to which Kehoe (1994), Jones (1996), and Case (1999) refer is the negative effect BPR can cause, named 'downsizing'; 'as we have witnessed, in the minds of many BPR has become synonymous with downsizing and has acted as a symbol for the widespread purging of middle management ranks throughout the nineties' (Case 1999 : 424). The recognition that downsizing might happen while reengineering and the admission that this might be causing problems for an organisation, I believe, is a great step towards uncovering the weaknesses of this notion. The way I look at it, though, is like this: what the above authors are saying is just one of the many pieces of the puzzle. Accepting BPR's weaknesses it does not mean that its problems are solved. On the contrary, this only directs people to the problem. My suggestion is to look at these weaknesses and firstly *understand why* they occur (because at present the BPR reader can only find confusion and conflict of opinion on this matter – see for example chapter 7). Secondly, the more of those *weaknesses* the user of the notion can *identify*, the better it would be for him/her in terms of having time to think about them and also further consider what needs to be done about them. Thirdly these *weaknesses* need to *be viewed in a broader context* in order for the user to be able to relate, integrate and, give solutions to modify them, in order to have a balance in his/her decision making (not favouring one aspect and ignoring others). These *three action steps*, I believe, would enable the future BPR user to look at BPR from different perspectives which

would aid him/her to identify and fight this notion's weaknesses by building on what this managerial tool can do best. This would also lead to a more integrated, systemic and holistic approach when thinking and applying the notion. Therefore, what I am trying to achieve here is to integrate a number of elements that, at the moment I see could be treated differently (for instance given the same degree of attention, see Chapters 4-8) when reengineering. This is to make this management tool more humane, richer and effective than it is at the present.

I would call the category to which the examined BPR authors' readings (Hammer 1990, Hammer and Champy 1993, Davenport and Short 1991, Davenport 1993, Johansson et al. 1993, Morris and Brandon 1993 etc.,) and their critiques (Weicher et al. 1995, Harrington et al. 1998, etc.,) belong 'classical BPR' and I would call what I am trying to promote a 'holistic BPR'. I have found that 'classical BPR' is characterised by fragmented but telescopic views (Davenport 1993 has an IT BPR orientation, Johansson et al. 1993 have a process BPR orientation) of what needs to be done whereas the 'holistic BPR' is characterised by an integrated systemic perspective that unifies all of those areas and adds a number of new dimensions to it (see Figures 3.4 and 9.1).

People might ask how, for instance, other critiques (Weicher et al. 1995, Pruijt 1998, Case 1999) found concerning BPR differ from mine. I have to say that I agree with what these other BPR writers talk about but I went a step further than that. For instance, I do not just reflect on the point on which Hammer and Champy (1993) have been criticised (using a mechanistic approach to reengineer), but I talk about people and the organisation in general and how that affects the parties involved and also how that can change while reengineering. Indeed, even some critiques are still taking a piecemeal⁸⁶ approach; they are still only dealing with only some aspects, and they have not been 'holistic' enough. Their criticisms are coming from one or another of the perspectives that I am trying to integrate together. This is my contribution. The article by Pruijt (1998) could make a very good example here. Amongst other things he talks about BPR and he gives the notion different identities, like the mechanistic, the downsizing, the functionalistic one (1998 : 61/63). I argue that whilst it is fine to criticise the notion and talk about it coming from one or two points of view, this is not enough. What happened to the idea of putting everything down, analysing it (adding

what is missing - other elements, removing what is causing inconvenience to the system) and trying to achieve one result which could lead to the maximum input of the organisation's capabilities to achieve change? What happened to the idea of uniting all these different aspects and approaches (in this case BPR's negative and positive points) and understanding where they are coming from to make a better whole? All these, with the *three-step action plan* I explained earlier, I would argue, give the opportunity to the BPR user to achieve a systemic/holistic approach to reengineering.

This is why my contribution is different, because I am not just approaching BPR from one point of view, as do most other BPR critiques. Thus, I would call for the future BPR users/practitioners/thinkers to consider and follow a holistic approach if they want a successful and richer BPR, instead of being 'classical BPR' oriented.

10.4 Future Work

As with virtually all research projects, there is inevitably some frustration one experiences when drawing them to a close. Bounded by external influences such as time restrictions or politics, there is not often the opportunity to explore each new avenue one has discovered along the way. There are several insights, which I had to resist incorporating into this research process. While some may have categorised these neglected insights under a heading of 'things I would do differently next time', I am reconciled that these insights are openings for future work. I now share two substantial areas for further investigation.

10.4.1 Teaching and Learning BPR

This is a large area that I have identified for further investigation; an area which was not evident at the start of this PhD. Recently I found myself teaching a group of undergraduates and the discussion turned to BPR. The notion started to receive negative comments, without really any justifiable reason(s). Certainly that was an indication that there is a need for more extensive and effective teaching and learning of BPR in order to encourage awareness and development of BPR as a useful managerial tool. Definitely this relationship of BPR and social sciences - especially management - is an avenue for further logical attention.

10.4.2 The need to apply the approach

This thesis, I believe, has created the path for further research in the BPR arena. I have made progress towards what I have called 'holistic BPR' but that should not stop here. From my perspective, the next logical step would be to apply the suggested frameworks of this thesis in a real life scenario. In doing so I believe a *critical holistic BPR approach* could be developed.

10.4.3 Final Comment

With the passing of the years and throughout the writing of this study I have learned to appreciate and respect other people's ideas and beliefs. I have also learned to challenge them and that, I believe, will lead to a better tomorrow. It has been an exhilarating learning process. I hope that at the end of the day, my ideas and beliefs will be treated with the same respect.

¹ If I were to loosely indicate to the reader what I mean by the term 'human element', I would say that when I refer to it in this thesis, I refer to the individual/or group/s of individuals (and their behaviour) who work for/with an organisation. That is irrespective of the post they hold in such institution. For example they could belong to the manual labour division or they could be part of the sales executive force; they both would be part of the human element in their organisation.

² According to Hammer and Champy (1993) there is 70 per cent failure when reengineering. There is no specific justification from these authors why this is happening but if I were to speculate I would say that perhaps the objectives set up by the managers of a number of organisations who undertook this type of change initiative have failed to be met. This might have been the case due to a lack of knowledge in managing a company's resources while BPR change was taking place or even due to a lack of resources to do so (finance, IT, human element expertise, etc.).

³ Philosophy: a short definition is that philosophy is thinking about thinking. That brings out the generally second - order character of the subject as reflective thought about particular kinds of thinking - formation of beliefs, claims of knowledge - about the world or large parts of it - the rationally critical thinking, of a more or less systematic kind about the general nature of the world, the justification of belief/epistemology or theory of knowledge, and the conduct of life/ethics or theory of value (Honderich 1995 : 666).

⁴ *The Radical Humanist Paradigm:* The radical humanist paradigm is defined by its concern to develop a sociology of radical change from a subjectivist standpoint. Its origins, in intellectual terms, can be traced back to the tenets of German Idealism and the Kantian notion that the ultimate reality of the universe is spiritual rather than material in nature. Its approach in dealing with social phenomena has much in common with that of the interpretive paradigm. However, as well noted by Burrell and Morgan (1979) this paradigm's frame of reference is committed to 'a view of society which emphasises the importance of overthrowing or transcending the limitations of existing social arrangements. It is also a brand of social theorising designed to provide a critique of the status quo. More specifically it tends to view society as anti-human and it is concerned in articulating ways in which human beings can transcend the spiritual bonds and fetters which tie them into existing social patterns and thus realise their full potential' (Burrell and Morgan 1979 : 32). Theorists have sought to change the social world through a change in modes of cognition and consciousness. They mostly place emphasis upon emancipation (freedom from restraints), deprivation, potentiality, radical change and modes of domination. By approaching social phenomena under this category of thought it is believed that the human predicament in these terms is with release from the constraints which the existing social arrangements, place upon human development.

⁵ *The Radical Structuralist Paradigm:* The radical structuralist paradigm is rooted in a 'materialist view of the natural and social world. The theorists of this particular paradigm advocate a sociology of radical change from and objectivist standpoint' (Burrell and Morgan 1979 : 33). It might seem that this approach to science has many similarities with that of functionalist theory, which everybody agrees on, but it is broadly recognised that is directed at fundamentally different ends. To explain this paradigm is committed to radical change, emancipation and potentiality, in an analysis, which emphasises structural conflict, modes of domination, contradiction and deprivation. It approaches these general concerns from the standpoint which tends to be realist, positivist, determinist and nomothetic. So the element of functionalism has influenced this category of thinking and its theorists make sure that this is shown via their documents. According to Burrell and Morgan (1979) the work of mature Marx and Weber created a movement and they were particularly influential on Poulantzas, Colletti, Engels, Plekhanov and others that shared and developed further this thinking. One might also wonder how this paradigm differs from the radical humanist one. The latter focuses upon 'consciousness' as the basis for radical critique of society but the structuralists concentrate upon structural relationships within a realist social world. Mostly, emphasis is given to the fact that radical change is built into the very nature and structure of contemporary society, and the structuralists seek to explain the basic interrelationships within the context of total social formations.

⁶ *The Interpretive Paradigm:* This paradigm is the direct product of the German Idealist tradition of social thought. 'Its foundations were laid in the work of Immanuel Kant (1724 - 1803), who was one of the first philosophers to articulate its basic ontological and epistemological foundations, and reflect a

social philosophy which emphasises the essentially spiritual nature of the social world' (Burrell and Morgan 1979 : 31). This movement had numerous followers, especially in the 1890s and the early years of the 20th century. According to Burrell and Morgan (1979), theorists such as Dilthey, Weber, Husserl and Schutz contributed largely to the establishment of a framework for social analysis (though with varying degrees of commitment to its underlying problematic; emphasis is mostly given to implicitness rather than explicitness). Of course this is a valid critique point but does not stop the interpretivistic paradigm from being interested in seeking to understand the very basis and source of social reality. Researchers working in this field 'often delve into depths of human consciousness and subjectivity in their quest for fundamental meanings which underlie social life' (Burrell and Morgan 1979 : 31). 'The interpretive paradigm is informed by a concern to understand the social world at the level of subjective experience. It seeks explanation within the realm of individual consciousness and subjectivity, within the frame of reference of the participant as opposed to the observer of action' (Burrell and Morgan 1979 : 28).

⁷ *The Functionalist Paradigm*: This paradigm represents a perspective, which is firmly rooted in the sociology of regulation and approaches its subject phenomena from an 'objectivistic' point of view. This is explained further (Burrell and Morgan 1979) because of a major characteristic of this approach: the *concern* to provide explanations of the 'current situation', in other words the status quo, actuality, social investigation, need satisfaction and solidarity. This approach is deterministic, nomothetic and tends to be positivistic and realistic when examining social phenomena. Being grounded on such a pragmatic orientation in solving or explaining any social matter leads the researcher to bring into the scenario the regulatory element. This is because of the tendency that exists here to assume, 'that the social world is composed of relatively concrete empirical artefacts and relationships which can be identified, studied and measured through approaches derived from the natural sciences' (Burrell and Morgan 1979 : 26). Many social scientists have used this approach to carry out their research and have been successful, for instance, the modelling of social behaviour based on the use of mechanical and biological analogies favoured by Pareto, and Durkheim to illustrate their research points. Their adoption of this approach helped the social science world to understand how the several cases can be treated in this paradigm and what is the objective of doing so.

⁸ *Descriptivism*: is a term sometimes used to characterise theories which hold that judgements made in a particular area are descriptive; that is, that they refer to end are true of something. Distinguishing theories in this way of contrasting them with rival theories, which hold that the judgements being considered are not descriptive. For example some theories about evaluative judgements claim that they do not describe independent facts, but are merely expressions of attitude or emotion. A theory which denies this can be called descriptivist (Honderigh 1995 : 193).

⁹ *Interdisciplinary*: adj. of or between more than one branch of learning (The Oxford Dict. 1990 : 618).

¹⁰ *Complementary*: abj. Completing; forming a complement/one of a pair, or one or two things that go together (The Oxford Dict. 1990: 233).

¹¹ *Integrate*: combine parts into a whole (The Oxford Dict. 1995 : 616).

¹² Michael McDonald is the Director of the Centre for Applied Ethics and Professor in at the Department of Philosophy, University of British Columbia, and Vancouver. *Author*, Towards a Canadian Research Strategy for Applied Ethics. Social Sciences and Humanities Research Council of Canada Report -1988 (McDonald : 1997).

¹³ *Hermeneutics* is the last category of thought in the interpretive paradigm (the other being the *phenomenology*), and for my work, probably the most important one. Deriving from the work of Dilthey (1976) and the notion of '*Verstehen*' -understand- it first evolved as a method of study especially adapted to an idealist view of the world. Nevertheless, its importance within the context of the interpretive paradigm is rapidly increasing, because of its major characteristic which reveals *its concern in interpreting and understanding the products of the human mind which characterise the social and cultural world* (Burrell and Morgan 1979 : 235). Allow me, though, to talk a bit more about the history of hermeneutics, since this is the approach I will be employing to analyse critically the various BPR authors for the purpose of this thesis.

Hermeneutics (from the Greek hermeneutikos, related to explaining; 'explaining' is used here in the

sense of clarifying or rendering the obscure plain, the unclear clear) 'was for many centuries a sub-discipline of philosophy. Since most of the texts considered essential in the Christian world were available in contradictory versions, bearing traces of sloppiness and absent-mindedness in an endless chain of anonymous copyists, the question of authenticity, of the true version versus distorted ones - could not but turn into a major concern of scholars' (Bauman 1992 : 7). Hermeneutics was originally developed to answer this question for obvious reasons; historiography was most akin and a grateful client of hermeneutics. It was in the sixteenth century that hermeneutics emerged from relative obscurity and swiftly moved into the very centre of scholarly argument. *This is where the Catholic - Protestant debate was viewed by the eyes of the philological critique emerging from hermeneutics. The exposition of falsity of documents (e.g., the Bible) whose authenticity had not been doubted for centuries, created confusion* (Bauman 1992 : 7).

Hermeneutics raised the critique of historical sources to the rank of methodical scholarship. In this capacity it became a challenge to the social sciences in general, sociology in particular. As long as the task of 'clarifying' which hermeneutics set for itself was seen as, above all, a search for the original, hermeneutics was rightly viewed simply as a tool, however powerful and indispensable (*A tool helps to solve problems; it does not create them*). By the end of the eighteenth century, however, a fateful shift took place. As Bauman (1992) goes on to point out, the philosophical reflection on the activity and results of hermeneutics moved beyond the mere critique of texts and began to ask difficult questions about the nature and the objectives of historical knowledge as such; indeed, of social knowledge in general.

¹⁴ May (1993 : 149) in this publication, considers the bias of documents and selectivity in their analysis as major criticisms of documentary research which as he argues leads to 'an often uncritical approach to this form of research - it has been criticised for marginalizing people along race, class, gender and cultural lines' (1993 : 150). I would argue that in this research's scenario, the documents that were selected to be researched make most of the publications that exist regarding BPR and that is because is a fairly recent concept. On the other hand the reader should not be concerned about any uncritical approach to the material examined here and that is for the simple reason that this analysis employees the critical element as one of its techniques to derive to the suggestions provided at the end of each chapter, to the future BPR reader/writer/literature itself. In doing so I believe the best possible BPR analysis can be achieved and presented to the reader.

¹⁵ *Qualitative* research according to Ragin (1994) 'is a basic strategy of social research that usually involves in-depth examinations of a relatively small number of cases. Cases are examined intensively with techniques designed to facilitate the clarification of theoretical concepts and empirical categories' (1994 : 190).

¹⁶ *Quantitative* research is described by Ragin to be as 'a basic strategy of social research that usually involves analysis of patterns of covariation across a large number of cases. This approach focuses on variables and relationships among variables in an effort to identify general patterns of covariation' (1994 : 190).

¹⁷ *Deduction* 'is the process of deriving more specific ideas or propositions from general ideas, knowledge, or theories and working out their implications for a specific set of evidence or specific kinds of evidence' (Ragin 1994 : 14).

¹⁸ *Retroduction* 'is the interplay of induction and deduction, and is central to the process of scientific discovery. The process of constructing representations from the interaction between analytic frames and images involves retroduction' (Ragin 1994 : 47).

¹⁹ *Induction* 'is the process of using evidence to formulate a general idea. The process of constructing images (via synthesis of evidence) is mostly inductive. Generally, whenever evidence is used as a basis for generating concepts, as in qualitative research, or empirical generalisations, as in quantitative research, induction has played a part' (Ragin 1994 : 15).

²⁰ Intuition: immediate apprehension by the mind without reasoning, (-tive) - is characterised by possessing intuition (The Oxford Dict 1990 : 623).

²¹ There are five apparent tenets of political psychology and these are: (1) focus on the interaction of

political and psychological phenomena, (2) research is responsive and relevant to societal problems, (3) context can make a difference, (4) emphasis is on process as well as outcome and lastly, (5) there is a tolerance of multiple methods for gathering data (Hermann 1986 : 1-3).

²² Politics: The Oxford dictionary formally defines politics as 'the art and science of government' (The Oxford Dict 1990 : 922). It also views political processes: as the organisational process or principle affecting authority, status etc. *i.e.g., the politics of a decision* (The Oxford Dict 1990 : 922).

Chanlat (1996) though, reveals some of the origins of the political relation's notion and he analyses the concept based on organisational terms. This is what he says:

'from Aristotle to contemporary political theory, by way of Machiavelli, Montesquieu, de Tocqueville, Marx and Weber, many social theorists have pointed to the *essentially political character of human relations in social systems*, of which organisations are an example. Strikes, plant occupations, boycotts, legal action, meetings, negotiations, important decisions, manoeuvring, group strategies, career appointments, influence peddling, work-to-rule action, hidden resistance and open battle provide but few examples of the political life in an organisation. Political relations include all relations that contribute to either maintaining or transforming the social order of organisations. They combine two contradictory but empirically indissociable elements. This is the central contradiction of political life in all organisations. On the other hand every organisation tries to maintain a steady state by integrating its constituent elements so as to attain the objectives it has set for itself. It is a question of cohesiveness. On the other hand it is composed of interests which may differ from one person to the next and which are susceptible to polymorphous environmental influences. Thus every organisation contains tensions which may try to transform it' (Chanlat 1996 : 711 -712).

²³ Confidence: firm trust/a feeling of reliance or certainty (The Oxford Dict 1990 : 240).

²⁴ Strategic Intent 'suggests that organisations should not seek a fit between existing resources and emerging opportunities, but should deliberately create a mismatch between resources and objectives so that the organisation can be 'challenged' to close the gap' (Watson 1994 : 94).

²⁵ Within political psychology,

'there is a healthy dialogue and debate between those who search for more general aspects of time, situation, culture and political system that play critical roles in bounding how psychological and political phenomena interact and those who work within a specific context (with a particular problem located at a given point in time), each contributes to the mosaic that is political psychology - the latter group working on a particular picture or square of the mosaic, the former group identifying the colours, texture, dimensions that will characterise the entire mosaic' (Hermann 1986 : 3).

²⁶ The importance of communication is widely stressed around the world, but at the same time complaints are constantly being aired about poor communication even within the same scientific institute. If there are barriers against effective communication inside an individual organisation what must there be in the case of different societal groups with often a considerable degree of suspicion towards each other? (Child and Bate 1987 : 5) Despite the *knowledge factor* there is large number of such barriers that Child and Bate refer to as *the organisation of production and the patterns of work, the management and the motivation of human resources, the patterns of living, the distribution and significance of economic rewards etc.* (Child and Bate 1987 : 8-9).

²⁷ Order: a state of peaceful harmony under a constituted authority.

²⁸ Consensus: general agreement (of opinion)/majority view, collective opinion.

²⁹ Social Integration: the act of combining (part) into whole - in our case concerned with the mutual relations of human beings or classes of human beings.

³⁰ Solidarity: unity or agreement of feeling or action, esp.; among individuals with common interest - mutual dependence.

³¹ Actuality: reality - what is the case, existing conditions.

³² IBM Credit Co. and Ford Motors could be two of those examples. IBM Credit is in the business of financing computers, software and services that the IBM Corporation sells. It managed to turnaround its financing process from 7 days to 4 hours just by eliminating the handoffs in the process (Hammer and Champy 1993). Ford Motors with the help of Information Technology managed to turnaround its 'accounts payable process' to the minimum time whist using one fourth of the normally used personnel (Hammer and Champy 1993).

³³ They enhance this by 'seeing companies or businesses as something that can be formed, designed or redesigned according to engineering principles' (Jacobson et al. 1995 : 3).

³⁴ A principle for Angeles (1992 : 242-243) is the 'ground for a person's actions. A general statement (law, rule, or truth; the words *rule* and *law* are often used in place of the word principle) that serves as a basis for explaining phenomena. A principle, then, is used to guide our conduct or inquiry about something'.

³⁵ According to Mautner (1996) a methodology is the theory within a discipline. He also notes that methodology is *about* method and not the same as method. In other words it is 'the discipline which investigates and evaluates methods of inquiry, of validation, of teaching, etc' (1996 : 267). Flew (1984 : 230) on the other hand, I believe, is clearer on his definition of methodology. He states that 'it is the study of method, usually covering the procedures and aims of a particular discipline, and enquiry into the way in which that discipline is organised'.

³⁶ In 1979 the British Standards Institute (BSI) in the UK published the first general standards (BS5750) that applied to a broad range of business and organisations. Other standards were subsequently developed for the European Community (EC/EU) and the International Organisation of Standards (ISO) whose work was completed in 1987. The ISO 9000 series was heavily based on BS5750, but reflected international requirements and lessons learnt from eight years' use of BS5750. Now, ISO 9000, BS5750 and EN29000 have been harmonised and are equivalent (Flood 1993 : 51).

³⁷ Information Engineering and other redesign approaches based on data modelling are necessarily limited in scope. More than data is exchanged in many process relationships. Note too that many companies have used information engineering methods without a specific process orientation (Davenport and Short 1990 : 26).

³⁸ The use of IT enabled Xerox divisions to move directly from process modelling to automated generation of computer code for high - priority processes. Davenport and Short (1990) report that this has 'improved productivity and high user satisfaction with the resulting systems. The use of computer-aided systems engineering (CASE) enabled the company to design its products and draw process models. That allowed for changes to take place at no time at all and avoided experimental costs. This speedy redesign and modification activity on a simulated IT program is also suggested that it facilitates efficiency' (1990 : 17).

³⁹ This is something found in organisations that deal with expatriate categories of individuals. In other words, people that manage others who have a different culture. If we correlate that to the BPR activity, in literacy terms it is hard to tell that the two differ. A BPR manager or a consultant of the company undertaking BPR indeed will naturally have different ways of thinking and, different perceptions from the people that work in the organisation that is reengineering - probably in the same way the manager of those expatriates thinks and acts. This parallel thinking here could further improve the BPR managers' knowledge, even identify their initiatives with the findings of one recent review on the issue of 'intercultural competence in relation to expatriate assignments' which has identified a number of separate themes and strands for the management literature (Beaumont 1993 : 148).

Firstly there has been considerable emphasis on the *adjustment process* involved in such assignments; with commentators talking of crisis (or culture shock), recovery and adjustment stages. Secondly there has been the *personality and attitudes* approach in which traits such as empathy, tolerance and flexibility are emphasised as important selection considerations. Further studies have emphasised the importance of knowledge about other cultures, while yet others emphasise the importance of displaying appropriate communicative behaviour. Finally, others have identified the role of spouse and family considerations as being of particular importance in shaping the success or failure of expatriate assignments (Gertsen 1990 : 341-362) - in our case probable BPR success in spotting those

considerations.

In a BPR scenario we might not be talking of expatriate assignments but the human element's reaction seems to be quite similar to the cultural considerations and effects this transformation activity has on its people (as suggested from the revised case study material found in Hammer and Champy (1993), Davenport (1993), etc.). A BPR manager should have in mind that a number of the above stated considerations and influences will take place and overlap with each other to a considerable extent. Therefore their decision-making needs to be carefully designed to relate to the above, to avoid failure rates. Thus, having indirectly linked culture with the BPR managerial thinking, perception and knowledge, greater overlapping with the cultural element could be achieved, with the ultimatum to enhance the right managerial decision making.

⁴⁰ When I refer to the term radical I mean that change should be translated not only in terms of the *time* involved carrying that out but also *the amount of change*, elements like IT, culture, human element as well as processes take to change. Justification of the reasons why I have defined radicality in such terms can be found in the second part of this chapter.

⁴¹ Process (-es) : A course of action or proceeding, esp. a series of stages in manufacture or some other operation (The Oxford Dict 1990 : 951) – In simple terms, the progress or course of something – an event maybe – or, in our case, the way companies go about producing goods and selling services.

⁴² TQM : Total Quality Management – it can be easily understood as suggested by Flood (1993), if we analyse its parts systematically:

'Total', 'Quality' and 'Management'. 'Total' is very important in this expression because it states that we seek comprehensive ways of dealing with complex sets of interacting issues – involving everyone at all levels, addressing all major issues. 'Quality' means meeting customers' (agreed) requirements, formal and informal at lowest cost, first time every time. 'Management' in this context refers to the need for everyone to be responsible for managing their own jobs, which incorporates managers with worker and everyone else associated with the organisation (Flood 1993 : 41, 42 & 47).

⁴³ This is what he says at one point in his book: 'this specific book is based on the assumption that following a structured process is generally a good thing, and that there is nothing inherently slow or inefficient about acting along process lines. A process approach to business also implies a relatively heavy emphasis on improving how work is done...(emphasis added) - (Davenport 1993 : 6).

⁴⁴ Industrial Engineering 'is the expansion of engineering in its association with the arts of manufacture' (Lanchester 1917 : 9) - '*Industrial Engineering* can be looked upon as directing the worker in the last detail of the work, leaving absolutely nothing to individual volition' (Morris and Brandon 1993 : 214).

⁴⁵ That might imply for example the *work-study* of a project undertaken.

⁴⁶ *Industrial engineering* is perhaps the least showy or spectacular branch of the art (Lanchester 1917 : 12) – For instance let us take the scenario of a whole group of manufacturers connected with the supply of war material of every kind. In this trade [as suggested by Lanchester (1917)] there is employed

'a veritable army of trained men, who have every right to be considered engineers in the restricted sense; they range from the specialist in some particular direction or line, possibly on the fringe of what could be fairly classified as engineering, to the fully-fledged and responsible engineer as to whose qualifications there is 'no doubt whatever'; they are perhaps sometimes to be described as mechanical engineers, sometimes as electrical engineers, some as gas-works engineers, and so forth, but broadly it is possible to include the whole in one general category as *Industrial Engineers*' (Lanchester 1917 : 11/12).

⁴⁷ Just - In - Time (JIT) refers to the delivery and use of components and supplies for manufacturing so that stocks are held to a critical minimum level, reducing stockholding space, time and finance (Beardwell and Holden 1994 : 673). JIT principles of searching for and minimising waste, questioning whether activities add value, and trying to balance operational activities to minimise bottlenecks and work - in - process inventory build-up (Johansson et al. 1993 : 7). However, to achieve this requires everything to 'be right first time', otherwise the system would quickly grind to a halt for lack of usable

parts (Kidd and Karwowski 1994; Lamming 1993). Therefore, it is necessary to drive waste and inefficiency out of the system, and the key mechanism for achieving this is the Japanese commitment to quality (Dale and Cooper 1992). Throughout the 1980's this approach has posed a radical alternative to many Western manufacturing systems which have traditionally relied on the pattern of lengthy supply lines from a variety of suppliers, and a dependence of stockholding within the firm of several month's supplies. In this process the concept of quality has assumed an important role, often presented in the format of total quality management (TQM)(Beardwell and Holden 1994 : 673).

⁴⁸ When considering time and that is in any change initiative, estimated durations according to Turner (1993) are 'central' to the initiative but also 'dependent' on one of three things. These I consider very important to a BPR change initiative as well. Therefore I suggest the future BPR thinker take the following into account:

- the amount of time it physically takes to do the work involved, which in turn is dependent on the number of people available to do it
- the waiting time, for the delivery of some items which is independent of the number of people doing the work
- some mixture of the two (Turner 1993 : 212).

Elements include not only the above but other issues like 'people working part-time, interference and communication between people doing the work' (1993 : 212). A number of concepts that the future BPR user will need to consider for making his/her reengineering initiative as realistic and holistic as possible.

⁴⁹ The several parts put together for the make of this case study material were extracted from a working paper written by Helen Bevan in 1996 concerning the reengineering programme that took place at the LRI NHS Trust. Thus, this author will firstly present a bit of the (a) background of the LRI and (b) their aims while reengineering. This will be followed by (c) the timing they have allocated to the whole intervention and lastly, reference will be made on (d) a number of scatter changes that seen to take place and how they were managed and perceived by the participants of the intervention.

⁵⁰ *The Leicester Royal Infirmary NHS Trust Case Study*

Background and Aim of the Trust

The LRI NHS Trust embarked on a programme of 'whole hospital reengineering' in June 1994. The programme formally ended in May 1996. It is estimated that it would take a further two years to fully implement (or 'roll out') the changes. It was the first hospital in Britain and one of the first in the world, to undertake such a radical change programme. The Trust is one of the largest and most complex teaching hospitals in Europe. Each year it treats over 300,000 outpatients, 110,000 emergency patients and 57,000 in-patients. It employs 4,200 staff. Its core activity consists of teaching and training healthcare professionals and the capture and application of clinical research as well as the delivery of care to patients.

The circumstances within which the LRI operates are in an environment of substantial change, resulting from the government's reforms of the National Health Service. The population served by the Trust is increasing, with significant growth in the elderly population.... Leicestershire has one of the largest populations of General Practitioner Fundholding Practices in the country, and these manage their own resources and negotiate contracts directly with healthcare providers. Operating in one of the most competitive environments outside London, the Trust needs to respond to a more competitive, purchaser driven market where quality and service levels will be critical success factors.

The scope of the LRI reengineering programme, conceived during the latter part of 1993, satisfies Hammer and Champy's (1993 : 32) radical definition of reengineering. Rather than incremental improvement of existing healthcare processes, it sought the 'redesign from scratch' of all key healthcare processes across the organisation. The aim was to achieve dramatic improvements in measures of performance that were critical in the healthcare context. These included 'valuing patients' time' - reducing cycle time for diagnosis and treatment and eradicating delays for patients; 'valuing resources' - human, physical and financial; 'patient, General Practitioner and purchaser (Health Authority) satisfaction;; clinical teaching, the capture and application of research and improvements in clinical outcomes. The major focus of the reengineering programme was not on cost savings but on enhancing service provision to reach the Trust's mission: *'we at the LRI will work together to become*

the best hospital in the country, with an outstanding local and national reputation for our treatment, research and teaching. We will give to each patient the same care and consideration we would to our own family'.

The BPR initiative undertaken, for instance transformed a service that previously took up twelve weeks with multiple patients hospital visits into a single visit. It also its cut administrative costs by 39 per cent. The single visit concept is now well established and a number of neurologist clinics now exist, including hypertension, vascular, chest pain and back pain.

Timing allocation

The BPR initiative has been applied at both a macro (organisation wide) and micro (process specific) level. It commenced with the mobilisation of the key stakeholders around the strategic imperative for change. Analysis of existing processes was followed by the creation of a 'vision' of the reengineered future. Planning the reengineered solution included piloting and validating new roles and working systems. Finally, the new process and process infrastructure were rolled out across the organisation. For this to be done though a timetable was showing the periods that the LRI had to deal with what and with whom. For example a whole year was spent building an imperative for action with clinical, managerial and trade union leaders inside the Trust and with key external stakeholders such as the NHS Executive (the most senior executive) and the Leicestershire Health (the largest purchaser of the Trust's services).

In September 1992 we have the establishment of 'single visit outpatient clinic' and 'hearing services' process improvement projects which led to dramatic improvements in the quality of patient service. In June 1993 evaluation of process improvement projects took place and the initial analysis of hospital wide processes commences. In July 1993 Professor Moore aided the project leader with his reengineering knowledge. An agreement on joint strategy for whole hospital reengineering with King's Healthcare NHS Trust was made in September 1993. The following month, the production of 'reengineering the healthcare process' concept paper is produced and its submission to the NHS Executive turns it into a NHS national pilot site for whole hospital reengineering. In November 1993 an agreement of the Trust's strategic direction with 50 clinical, managerial and trade union leaders is settled and a programme leader was appointed. In January 1994 a detailed programme initiation document for reengineering was completed. This was followed by an 'initial scoping study which identified the generic processes, key opportunities for change and the programme's time scales. Also a reengineering group was established. August 1994 the redesign programme commences with the reengineering of 'patient visit and diagnostic test processes'. In February the following year the programme was set to give emphasis not only to the previous patient support processes but also to management processes and a management group was established. In September 1995 the LRI reengineering programme continues with wholesale transfer of accountability for reengineering deliverables from the reengineering team to Clinical Directorate (business unit) leader. Here the central reengineering team was reduced. In February 1996 the hospital directors commenced discussions on embedding a self-sustaining change programme to complete the task that reengineering started. In May a formal end to the project of the reengineering programme took place and in May 1998 the roll out of all reengineered healthcare processes completed.

A number of changes that seen to take place in this initiative and how they were managed

- Firstly the LRI undertook a comprehensive reengineering risk analysis during November and December 1993. This was included in the 'programme initiation document'. The analysis performed by the Chief Executive and the programme leader with support from an external management consultant who had led high-risk major change programmes in other public sector environments. Prior to the production of the document, the risk analysis was 'quality assured' and additions made by senior clinical and management staff of the Trust. This analysis was twofold; to outline the major risk faces and to generate preventative measures and actions to ameliorate each identified risk.
- The LRI was truly at a stage of transition but with a number of ironies surrounding it. In August 1995 the reengineering steering group indicated that progress till that point was made. There was evidence of variation in the rate these changes were being implemented though. Starting with the processes we see a generic process model to be developed and piloted which as stated rolled out across care processes. A series of redesigned ones were fully implemented. The Chief Executive had convened a group to redesign organisational structures along those processes rather than

functional lines. Yet, as stated by Bevan, *this last activity was taking place with the old organisational boundaries and its success was dependent on active leadership by functional managers who potentially had much to lose in the metamorphosis to process management.*

- Leaders after identifying the core processes in this initiative were required not just to lead the change process but to change themselves. Managers were also required to lose the old ways and mental sets and develop new skills, habits and insights. Training was given via a number of in-house seminars, but the responses in the category of 'motivating staff' comprised 12% of the reengineering management group total but only 6% of the reengineering team leaders review total. A challenge faced by senior operational staff who were leading the implementation of radical change with clinical and support service colleagues who were apprehensive or sceptical about it. Also issues like 'directorates were unable to release appropriate staff, and resistance by directorate staff' were showing the red tape involved and the managerial incompetence in dealing with the whole situation (e.g., finding ways around it). An additional point here could be the one of changing roles in the BPR teams created while trying, I believe to solve the above problem. Bevan amongst other things notes that the focus of the central reengineering team was changing. Previously this team had provided the active leadership of the reengineering programme. In the future this was used as a coaching and supportive team towards the Clinical Directorate teams that needed to monitor and lead their external communications activities. Another issue here that is worth mentioning is the one of Management Consultancy support. Something, which enabled the LRI to partner with and absorb whatever it, was provided to it for achieving its objectives. And that was after many consultancy firms were approached prior to the start of the programme that suggested a detailed analysis of current processes and performance, something that the hospital was so weak to draw by itself and provide. This lack of readily available baseline information made the initial consultant target setting very difficult. No wonder why that was so difficult. The LRI had no processes set, had not appropriate management infrastructure to enable a third party like a consultant to be attracted and help it out. They got it though in the end and it was constructive for them to receive such guidance.
- Other resource issues had to do with a majority of responses from the people involved in the initiative and those were bringing the issue of information systems in the up front reengineering scene. Many of the initial process redesign efforts were paper based. However, as new work systems were implemented, the requirement for accurate data and performance measurement was becoming more urgent; 'improved data collection/IT'; 'data collection and accuracy can undermine achievement'.
- A series of concerns were also raised about 'communications' - which as I see it can be related to how the human element communicates with one another within the boundaries of this BPR initiative. The issues related to publishing the achievements of the reengineering programme both internally and externally and for the need to improve 'communication Trust-wide'. Again, there is an emphasis on a corporate framework to support change.

(Adapted from Bevan 1996 : 2-53)

⁵¹ This particular case I consider as the most appropriate one for illustrating my point because of the following reasons:

- It might not be clear-cut to the reader but with my capacity as a researcher in this field I have identified that a number of elements emerged from the USPS case study could fall under the five general element categories I suggest as very important when considered properly for the succession of a BPR initiative (also refer to Figure 3.4). This enabled me to examine, compare and contrast the activities that took place in this case with the suggestions I make for the BPR notion.
- The USPS-Express Mail case (based on this thesis categorisation of the five major element categories) I believe presents to the reader how they deal with the Time, Human Element, Culture, IT and Processes factors in the BPR notion.
- Also we have a reflection part (last part of the case) which re-evaluates what else could have been done to further improve this company's change initiative - a point for the reader of this thesis to expand on and for me as a researcher to provide my suggestions as alternatives to what went wrong.
- Having to assess my suggestions based on such a scenario, I believe the proximity was very close and in doing so I validated my contribution to knowledge (assessing via this framework whether my suggestions could be applicable or not and whether the reader/user of my work could be benefited in a way if she/he applied what has been suggested in their own contexts and BPR scenarios).
- By comparing this case study with a number of others I see it has not been driven by individual

assumptions but of a degree of interlinked activities and decisions (e.g., Express Mail-USPS Vs Ford or IBM -Hammer and Champy 1993 the latter being IT driven). Something which justifies my suggestion for contextual and integrated BPR type of thinking.

- Is also a case which reflects on the timing element, which I consider as the only distinctive element BPR has when compared to other change programs (e.g., Express Mail-USPS Vs LRI - the latter having unlimited availability of time in its disposal and still can be identified as a BPR initiative).

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⁵² *United States Postal Service: Creating Change in a Mega-Organisation, A Case Study*

The US Postal Service, created out of the old Department of the Post Office through the 1970s-era Postal Reorganisation Act, employed 770,000 people in 1994, working in 40,000 post offices and support centres across the country. This is the second largest federal organisation; only the military, with more than 1 million uniformed personnel and hundreds of thousands of civilians, is larger.

Only seven private companies on the Fortune 500 generate more annual revenue than the USPS's \$47 billion. Much like these corporate giants, the USPS has faced dramatic changes from its inception to the early 1990s, and remains in a race to remake itself and remain competitive in the information age.

The USPS mission, according to the Postal Reorganisation Act, is to provide all Americans with quality service, including universal service at uniform prices for at least one class of mail, and to provide employees with wages, benefits, and working conditions comparable to the private sector; all the while becoming economically self-sufficient. These are very ambitious goals, which as of the end of 1994 had yet to be fully realised.

Clearly, reengineering processes to make them more effective and efficient, along with increasing the use of automated sorting equipment, are solutions to improve the overall Postal Service performance. Both of these changes, however, will have a profound impact on the mostly unionised workforce and on the civil service model of organisational culture.

Almost 90 percent of postal employees are represented by one of the four primary unions, which from the end of World War II until the 1980s were a significant force in an industry characterised by little competition, few communications substitutes (primarily the telephone), and captive customers.

But the structure of the industry has changed considerably in recent years. Facsimiles and e-mail provide communication substitutes for data over telephone lines. The cost of telephone communications has dropped dramatically since deregulation. New entries into the market to deliver hard copy documents - Federal Express (FedEX) and a host of others - have chipped away at the more lucrative end of the mail delivery spectrum overnight mail. City couriers also eat into the cost-effective delivery routes in major cities.

In the nimble, fast paced, ever changing communications industry, the postal service is a bureaucracy with 80 percent of its costs tied up in labour costs, and many outdated procedures, some of which were placed there by the very government that is now demanding a 'profitable performance'. The postal service does not even deliver the federal government's overnight mail, because it is prohibited from offering volume discounts and therefore is not price-competitive; FedEx has the contract.

In addition to contending with labour costs and the government, the postal service must struggle against its own corporate culture to successfully change. An analysis of the postal service's corporate culture in the late 1980s by Duke University identified a culture that was more conservative than innovative; more task-driven than people-oriented; and more structured than relaxed. It was further characterised as autocratic, internal focused, functionally driven, and not strategic in outlook. Marketing was perceived as weak.

In 1992, Marvin Runyon entered the picture as the 70th Postmaster General of the US. Within weeks of joining the agency, he announced plans to eliminate 30,000 jobs of management employees who 'don't touch the mail'. He offered buyouts and in fact 47,838 employees accepted. The problem was that only about 16,000 were managers; the rest were experienced craft employees, many of whose jobs have had to be filled by inexperienced new hires to keep operations running.

By late 1994, two years into Runyon's tenure, the biggest problems had yet to be resolved. The postal

service continued to lose money - \$1.7 billion in fiscal 1993 and an estimated \$900 million in fiscal 1994. There were more postal workers in late 1994 than when Runyon took over in 1992. And delivery problems in NY, Chicago, and Washington, D.C. were widely published.

Where Runyon may have been more successful is in his reorganisation of the executive levels of the postal service to create a new emphasis on customers. Even changing the nomenclature from bureaucratic to corporate - such as changing the titles from Associate Postmaster General to vice president - is a subtle but important piece of the overall effort to change the corporate culture.

Runyon started to change the language of the postal service by asking executives to look at competition and to seek improvements not just cost but in service. He forced the postal service to begin measuring its success in terms of customer service. He continued to emphasise aggressive marketing and communications; he hired the former White House spokesman, Larry Speakes, as a Vice President of Communications, and the former CEO of CitiBank of Illinois, Loren Smith, as Vice President of Marketing.

In its 1993 Annual Report, the USPS enumerated its five Guiding Principles, which speak in the language of business organisations doing business in the highly competitive, customer-focused and team-oriented ways of the 21st century. These principles are shown in Figure 2-9.

Figure 2-9

USPS

Annual Report of the Postmaster General

Fiscal Year 1993

Guiding principles the postal service is committed to:

- *People*: diversity is valued; everyone must be treated with dignity and respect. Training and information must be provided to employees. Preparation strengthens teamwork and participation in decision making, which are essential to customer and job satisfaction
- *Customer*: we will achieve the highest possible levels of satisfaction with every service encounter. Customer satisfaction is essential to the health and growth of our business
- *Excellence*: we need to stand for continuous improvement, positive change, and making breakthroughs in what we do and how we work. Each of us will bring our finest efforts to bear on each task and each endeavour, all the while looking for better, easier, faster, and simpler ways to serve our customers, achieve our goals and improve our performance.
- *Integrity*: we will be worthy of the trust given us by the American people. We will act with integrity in every encounter and relationship with postal customers, business partners and each other.
- *Community Responsibility*: we will build upon our legacy of more than 200 years of service to the nation by meeting the changing needs of the communities we serve into the next century.

What role does BPR play in this environment? How can managers and employees throughout the organisation hope to achieve the excellence that is one of the five guiding principles for the postal service when the individual with the most power, the Postmaster General, has difficulty effecting change?

Business Process Reengineering at the USPS is currently organic. Several reengineering projects are in process in a variety of departments and at a number of sites throughout the postal service. Some are further along than others are. Many of those efforts are co-ordinated through the Information Systems Organisation, which has developed its own framework for undertaking BPR projects, the basics of which are to:

- create a charter
- define as - is of the process to be reengineered
- develop a vision for the new process
- develop alternatives for achieving the vision
- develop specifications for the selected alternative.
- perform change management
- develop an implementation plan

- implement the new process
- measure and monitor the process

A project is typically chartered at the vice presidential level, or one level below, and the person who charters the project becomes the executive sponsor. A management review board is chosen, followed by a project core team to actually reengineer the process. On the management review board are executives from the functions that are stakeholders in the process to be reengineered.

A postal service employee chairs the project core team, and consultants, if used, work closely with the project core team. The project core team reports all its results, including information gathering and recommendations for reengineering, to the management review board.

As at the end of 1994, the postal service had more than a dozen BPR initiatives underway. Each looked for 'quick wins', which can yield cost savings, improve the work processes, and increase morale over the short term. These successes allowed BPR teams to push ahead with long-term opportunities that will yield even more dramatic improvements in the business process.

Creating change at the postal service is a multipronged challenge. To some degree, change has occurred in that:

A focus on customers is beginning to emerge and become the focus for reengineering efforts. Stronger, more cohesive teams are formed that stay together throughout the reengineering effort. In early BPR undertakings, teams often drifted apart and the process change was implemented by a few people who 'stuck with it'. Often these changes didn't last.

But to drive organisational change into the fiber of an organisation the size of the postal service, a succession of successful BPR projects will need to be accomplished. Only when enough processes are made more effective and efficient can meaningful downsizing and reduction in head count take place.

Let's look more closely at one postal service BPR effort. Express Mail competes head to head with overnight carriers such as FedEx, DHL, and United Parcel's Overnight Letter. In 1993, 53 million pieces of Express Mail were delivered, contributing \$627 million in revenue (Source : USPS 1993 Annual Report).

Reengineering of Express Mail began in 1993 and focused primarily on finance and customer support. A task force discovered a number of problems with Express Mail processes, including duplication of effort, confusion about job responsibilities, and activities that added work with no real benefit.

The Express Mail reengineering project was chartered in the fall of 1993, with final recommendations presented to the management review board overseeing the effort on December 22, 1993. The initial project focused on 'administrative support' processes, called Expedited Services, not on processing and distribution of the physical pieces of Express Mail.

Although these are not the processes most people associate with the postal service - receiving, sorting, transporting and delivering Express Mail packages - administrative support processes directly touch customers and have a significant impact on customer satisfaction.

The project goals were to:

- identify short and long-term improvements to Expedited services
- streamline Expedited services to improve utilisation of resources
- eliminate unnecessary work associated with Expedited services
- enhance current customer service levels
- develop a functional vision for the Expedited service office, of which Express Mail is only one product
- create a 'roadmap' to achieve the vision

Team members considered to be the 'best and brightest' were assembled and expected to devote 75 to 100 percent of their time to the team's work. Union members, though not actually team members, were encouraged to provide input into the process. The team was given physical space in which to work,

training as needed, and a facilitator from an outside consulting firm.

Five major processes were identified:

- customer inquiries
- corporate account set-up and maintenance
- performance analysis and improvement
- label handling, data entry, and verification
- Express Mail technical and design support

Within these five processes, 32 subprocesses were identified and recommendations were made for each. Many subprocess changes were 'quick hits' - 70 percent of the recommendations were implemented within three months, and they account for 50 percent of the cost savings recognised in the project. Figure 2-10 shows the processes reviewed by the reengineering team.

Figure 2-10

USPS

Processes Reviewed

Customer Inquiries

- process delivery inquiries
- process product inquiries
- process financial inquiries (EMCA)

Corporate Account Set-up and Maintenance

- set up new account
- cancel account
- deposit funds into EMCA
- process credits to EMCA
- obtain new accounts
- monitor account status-sales
- send monthly EMCA statement

Performance Analysis and Improvement

- perform destination
- analyse CTT daily transmission report
- expand on demand pickups

Label Handling, Data Entry, and Verification

- process refund for prepaid customer
- collect on short paid items
- perform EMCA/CD Federal agency label verification
- analyse EMRS rejected labels
- process express mail labels
- audit daily IRT transactions
- audit IRT transmission report

Express Mail Technical and Design Support

- distribute supplies
- facilitate drop shipments
- facilitate mail reshipments
- facilitate custom shipments
- co-ordinate on demand pickup
- maintain network information
- provide training
- support CTT hardware
- order CTT hardware
- process IRT close-out

There are a number of change management lessons learned from the Express Mail reengineering project. First the details of changes to take place in Express Mail were initially not communicated widely, for fear that too much communication might cause unnecessary confusion and resistance to the

change effort. However, as the postal service becomes more confident about the benefits gained from BPR efforts, the organisation is likely to communicate more and earlier in future projects.

Second, referring to the Burke-Litwin model, you can see the different levels of change attempted at the postal service. Runyon's downsizing and reorganisation are transformational changes, requiring strong leadership and direction. In contrast, the type of changes recommended by the Express Mail reengineering were transactional.

While we generally advocate transformational change in some instances the corporate culture makes this especially difficult. Rather than have no change, transactional changes that produce significant results but they do not require the same type of leadership as transformational changes can be implemented. Individuals at various levels and at different locations in the organisation can make successful changes of this sort, demonstrate success, and help drive the organisation toward future transformational changes.

Choosing to focus on finance and customer service support as well was important to a successful reengineering effort in Express Mail. Many more employees are involved in processing and distribution, and therefore it is much harder to successfully implement change. This is true only in the postal service, but in any large, unionised organisation.

Because of the most cost-effective gains could be secured on the business side of Express Mail, and because implementation would be somewhat easier, this was the logical place to focus.

(From Carr and Johansson 1995 : 56-63)

⁵³ Overall it was claimed that a 72-hour hospital wait now is down to an hour and that is a dividend gained from the reengineering revolution - something which will benefit the amount of patients accepted in the hospital, greatly (Nelson in Leicester Mercury 1996).

⁵⁴ Further evidence that the NHS in UK still needs to familiarise itself with all these aspects this author refers to, can be found in many Medicine Projects (reviewed by the NHS Centre for reviews and dissemination) that deal with the improvement of clinical effectiveness (e.g., FACTS, PACE Projects) One of them was the Front-Line Evidence Based Medicine Project (EBM). A three-year exploratory study conducted with 20 hospital teams from 12 specialties in 14 hospitals in North Thames. Its aim was to assess whether it was feasible for hospital doctors to use databases and apply research evidence in the context of their routine clinical practice, and to identify key barriers to such use. The results showed that the main barriers cited by the participants were: inadequate access to information; insufficient time and money for clinical teams to acquire new skills; low levels of baseline skills in critical appraisal and computer use amongst staff; problems associated with medical and nursing hierarchies (getting an agreement about an issue was also vested in personal interests - time consuming, and factors related to the peoples' involved resistance towards change); perceived threats to medical autonomy (low communication levels); and lack of relevant evidence (NHS Centre for Reviews & Dissemination/Effective Health Care 1999 : 1-16). In other words a weak system to work in; which obviously needs great direction and support (financial and managerial) to reach to the best end of the suggested by this thesis author, BPR continuum.

⁵⁵ Case (1999 : 424) on this matter criticises BPR and amongst other things he states that 'BPR entails treating organisations like machines that have gone wrong and offering a set of principles by which those corporate machines can be overhauled, ...'. A critique, which does not come only from this author's reading but from other writers, like Kehoe (1995) and Jones (1996).

⁵⁶ I extensively refer to this particular author's reading because he provides a detailed analysis and background knowledge for the process element, something, which is rarely found in a management disciple publication. Normally processes analyses, mapping and modeling are issues discussed in the engineering (industrial/mechanical/electrical) literature publications (e.g., Medland 1986, Wang and Li 1991, Barker and Longman 1992).

⁵⁷ These tools fall into three broad categories: the category of (i) *systems engineering and analysis*, the (ii) *business modeling* and the (iii) *process simulation*. These tool-techniques have also evolved from this work-study and are currently used by the contemporary engineers of processes (Johansson et al.

1993 : 214). According to these authors the first category includes a number of tools like the: *Flow Diagram*: a scale diagram showing the location of specific activities and the sequences of men/machines/materials/equipment used in a process, *String Diagram*: a scale plan showing the movement of men or materials using 'string' to follow the paths of each (these are similar to the Flow Diagram), *Travel Chart*: a tabular record with data about the movement of resources used in production, *Photographic Records*: a recording of movements on the shop floor using a camera over a fixed period of time; the method has gained in popularity with the advent of low-cost video recording equipment with superimposed elapsed time, *Multiple Activity Charts*: these charts summarise a number of activities that take place concurrently in order to represent in schematic form situations in which many activities in a process are taking place in parallel and the *Process Charts*: which map a sequence of events represented by using standard symbols (Johansson et al. 1993 : 214).

In the category of *general business modeling* business models are useful to understand the importance of processes in contributing to business performance as in a 'road map' style representation. These maps serve the purpose of 'displaying the objective sought at the highest level and the contributing sub-goals leading to the fulfilment of that objective' (1993 : 222/223). These might include accounting models (like the ones that suggested and analysed in Kefford's 1995 reading), marketing and pricing models, production modeling even vehicle routing when distributing goods (examples like the ones De Chernatony (1992) presents in this particular reading of hers). According to Kefford (1995 : 20) the very process of building a model, 'gives a better insight into the business operation and aids the process of understanding' of the people involved. An additional reason for this category to be so popular in the engineering world is the fact that, it seems to be able to 'produce complete results very quickly which can then be used not only to investigate different scenarios but also to test the effects of specific risks to the business that are associated with a new project or sales bid' (1995 : 20).

The last category reflects on *computer based process mapping*, which mostly deals with industrial process simulation activities. (Johansson et al. 1993 : 224). These simulation exercises based on computer data bases tools are considered to be effective means for investigation of current and future industrial operations with the capability to simulate or predict with high rates of success issues like costs, machine utilisation, rework and failure etc. (1993 : 225/230). It is further argued that these models 'are made up of rules, logical expressions and probability distributions as well as mathematical equations' (Oakshoot 1997 : 16).

⁵⁸ The field of organisation networks is a rich one in terms of research studies. However, there are clear differences in how the network approach has been applied. It has been used primarily for descriptions of how different units relate to each other inside an organisation or between relatively independent organisations. In a few studies it has been used for giving normative recommendations. A common denominator, as described by Hakanson (1996), is that a network structure 'is characterised by a set of actors connected by a set of relationships. Each actor is related to a certain number of other actors' (Hakanson 1996 : 3857). Generally, he notes multiple types of ties between the actors are assumed to exist. Furthermore, relationships are expected to be more or less connected; that is, the outcome of one is dependent on the outcomes in some of the others (Hakanson 1996).

⁵⁹ I got the idea for such a framework while studying Clark's (1999) latest publication on 'Organisation in action - competition between contexts'. In chapter 7 (1999 : 133-157) of his book, Porter (1990, 1997) is cited to explain the interacting factors of the organisations which are located into local and international/national contexts and that is of course from the competitors perspective. I found the pointers he had used (e.g., examining a company's context prior to structural and strategic changes, always look at inner factors like core technologies, advanced skills, leading edge activities and others like supporting and related industries, market demand - 1999 : 144) very interesting and I used them, amongst other issues, in parallel with how the process element should be viewed by its future users while reengineering in order to avoid overemphasising the processes element.

⁶⁰ David O'Brien, quoted in B. Denning and B. Taylor, 'Rank Xerox U.K., Office Systems Strategy (C): Developing the Systems Strategy' (Henley on Thames, England: Henley - The Management College case study, September 1988). Other Rank Xerox U.K. information comes from personal interviews (Davenport and Short 1990 : 21).

⁶¹ In Davenport (1995), we see a change of opinion in his beliefs regarding the role that IT plays in BPR. He says that, 'till now the dominant model of IT has been that data streams can be designed architecturally and engineered..., [this approach] involves detailed modelling of information

requirements and flows, and their relation to business activities and processes' (Davenport 1995 : 28-29). Now he notes we need to become 'more familiar' with the term 'information ecology' which does not have to do only with modelling and prediction but the 'valuing of diversity' that surrounds this aspect. This is a view that I believe contradicts his earlier readings of 1990 with Short and 1993, two readings in which, as shown throughout this part, he views the BPR initiative as an IT-driven one. The reason why I believe he redirected his thoughts and suggested otherwise, is because of the fact that the traditional approach runs into difficulties when confronting environments that are in a dynamic form, fluid or characterised by dissent. I cannot discuss this further, though, because there is no follow up paper on his latest ideas. Thus, it is my belief that my overall suggestion towards the future BPR writers/practitioners/readers/ researchers to view the notion of BPR in a contextual way, a systemic way (which would allow them to be flexible when considering issues like IT, the Human Element, time) is useful and more realistic than the one pursuing the idea of an IT driven BPR change initiative.

⁶² Clark (1993 : 12) for example notes that 'technical change is now a fact of organisational life of employees in most advanced industrial countries'. Forester (1989) on the same topic reveals that by the late 1980s, it was calculated that 'over \$300 billion per annum were being spent worldwide on the use of computers and communications hardware and software' (1989 : viii). Kast and Rosenzweig (1970 : 204) state that,

'science and technology have become a pervasive force in modern society, influencing all of man's activities and providing a new shape to the world'.

It is also my belief that IT today has an important effect upon our individual lives and most specifically on the way we organise them. Whether these are our private or organisational-working lives, I think it makes no difference to the end result. I shall add, though, that these are issues that a BPR manager should be aware of in order to pre-detect any problems arising and/or the compounding of existing problems with relevance to their initiatives surroundings.

⁶³ Bradley et al. (1993) state, 'co-ordinating technologies directly addresses the rationale which is set to enable people to cooperate more effectively and efficiently in the conduct of their work' (Bradley et al. 1993 : 13).

⁶⁴ Issues that have also been causing problems to the implementation side of BPR. A very recent case study (by Harrington, McLoughlin and Riddell 1998) based on a public sector research study (Contributions Agency - UK) further justifies the idea that this thesis is pursuing, that much of the current BPR literature concentrates on giving guidelines as Hammer (1990) puts it, 'for successful implementation' rather than presenting a critique on BPR activities and on its foundations (e.g., Hammer 1990, Hammer and Champy 1993, Davenport 1993, Davenport and Short 1990, etc.). A number of problems that the case study was facing, had to do with control, empowerment and commitment - some of the gaps that this thesis presents throughout this analysis, as issues lacking from the BPR literature. Some of those problems were also reflecting on how internal politics and relationships operated at the time of change towards the radicality element for the notion of BPR (Harrington et al. 1998).

⁶⁵ 'Mindset' - One of the factors that for these specific authors is considered as major to a *change* operation: They note, 'probably the most important for we may not see the potential of the change because we are stuck in the mindset of the past. This is very relevant in the function versus process debate' (Armistead and Rowland 1996 : 71).

⁶⁶ Motorola was among the earliest North American companies to demonstrate the power of process reengineering. Between 1984 and 1987 a process improvement program aimed at greatly reducing defects also cut cycle times in half and reduced cost by almost \$ 1 billion (Harrison and Pratt 1993 : 8).

⁶⁷ The CSC acronym stands for '*Computer Science Corporation*'. It is an International Management Consultancy, which has locations in a number of countries, such as Sweden, Denmark, UK, Benelux, Germany, France, Australia etc. (<http://www.csc.com>). As stated in the corporation's web-site, 'its history goes back 39 years and throughout these years, CSC has been involved in some of the most innovative and going breaking projects in IT' (Amongst them the *NASA* project where the corporation was dealing with mission control systems to complex astrophysics applications, and the *Rolls-Royce* project, which involved vehicle ordering and spec changes to manufacturing and after-sales service) (<http://www.uk.csc.com/index-2.html>). With around 47,000 valued employees at 700 locations across

the globe, CSC notes that it 'provides a wide range of services including management consulting; the development, implementation and integration of complete information systems; and outsourcing, covering a full range of client's information technology activities' (<http://www.uk.csc.com/index-2.html>).

⁶⁸ This is based on the author's experiences in designing and facilitating stress management programs – the author is a medical doctor and currently president of Synectia consultants in Toronto.

⁶⁹ The coverage of the literature in terms of HRM indicated that empowering staff is a dogma of BPR, and that is by allowing decision making at lower levels in the organisation and towards a flatter management structure. However, BPR, as shown, relies on top-down leadership to carry out BPR, which is inconsistent with the ideas of empowerment. Its advocacy of delayering the organisation, whereby managers are transformed from bosses into coaches, contradicts with its advocacy of methods for implementing reengineering, that have proved to be hierarchical and even dictatorial. On this particular point and according to Eccles (1992) empowerment under BPR can become little more than delegation. In his opinion it pushes down authority and responsibility but staff do not really gain empowerment.

⁷⁰ In White's (1996 : 1) article Hammer blamed his engineering background and he admitted that he had been sufficiently appreciative of the human dimension.

⁷¹ *Pluralism* is 'a philosophical perspective on the world' Audi (1995 : 624) and according to the same author:

pluralism emphasises diversity rather than homogeneity, multiplicity rather than unity, difference rather than sameness. The philosophical consequences of pluralism were addressed by Greek antiquity in its preoccupation with the problem of the one and the many. The proponents of pluralism, represented principally by Empedocles, Anaxagoras, and the Atomists (Leucippus and Democritus), maintained that reality was made up of a multiplicity of entities. Adherence to this doctrine set them in opposition to the monism of the Eleatic School (Parmenides), which taught them that reality was an impermeable unity and an unbroken solidarity. It was thus that pluralism came to be defined as a philosophical alternative to monism.

Recent philosophical thought has witnessed a resurgence of interest in pluralism. This was evident in the development of American pragmatism, where pluralism received piquant expression in James's *A Pluralist Universe* (1909). More recently pluralism was given a voice in the thought of the latter Wittgenstein, with its heavy accent on the plurality of language games displayed in our ordinary discourse. Also, in the current developments of philosophical postmodernism (Jean-Francois Lyotard), one finds an explicit pluralist orientation. Here emphasis falls on the multiplicity of signifiers, phase regiments, genres of discourse, and actions are subverted in the interests of reclaiming the diversified and heterogenous world of human experience.

Pluralism in contemporary thought initiates a move into a post metaphysical age. It is less concerned with traditional metaphysical and epistemological issues, seeking answers to questions about the nature and kinds of substances and attributes; and it is more attuned to the diversity of social practices and the multiple roles of language, discourse and narrative in the panoply of human affairs.

(Adapted from Audi 1995 : 624-62)

⁷² Unitarism assumes that conflict or at least differing views can not exist within the organisation because the actors - management and employees - are working to the same goal of the organisation's success (Beardwell and Holden 1994 : 16).

⁷³ Integration is something that can be achieved as shown above with the intention to place a notion/ different aspects of a notion within a context, which unless examined from different perspectives, is this thesis belief that it lacks of advantages that it would not have gained otherwise. Organisational Integration (OI) could be a way of broadening what has been stated here and Guest's (1987) definition describes precisely what this thesis is trying to pursue; he refers to it as 'the extent to which personnel policies are integrated with other activities within the organisation' - supposingly in our case one of those decisions is the decision of undergoing a BPR change programme. Guest sees OI interacting with,

- Strategic HRM
- Operational HRM
- Employee Integration
- Organisational Design

I believe that this could make a good way of integrating the human element with other elements when reengineering.

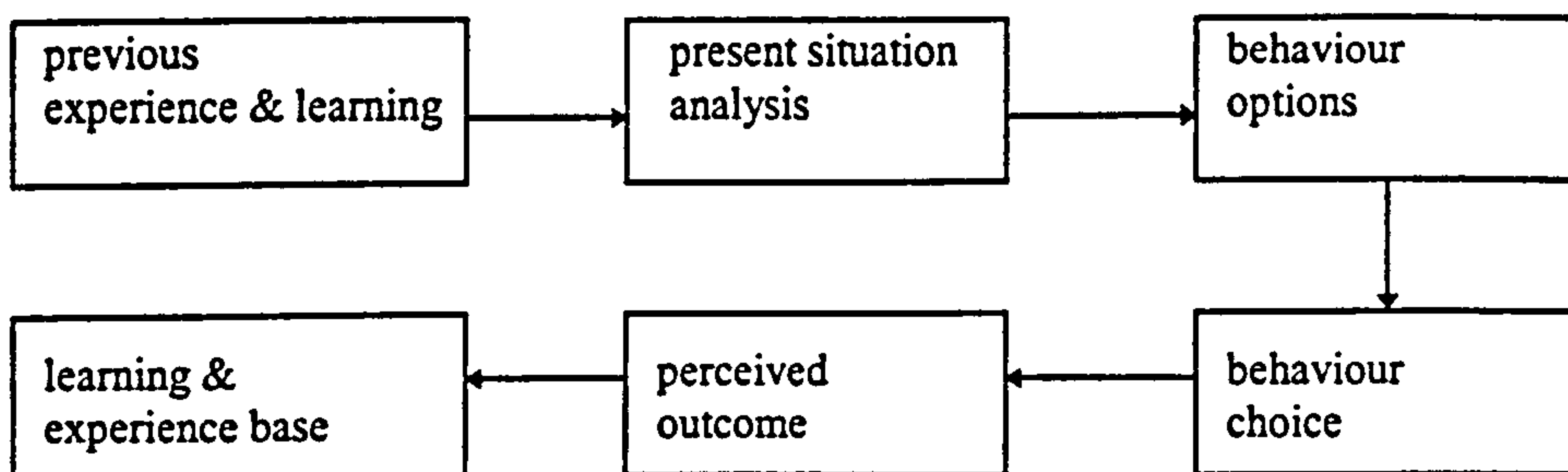
⁷⁴ Guest (1987) amongst other things, sees *Employee Commitment* related to the organisation, to management, to the work itself, and to change factors. In accepting that, it would be a good suggestion for the BPR managers to view it in such a way as well. This will allow the integration of relevant to the human element ideas that he/she can deal with when analysing this factor and how is affecting and being affected by the BPR framework.

⁷⁵ Does HRM then really matter for that reason? Reviews on studies of the relationship between human resource and firm performance indicate that although much is still to be learned, the relationship more often than not is *distinctly positive* (Kleiner et al. 1987). A more recent review concludes as follows :

‘Industrial relations and HR policies have important quantitative effects on the productivity and profitability of major organisations. As a result, variations in those policies and practices have a major effect on an organisation’s success’ (Kleiner 1990 : 39).

⁷⁶ In a cognitive environment the learner has to apprehend what is required, rules and concepts and how an objective can be achieved (Beardwell and Holden 1994 : 293). The basis of cognitive theories of learning according to Martin (1998 : 113), is where individuals develop internal frameworks that allow them to more effectively interact with the environment around them. This approach creates the need to study the internal working of the mental processes involved in learning. A simplified way of thinking about this cognitive approach is shown in Figure 7.8, cited from Martin’s reading.

Figure 7.8 A cognitive model of learning



(Adapted from Martin 1998 : 114)

⁷⁷ Alvesson (1987) in particular, reflects on the reasons why to a certain extent during the whole of the Twentieth Century, but to a rapidly accelerating degree during the past 10-20 years, economic development, above all under the late capitalism, has resulted in a previously uniform and cohesive culture beginning to break up. ‘The transfer [he states] of more and more functions to formal organisations and to various professions, the introduction of an increasingly far-reaching functional division of labour in society and the sectional organisation of need fulfilment for different areas of life has brought about technocratization of social life and a destruction of the traditional cultural patterns’ (1987 : 200). The BPR reader can identify from the above approach the current BPR literature is taking in dealing with culture. The similarity is becoming clearer when we refer to the IT and the Processes factors considered in previous chapters. As has already been shown, these are factors that are overshadowing for instance the People factor in the BPR literature and it seems that the same thing is happening with regard to the cultural factor as well.

⁷⁸ Antonacopoulou (1995 : 1-23) published a very interesting paper on the matter. Her study explored

the link between peoples emotions* and learning* within changing organisations. The study's empirical findings were drawn from a study of managers in the financial services sector. The findings illustrated the interplay between emotion and learning in the way individual managers identified and pursued a specific goal. Overall though Antonacopoulou argued that 'in acknowledging the interdependence of emotion and learning has significant implications for our understanding of human action and interaction during periods of change' (1995 : 1). Thus, it is of no surprise that the human element is influenced by what we call culture when changes are made in their working environments; this is something that the BPR people need to be aware of and also act on it (suggestion #3 shows how to do that). (*): 'The study of emotion in the context if learning is particularly important, because it offers a more holistic perspective of the way motives, attitudes, values, beliefs and conflicts of individuals generate feelings and judgements which in return guide their action. The study of learning in the context of emotion is also very important, because it shows how existing knowledge and, in some instances, ignorance shape individual reactions to existing and new events' (Antonacopoulou 1995 : 17).

⁷⁹ ZTC Ryland 'is a plant of three thousand or so employees engaged in developing, making and selling telecommunications products. It is one of the several plants owned by ZTC, a company made up of what were formerly rival telecommunications business' (Watson 1994 : 4). The author had chosen to write about this company because according to him 'it presented a superb opportunity', 'it provided an opportunity to look at how some of the fashionable management ideas are impinging on the lives of managers who are attempting to put them into practice', and because at the same time he could apply his interest in trying to relate academic ideas to the practicalities of managerial work (1994 : 4). The most significant factor for the author in choosing that company as a research site, though, was that this company's management had engaged in a whole series of change initiatives of the type associated with the 1980s and 1990s 'search for excellence' in organisations (1994 : 4). According to Watson, this research site explicitly formulated the corporate culture which the company was trying to engender and 'there was a whole series of 'progressive' management initiatives, ranging from 'Total Quality Management' to team briefings, team working, personal development programmes, performance - related pay, and so on. Not only this, but the company had based its distinctive approach to strategy development and culture-building on the work of consultants who were also academics' (1994 : 4).

⁸⁰ Here we see two different cases of cultural change within two different organisations leading to two different outcomes; outcomes that, I could say, complement each other. This thesis assumes that the ZTC Ryland's Case presented by Watson (1994) and the BT Example mentioned by Hopfl et al. (1994) to be two different examples. Willmott's (1997) reading, though, reflects on the matter and this particular author argues that the two previously stated examples are referring to the same organisation, despite the pseudonym Watson uses. Whatever the case though, this research's intention, when presenting the above, is not to find out whether this last argument is correct or not, but to indicate to the BPR reader and the BPR literature itself that cultural change takes place (despite our preference as managers), how it takes place and how this cultural change is/could be perceived (e.g., accepted/rejected by the people affected) in the organisation (whichever type of entity that might be) that is undertaking a change initiative (BPR or any other).

⁸¹ Table 8.1 illustrates the extremes of the applicable and the analytical approaches given by Wilson and Rosenfeld (1990 : 234) along with some examples of the related disciplines upon which each draws.

Table 8.1 Four ways of viewing organisational culture

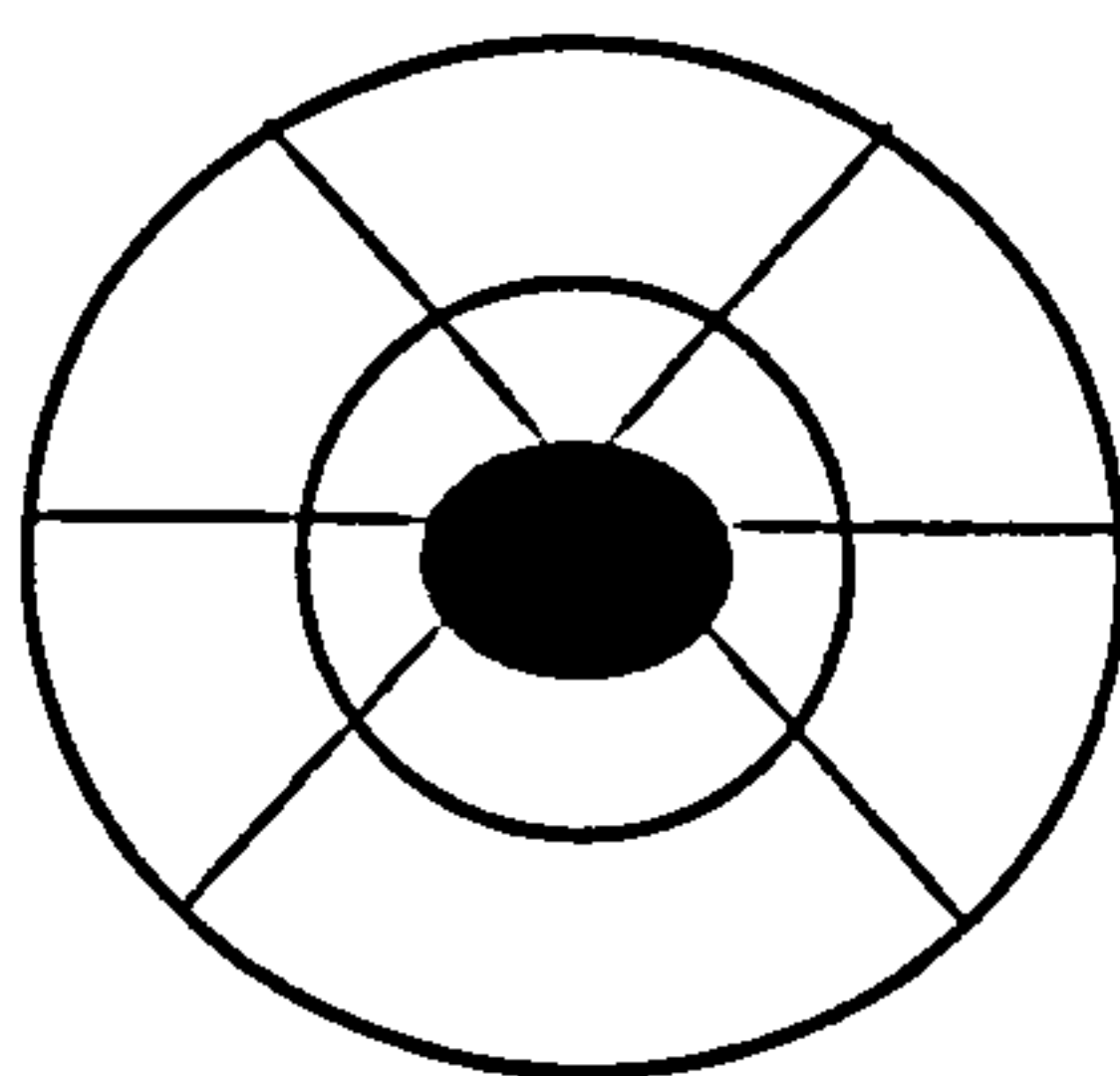
Applicable / Analytical	Culture is viewed as	Related concepts (examples)
Applicable	Commitment to a firm's values & corporate goals	Motivation theories, decision theories, leadership
Applicable	A recipe for success	Strategic management, organisational change, organisation structure and design
Analytical	Context and history of the organisation	Business history, anthropology, the sociology of language
Analytical	The Control of individual and group behaviour, approving some and not others	Social psychology, socialisation, studies of informal organisation

(Adapted from Wilson and Rosenfeld 1990 : 234)

⁸² These interpretation stages indicated to the author of this research how people engaged in a change process and how they personally reacted to it. In other words *what will the changes be meaning to the people involved* (Isabella 1990). The anticipating phase involves rumours from the grape vine to the individuals and according to the way they connect to each other at the work place, different pictures of anticipation for future changes emerge. The confirmation stage is where the jigsaw of interpretation involves putting all the fragments of information together and the anticipation stage is confirmed. This is followed by the stage of culminating. This is the point where the individual will amend his or her prior interpretation of what happened earlier. According to the author, this stage is closely linked into organisational symbolism and here people are in search of clues from which they will derive new meanings or reconfirm other existing interpretations of events. The last stage involves the testing of the change (experimentation) and here is where people accept the change or reject it (Isabella 1990 : 7-41).

⁸³ This is a type of a culture, which represents an organisational structure which is best pictured as a web. Figure 8.4 graphically draws on that:

Figure 8.4 The power culture



(Adapted from Handy 1986 : 183)

According to this author 'if this culture had a patron god it would be Zeus, the all-powerful head of the

gods of ancient Greece who ruled by whim and impulse, by thunderbolt and shower of gold from Mount Olympus' (Handy 1993 : 183). He continues by saying that in organisations culture depends 'on a central power source, spreading out from that central figure. They are connected by functional or specialist strings but the power rings are the centres of activity and influence' (Handy 1993 : 184).

⁸⁴ *Provision of more analysis of how culture is referred to in the currently examined BPR literature:*

As noted earlier the cultural element in the currently examined BPR literature has not been the centre of attention. The reader of this thesis might also wonder how culture is referred to in the BPR literature. Do texts have chapters on it, or sub-sections of chapters, or even, is the word of culture indexed? Looking at the books examined randomly I could say that the reference varies. For instance if we look at Hammer (1990) there is no reference to the concept of culture at all. Hammer and Champy (1993) do not even include this word in their book's index, and this is despite the fact that they acknowledge this concept's existence (refer to part 8.1). Davenport and Short (1990) make no reference to it. Davenport (1993) takes it a step further, he mentions it, but the concept is overshadowed by the approach he takes towards a control-oriented culture.

For other writers like Johansson et al. (1993), we see an acknowledgement of the fact that culture is a 'value factor' that a company has to look at before launching to a detailed analysis of its future activities. However, although they may talk about it, we see them leaving the matter there, with no exact indication on how the literature could approach this issue arising and how organisational strategies could tackle this particular problem. Morris and Brandon (1993) and Armistead and Rowland (1996) go as far as cultural paradigms featuring in organisations but I believe this is not enough. There are a number of other issues in the organisational change cultural literature (e.g., dimensions, types, factors influencing culture, suggestions on how managers and employees could approach the concept and correlate it with the BPR activity in order to provide a holistic picture of what is really happening when reengineering change takes place - issues that were discussed in the earliest sections of this chapter and at the moment are missing from the BPR literature) that could be beneficial and useful to the BPR reader if those elements were mentioned and analysed in the current BPR readings. An approach which forms according to this research's author, a suggestion falling under suggestions # 1 and 2 of this chapter. Finally, Obeng and Crainer (1994) and Jacobson et al. (1995) provide no chapters, sections or suggestions on the cultural concept.

Thus, this small-scale empirical analysis on the currently examined BPR literature indicates once more the fact that the concept of culture has not been given enough attention. It is my belief that when the BPR literature presents the features of organisational cultural change, and correlates them with its own, then the reader will be enriched in knowledge terms and it will be easier for him/her to perceive the notion of culture and be guided by it when reengineering. This could also lead to the modification of the perceived culture, the acceptance of a new one and the future adaptation to it.

⁸⁵ 'Template Analysis' - for King (1998) 'the essence of the approach is that the researcher produces a list of codes (templates) representing themes identified in their textual data' (1998 : 118). It is also 'a very widely used approach in qualitative research' (1998 : 118) and can be used on 'any textual data, including organisational documents, participant observation notes and research diaries, but it is most often used on transcripts from individual or group interviews' (King 1998 : 133).

⁸⁶ To further justify what I am arguing, I would refer to the originators of the idea Hammer and Champy who have themselves come to admit that BPR has not been implemented in the 'revolutionary' manner (Champy 1995, Hammer and Stanton 1995) that was originally intended and the main reason is because of this rather more piecemeal fashion approach.

APPENDICES

APPENDIX 1 : Table 2 -

Logical and intuitive techniques for finding and selecting a research idea

(Re: Saunders & Lewis 1997)

APPENDIX 2 : Table 3 -

Preliminary study techniques identified as helping refine the research idea

(Re: Saunders & Lewis 1997)

***APPENDIX 3 : Organisations and individuals contacted:
addresses - letters - replies***

APPENDIX 4 : Table 4 -

Attitudes of a good research problem

(Re: Saunders & Lewis 1997)

APPENDIX 1

Table 2

Logical and intuitive techniques for finding and selecting a research idea

<u>Logical Techniques</u>	Bryman (1988)	Gill & Johnson	Jankowicz	Raimond	Smith	Smith & Dainty
Looking at own strengths (e.g. assignment marks)			✓			
Looking at past projects			✓	✓	✓	
Searching for themes from articles in journals	C	✓		✓	(✓)	
Discussion with tutor			✓	✓	(✓)	
Pursuing a nascent idea				✓		(✓)C
Talking to practitioners/professionals/clients		✓		✓	(✓)	(✓)C
Discussion with colleagues	C		✓	C		
<u>Intuitive Techniques</u>						
Exploring likes and dislikes using past projects				✓		
Brainstorming	C	✓	(✓)			
Triads				✓		
I Ching				✓		
The pendulum				✓		
Keeping a notebook of ideas			✓	✓		
Relevance trees		(✓)	✓			
Morphological analysis		✓	✓			
Forced relationships		(✓)				
Attribute listing		(✓)				

✓ : - technique discussed in sufficient detail to use it / (✓): - technique just mentioned in context of topic identification / C: - case study or in-depth discussion of research project provides an illustration

(From Saunders and Lewis 1997 : 286)

APPENDIX 2

Table 3 Preliminary study techniques identified as helping refine the research idea

Techniques	Bryman 1988	Bryman 1989	Easterby-Smith et al.	Emory and Cooper	Ghauri	Gill and Johnson	Jankowicz	Kervin	Raimond	Sekaran	Smith	Smith and Dainty	Zikmund	Athanasios
literature review	C	C	✓	✓	✓	(✓)	✓	✓	C	✓	✓	(✓)C	✓	✓
own intuition		C					✓		C			C		✓
secondary data analysis	C			✓				✓		✓			✓	✓
pilot study/case study exploratory study	C			✓	(✓)		✓	✓				(✓)	✓	(✓)
informal discussions (including stakeholder and tutor)	C		✓	✓			✓		C			C	✓	✓
focus groups				✓			✓	✓					✓	(✓)
in-depth interviews								✓		✓			✓	(✓)
observation e.g., shadowing key employees								✓						C

*often used as overview terms / ✓: technique discussed in the context of refining the research idea in sufficient detail to use it /

(✓): technique just mentioned in the context of refining the research idea / C: case study or in-depth discussion of research project provides an illustration

(Adapted from Saunders and Lewis 1997: 289)

APPENDIX 3

***Organisations and individuals contacted:
addresses - letters - replies***

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London WC2R 3LT

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PROFESSOR R L FLOOD BSc CEng MInstMC
HEAD OF DEPARTMENT

Mr Khalil Bar Soum
General Manager -UK
IBM Consulting
1 New Square
Bedfont Lakes, Feltham
Middlesex TW14 8H.B

8th May 1997

Dear Mr Bar Soum,

I am a Doctoral Researcher specialising in Business Process Reengineering/Transformation (BPR) at Hull University, have obtained Upper Second Class Honours Degree and an MBA in General Business Administration. I would be grateful for your assistance.

After examining your company's history I am aware that you are involved in projects that deal with the very new issue of BPR. I am keen to make sure that my theoretical background of BPR and its different methodologies can be dealt with practice as well, by being involved with some real life projects.

I was wondering whether there is any possibility of co-operating with staff in your organisation for the completion of my thesis possibly by joining one of your projects; If there were a possibility of paid employment this would actually make a mostly beneficial relationship even more attractive to me.

I shall telephone you in one weeks time, in order to discover whether you can advice me of possible opportunities with IBM Consulting Group.

Further details of my success to date appear in the attached CV.

Yours sincerely

Ms Christina Athanasiou, BA, MBA

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PROFESSOR R L FLOOD BSc CEng MInstMC
HEAD OF DEPARTMENT

Mr N. Sanson,
The Managing Director
McKinsey & Co. Inc
1 Jermyn St.
London SW1Y 4UH

8th May 1997

Dear Mr Sanson,

I am a Doctoral Researcher specialising in Business Process Reengineering/Transformation (BPR) at Hull University, have obtained Upper Second Class Honours Degree and an MBA in General Business Administration. I would be grateful for your assistance.

After examining your company's history I am aware that you are involved in projects that deal with the very new issue of BPR. I am keen to make sure that my theoretical background of BPR and its different methodologies can be dealt with practice as well, by being involved with some real life projects.

I was wondering whether there is any possibility of co-operating with staff in your organisation for the completion of my thesis possibly by joining one of your projects; If there were a possibility of paid employment this would actually make a mostly beneficial relationship even more attractive to me.

I shall telephone you in one weeks time, in order to discover whether you can advice me of possible opportunities with McKinsey Consulting Group.

Further details of my success to date appear in the attached CV.

Yours sincerely

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13 May, 1997

Private & Confidential

Ms. Christina Athanasiou

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Management Systems & Sciences Department

University of Hull

Hull, HU6 7RX

Dear Ms. Athanasiou,

Thank you for your recent letter and curriculum vitae enquiring about the possibility of a placement with McKinsey & Company whilst you complete your PhD thesis.

Unfortunately, due to our client confidentiality policy, we generally do not offer such opportunities, and therefore will not be able to help you. However, you may wish to consider applying to us at a later stage for a full time position.

We hope you will not be too disappointed by this, but may we wish you every success in your search for an interesting placement.

Yours sincerely,

Camilla Grover

Recruitment Administrator

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Ms Christina Athanasiou
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University of Hull
HULL
HU6 7RX

May 20, 1997

Dear Ms Athanasiou

Thank you for your letter dated 8 May addressed to Mr K Bar Soum,
which has been passed to me for attention.

As you may expect we receive such requests quite frequently, and I
regret to have to tell you that at the moment we have no opportunities
which match your requirements.

May I wish you every success with your thesis.

Yours sincerely

Charles Hobson
Manager
Customer Satisfaction, Quality & Process Re-engineering
EMEA Business Units, UK & Ireland 0161-905-6360 or 0850-743526 FCH/ jbm

Certificate Number FM12587

Registered in England: No. 741598
Registered Office: POBox 41, North Harbour,
Portsmouth, Hampshire, PO6 3AU

APPENDIX 4

Table 4
Attributes of a good research problem (NB it is intended that authors be identified as for Table 3)

Attribute	B88	B89	E-S	G	G&J	J	K	R	Se	Sm	S&D	W&W	Z
fit the specifications set by the examining institution					✓	✓		✓C					
researcher has or can obtain necessary skills				✓	✓	✓		C		✓	C	C	
be within the researcher's area of knowledge	C					✓		C		✓	C		
be something in which the researcher is interested	C	C			✓	✓		✓C		✓	C	C	
will stimulate the researcher's intellectual growth	C							C		✓			
Institutional experience available in area (tutor, library etc.)						✓	C	✓		✓			
be financially viable	C			✓	✓		✓			✓	C	C	✓
state and define the objective and/or research question (s) clearly	C	C	✓	✓		✓	✓	✓C	✓	✓	C	C	✓
(when working for a client) address the client's needs						✓	✓	✓				C	
Provide basis for analysis, not mere fact grubbing		C						C		✓	C	C	
narrow focus but with capability for expansion										✓	C	C	
have symmetry of potential outcomes	C	C			✓	✓		C			C		

References

- Allaire, Y., & Firsirotu, M., 1984 : Theories of organisational culture. In *Organisational Studies*, Vol. 5, pp 193-226
- Allen, F. R., & Kraft, C., 1982 : *The organisational unconscious. How to create the corporate culture you want and need*, Prentice - Hall, New Jersey
- Alvesson, M., 1987 : *Organisation theory and technocratic consciousness - rationality, ideology and quality of work*, De Gruyter, Berlin
- Anderson, K., Armitage, S., Jack, D., & Wittner, J., 1990 : 'Beginning where we are : feminist methodology in oral history'. In McCarl Nielsen, J., (ed) *Feminist research methods : exemplary readings in the social sciences*, Westview Press, London
- Angeles, P.A., 1992 : *The Harper Collins Dictionary of Philosophy*, HarperPerennial, NY
- Anthony, P., 1994 : *Managing Culture*, OU Press, Buckingham
- Antonacopoulou, E.,P., 1995 : Exploring the link between emotion and learning within organisations, *Warwick Business School Research Paper*, No. 191
- Antonacopoulou, E., P., & FitzGerald L., 1996 : Reframing competency in management development. *Human Resource Management Journal*, Vol. 6, No. 1, pp 27-48
- Armistead, C., & Rowland, Ph., 1996 : *Managing business processes - BPR and beyond*, John Wiley & Sons, Chichester
- Atkinson, R., L., Atkinson, R.C., Smith, E.E., & Bem, D.J., (11th ed) 1993 : *Introduction to psychology*, Harcourt Brace Jovanovich, NY
- Audi, R., (ed) 1995 : *The Cambridge Dictionary of Philosophy*, Cambridge University Press, Cambridge
- Bahm, A.J., 1992 : Interdisciplinarity : history, theory and practice. *Journal of Interdisciplinary Studies*, Vol. 4, No. 1/2, pp 193-194
- Barker, R., & Longman, C., 1992 : *CASE (computer aided systems engineering): function and process modeling*, Addison-Wesley, Wokingham
- Barnett, C., 1995 : *Cyber business*, John Wiley, Chichester
- Bashein, B.J., Markus, M.L., & Riley, P., 1994 : Preconditions for BPR success - and how to prevent failures. In *Information Systems Management / Spring*, Vol. 11, No. 2, pp 7-13
- Barry, A., 1988 : Twilight study sheds new light on craft development. *Personnel Management / November*, pp 46-49
- Bauman, Z., 1992 : *Hermeneutics and social science – approaches to understanding*, Gregg Revivals, Aldershot – Hampshire
- Beardwell, I., & Holden, L., 1994 : *Human resource management : a contemporary*

perspective, Pitman, London

Beaumont, P.B., 1993 : *Human resource management : key concepts and skills*, Sage, London

Beer, S., 1985 : *Diagnosing the system for organisations*, Wiley, Chichester

Bennis, W., 1997 : *Managing people is like herding cats*, Executive Excellence Publishing, Middlebury

Besterfield, D.H., 1990 : *Quality Control*, Prentice-Hall, London

Bevan, H., 1996 : *Managing today while creating tomorrow: the paradox of a reengineering journey. Working Paper*, The Henley Research Centre, Whole issue

BIDS Citation Index / references taken from:

<http://mars.bids.ac.uk:8080/isibin/bw-action/193.63.84.4/4378/3173f0030834a006/19,6>

November 1998, 5 :52pm

Binsted, D.S., 1980 : *Design for learning in management training and development : a view. Journal of European Industrial Training*, Vol. 4, No. 8, Whole issue

Boje, D.M., 1996 : 'We need to re-critique reengineering!' In *Journal of Organisational Change Management*, Vol. 9, No. 2, pp 3

Boyatzis, R.E., 1982 : *The competent manager : a model for effective performance*, Wiley, NY

Bradley, S.P., Hausman, J.A., & Nolan, R.L., (eds) 1993 : *Globalisation, technology and competition. The fusion of computers and telecommunications in the 1990's*, Harvard Business School, Boston, MA

Brewer, J., & Hunter, A., 1989 : *Multimethod research: a synthesis of styles*, Sage, Newbury Park – CA

Bryman, A., (ed) 1988 : *Doing Research in Organisations*, Routledge, London

Burnes, B., (2nd ed) 1996 : *Managing Change : a strategic approach to organisational dynamics*, Pitman, London

Burrell, G., & Morgan, G., 1979 : *Sociological paradigms and organisational analysis – elements of the sociology of corporate life*, Heinemann, London

Butler, R., (1995) : *Time in organisations: Its experience, explanations and effects, Organisation Studies*, Vol. 16, No. 6, pp 925-950

Caldwell, B., 1994 : *Missteps, Miscues. Information Week / June 20*, pp 50-60

Carlzon, J., 1987 : *Moments of truth*, Ballinger, MA

Carlzon, J., & Lagerstrom, Th., 1985 : *Riv Pyramiderna! En hok om den nya manniskan, Chefen och ledaren (transl. pull down the pyramid! About the human being, the boss and the leader)*, Fagbogforlaget, Norway

- Caron, M., Jarvenpaa, S.L., & Stoddard, D.B., 1994 : Business reengineering at CIGNA Corp : experiences and lessons learned from the first five years. *MIS Quarterly* / September, pp 233-250
- Carr, D.K., & Johansson, H.J., 1995 : *Best practices in reengineering*, McGraw-Hill, NY
- Case, P., 1999 : 'Remember reengineering? The rhetorical appeal of a managerial salvation device'. In *Journal of Management Studies*, Vol. 36, No. 4, pp 442-419
- Cavaye, A.L.M., 1996 : 'Case study research: a multi-faceted research approach for IS'. In *Journal of Information Systems*, Vol. 6, No. 3, pp 227-242
- Champy, J., 1995 : *Reengineering management: the mandate for new leadership*, HarperCollins, London
- Chanlat, J.- F., (ed by Warner, M.) 1996 : Conflict and Politics, *International Encyclopaedia of Business and Management*, Routledge, London
- Child, J, & Bate, P., (eds), 1987 : *Organisation of innovation- east- west perspectives*, Walter de Gruyter, NY
- Choi, J.C., & Keleman, M., 1995 : *Cultural competencies : managing co-operatively across cultures*, Dartmouth, Hants
- Clark, H., Chandler, J., & Barry, J., 1994 : *Organisation and identities*, Chapman & Hall, London
- Clark, J., (ed) 1993 : *Human resource management and technical change*, Sage, London
- Clark, P., 1999 : *Organisations in action – competition between contexts*, Routledge, London
- Clark, T., (ed) 1996 : *European human resource management : an introduction to comparative theory and practice*, The Open University Business School, Blackwell, Oxford
- Clegg, S., 1974 : *Power, rule and domination*, Routledge, London
- Cohen, P., & Ewyk, D., 1996 : 'BPR', HCI Consulting, Sydney taken from: <http://www.hci.com.au.management>, 15 February, 1998, 11pm
- Collins, J., & Porras, J., 1994 : *Built to last: successful habits of visionary companies*, HarperCollins, NY
- Computer Science Corporation (CSC Indexes), taken from: <http://www.uk.csc.com/index-2.html> & <http://www.csc.com>, 30 January 1999, 10.30 am
- Cooper, H., 1987 : *Integrating Research*, Sage Publications, Newbury Park, CA
- Coulson- Thomas, C., 1994 : *Business process reengineering – myth and reality*, Kogan Page, London
- Coulter, J., 1979 : *The social construction of mind, studies in ethnomethodology and linguistic philosophy*, Mcmillan, London
- Coulter, J., 1983 : *Rethinking cognitive theory*, St Martin's Press, NY

- Dahrendorf, R., 1959 : *Class and class conflict in Industrial Society*, Routledge & Kegan Paul, London
- Dale, B.G., & Cooper, C.L., 1992 : *TQM and human resources : an excellent guide*, Blackwell, Oxford
- Darlington, G., 1996 : 'Culture - a theoretical review'. In Joynt, P., & Warner, M., (eds) *Managing across culture : issues and perspectives*, Thomson Business Press, London
- Davenport, T.E., 1995 : Will participate makeovers of business process succeed where reengineering failed? In *Planning Review* / January, pp 24-28
- Davenport, T.E., 1993 : *Process innovation – reengineering work through information technology*, Harvard Business School Press, Boston – MA
- Davenport, T.E., & Short, J.E., 1990 : The new industrial engineering - information technology and business process redesign. In *Sloan Management Review* / Summer, pp 11-27
- Deal, T. E., & Kennedy, A.A., 1982 : *Corporate cultures : the rites and rituals of corporate life*, Addison - Wesley, Reading – Mass
- Dean, E.B., 1996 : 'BPR', Working Paper, taken from:
<http://www.bprcard.com>, 10 June 1997, 9pm
- De Chernatony, L., 1992 : Categorising brands: evolutionary processes underpinned by two key dimensions. In *City University Business School Working Paper Series* / January
- DelMar, D., & Sheldon, G., 1988 : *Introduction to Quality Control*, West Publishing Company, St. Paul
- Dex, S., (ed) 1991 : *Life and work history analyses : qualitative and quantitative developments*, Routledge, London
- Diebold, J., 1990 : *The innovators*, Truman Talley/Plume, NY
- Dicken, P., 1998 : *Global shift. Transforming the world economy*, Paul Chapman, London
- Dilthey, W., (ed & transl by Pickman, H.P.,) 1976 : *Selected Writings*, Cambridge University Press, Cambridge
- Dorfman, P.W., Howell, J.P., & Bautista, J.A., 1986 : 'Dimensions of national culture and work - related beliefs : Hofstede revised'. Unpublished manuscript. In Fernandez, D.R., Carlson, D.S., Stepina, I.P., & Nickholson, J.D., 'Hofstede's Country classification - 25 years later'. *Journal of Social Psychology*, 1997, Vol. 137, No.1, pp 43-54
- Dubin, R., 1978 : *Theory Building*, The Free Press, NY
- Dulewicz, V., 1989 : Assessment Centres as the route to competence. In *Personnel Management* / November, pp 56-59
- Durkheim, E., 1938 : *The rules of sociological method*, Free Press, NY
- Durkheim, E., 1961 : *The elementary forms of the religious life*, Collier, NY

- Eccles, T., 1992 : Brief Case : De – layering myths and mezzanine management. *Long Range Planning*, Vol. 25, No. 4. Pp 105-107
- Edward, C., 1994 : Technology Chief of the year; all right moves - trainer of Reebok Int. successfully teamed business reengineering with IT. *Information Week / December 26*, pp 35-39
- Eisenberg, H., 1997 : 'Reengineering and dumbsizing: mismanagement of the knowledge resource', taken from:
<http://syntrek.com/eisen1.htm>, 12 October, 1999, 4:47pm
- Eldridge, J.E.T., & Crombie, A.D., 1974 : *A sociology of organisations*, George Allen & Unwin, London
- ESRC - BPR Centre, Forum Four Proceedings, *Business Process Reengineering*, Warwick University, April 30, 1996
- Feigenbaum, A.V., (2nd ed) 1983 : *Total quality control*, McGraw-Hill, NY
- Flew, A., (ed) 1984 : *A dictionary of Philosophy*, Macmillan Publishers, London
- Flood, R.L., 1993 : *Beyond TQM*, Wiley, Chichester
- Flood, R.L., & Jackson, J., 1991 : *Creative problem solving - total systems intervention*, Wiley, Chichester
- Flood, R.L., & Romm, N.R.A., 1996 : *Diversity management - triple loop learning*, Wiley, Chichester
- Forester, T., (ed) 1989 : *Computers in the human context*, Blackwell, Oxford
- Foucault, M., 1984 : 'What is an author?'. In Rabinow, P., (ed) *The Foucault reader*, Penguin, Harmondsworth
- Gallos, J.V., 1989 : 'Exploring women's development : implications for career theory, practice and research'. In Arthur, M.B., Hall, D.T., & Lawrence, B.S., (eds) *Handbook of Career Theory*, Cambridge University Press, Cambridge
- Garfinkel, H., 1967 : *Studies in ethnomethodology*, Prentice-Hall, NY
- Gertsen, M., 1990 : Intercultural competence and expatriates. *International Journal of Human Resource Management*, December, Vol. 1, No. 3, pp 341-362
- Gibson, C.F., & Davenport, T.H., 1985 : Systems Change : managing organisational behavioural impact. *In Information Strategy – The executive's Journal*, Vol. 2, No.1, pp 23-27
- Giles, W.D., 1991 : Making strategy work. *Long Range Planning*, Vol. 24, No. 5, pp 75-91
- Gill, J., & Johnson, P., 1991 : *Research methods for managers*, Paul Chapman, London
- Goffman, E., 1982 : *The presentation of self in everyday life*, Peligan, London

Golembiewski, R.T., Welsh, W.A., & Crotty, W.J., 1969 : *A methodological primer for political scientists*, Rand McNally, Chicago

Grey, C., & Mitev, N., 1995 : Reengineering organisations. In *Personnel Review*, Vol. 24, No. 1, pp 6-17

Grover, V., Yeong, S. R., Kettinger, W. J., & Teng, J.T.C., 1995 : The implementation of business process reengineering. In *Journal of Management Information Systems / Summer*, Vol. 12, No. 1, pp 109-144

Guest, d., 1987 : Human resource management and industrial relations. *Journal of Management Studies*, Vol. 24, No. 2, pp 503-521

Hage, J., 1980 : *Theories of organisation*, Wiley, NY

Hakanson, H., (ed by Warner, M.,) 1996 : *Organisational networks*, International Encyclopedia of Business and Management, Routledge, London

Hakim, C., (1987) : *Research Design*, George Allen & Unwin, London

Hall, E.T., 1974 : *Beyond culture*, Doubleday, NY

Hall, R., 1992 : The strategic analysis of intangible resources. In *Strategic Management Journal*, Vol. 13, pp 135-144

Hammer, M., 1990 : Reengineering Work : don't automate, obliterate, *Harvard Business Review / July-August*, pp 104-12

Hammer, M., & Champy, J., 1993 : *Reengineering the corporation - a manifesto for business revolution*, Nicholas Brealy, London

Hammer, M., & Stanton, S., 1995 : *The reengineering revolution: the handbook*, HarperCollins, London

Hammersley, M., & Atkinson, P., (2nd ed) 1995 : *Ethnography: principles in practice*, Routledge, London

Handfield, R.B., 1995 : *Reengineering for time-based competition: benchmarks and best practices for production, R & D, and purchasing*, Quorum Books, Connecticut

Handy, C.B., 1985 : *Understanding Organisations*, Penguin, Harmondsworth

Handy, C.B., 1986 : *Understanding Organisations*, Penguin, Harmondsworth

Handy, C.B., (4th ed) 1993 : *Understanding Organisations*, Penguin, Harmondsworth

Harrington, B., McLoughlin, K., & Riddel, D., 1998 : Business process reengineering in the public sector : a case study of the Contributions Agency (CA). *New Technology, Work and Employment / March*, Vol. 13, No. 1 pp 43-50

Harrison, D.B., & Pratt, M.D., 1993 : A methodology for reengineering businesses. In *Planning Review / March - April*, Vol. 21, No. 2, pp 6-11

Harrison, R., 1972 : Understanding your organisation's character, *Harvard Business Review /*

May-June, Vol. 50, pp 119-128

Harrison, R., 1993 : *Human resource management : issues and strategies*, University of Durham Business School, Addison-Wesley, Wokingham

Henderson, J.C., & Venkatraman, 1989 : Strategic alignment : a process model for integrating information technology and business strategies. *In MIT Sloan School of Management, Centre for Information Systems Research, Working Paper / October, No. 196, Cambridge, MA*

Hendry, C., & Pettigrew, A., 1990 : Human resource management : an agenda for the 90's. *International Journal of HRM*, Vol. 1, No. 1, pp 17-43

Hermann, M.G., (ed), 1986: *Political Psychology-contemporary problems and issues*, Jossey-Bass, San Francisco, CA

Hickson, D.J., & Butler, R.J., Cray, D., Mallory, G., & Wilson, D.C., 1986 : *Top decisions : strategic decision making in organisations*, Blackwell, Oxford

Hindess, B., 1977 : *Philosophy and methodology in the social sciences*, The Harvester Press, Sussex

Hofstede, G., 1980 : *Culture's consequences : International differences in work related values*, Sage, London

Hofstede, G., 1990 : 'The cultural relativity of organisational practices and theories'. In Wilson, D.C., & Rosenfeld, R.H., *Managing Organisations : Text, readings and cases*, McGraw-Hill, London

Hofstede, G., 1991 : *Cultures and organisations: software of the mind*, McGraw-Hill, London

Hofstede, G., 1995 : 'Managerial values : the business of international business is culture'. In Jackson, T., (ed), *Cross – cultural management*, Butterworth-Heinemann, Oxford

Hollinshead G., & Leat, M., 1995 : *Human resource management : an international and comparative perspective*, Pitman, London

Honderich, T., 1995 : *The Oxford Companion to Philosophy*, Oxford university Press, Oxford

Hopfl, H., 1994 : 'Excessive commitment, and excessive resentment : issues of identity'. In Clark, H., Chandler, J., & Barry, J., 1994 : *Organisation and identities*, Chapman & Hall, London

Huczynski, M., & Buchanan, D., (2nd ed) 1991 : *Organisational behaviour*, Prentice-Hall, NY

Hunt, J.W., (3rd ed) 1992 : *Managing people at work : a manager's guide to behaviour in organisations*, McGraw-Hill, London

Isabella, L.A., 1990 : 'Evolving interpretations as a change unfolds : how managers construe key organisational events'. In *Academy of Management Journal*, Vol. 33, No.1, pp 7-41

- Jackson, M.C., 1991 : *Systems methodology for the management sciences*, Plenum Press, NY
- Jacobson, I., Ericsson, M., & Jacobson, A., 1995 : *The object advantage - business process reengineering with object technology*, ACM Press, Wokingham
- Jankowicz, A.D., 1995 : *Business research projects for students*, Chapman & Hall, London
- Johansson, H.J., McHugh, P., Pendlebury, A.J., & Wheeler, W.A., 1993 : *Business process reengineering – breakpoint strategies for market dominance*, Wiley, Chichester
- Johnson, G., & Scholes, K., (2nd Ed) 1993 : *Exploring corporate strategy*, Prentice-Hall, NY
- Jones, M., (ed by Warner, M.), 1996 : *Reengineering*, International Encyclopedia of Business and Management, Routledge, London
- Jupp, V., 1996 : 'Documents and critical research'. In Sapsford, R., & Jupp, V., (eds) *Data collection and analysis*, Sage, London
- Kast, F.E., & Rosenzweig, J.E., 1970 : *Organisation and management : a systems approach*, McGraw-Hill, NY
- Kefford, B., 1995 : *Financial modelling for business decisions*, Kogan Page, London
- Kehoe, L., 1994 : Down in the dirt to clean up IBM. *Financial Times* / December 5, p 8
- Kerzner, H., (5th ed) 1995 : *Project management: a systems approach to planning scheduling and controlling*, Van Nostrand Reinhold, NY
- Kidd, P., & Karwowski, W., (eds) 1994 : *Advances in agile manufacture*, IOS, Amsterdam
- Kilmann, R.H., & Mitroff, I.I., 1976 : 'On organisation stories : an approach to the design and analysis of organisations through myths and stories'. In Kilmann, R.H., Pondy, L.R., & Slevin, D.P., (eds) *The management of organisation design : strategies and implementation*, North Holland, NY
- King, N., 1998 : 'Template Analysis'. In Symon, G., & Cassell, C., 1998 : *Qualitative methods and analysis in organisational research; a practical guide*, Sage, London
- Kleiner, M.M., 1990 : 'The role of Industrial Relations in industrial performance'. In Fosum, J.A., (ed) *Employee and labour relations*, Bureau of National Affairs, Washington
- Kleiner, M.M., Block, R.M., Roomkin, M., & Salsburg, S.W., 1987 : *HR and the performance of the firm*, Madison-Industrial Relations Research Association, Wis
- Klein, J.T., 1990 : *Interdisciplinarity : history, theory and practice*, Wayne State University Press, Detroit, MI
- Klemp, G.O., 1980 : *The assessment of occupational competence*, National Institute of Education, Washington
- Kluckhohn, C., 1951 : 'The study of Culture'. In Lerner, D., & Lasswell, H.D., (eds) *The Policy Sciences*, Stanford University Press, Standford – CA

- Kluckhohn, C., & Strodtbeck, F., 1961 : *Variations in value orientations*, Row Peterson, NY
- Knowles, M.S., 1984 : *Andragogy in action*, Jossey-Bass, San Francisco
- Kotter, J., & Heskett, J., 1992 : *Corporate culture and performance*, Macmillan, IN
- Kroeber, A., & Kluckhohn, C., 1985 : *Culture : a critical review of concepts and definitions*, Random House, NY
- Lamming, R., 1993 : *Beyond partnership : strategies for innovation and lean supply*, Prentice - Hall, Hemel Hempstead
- Lanchester, F.W., 1917 : *Industrial engineering: present position and post-war outlook*, Constable, London
- Leicester Royal Infirmary NHS Trust, *Reengineering the healthcare process - achieving results*. A 33 minute Video Tape, The Health Education Video Unit CSB, Leicester Royal Infirmary, Leicester
- Lewin, K., 1951 : *Field theory in social science*, Harper & Row, NY
- Lewis, R., 1997 : *When cultures collide : managing successfully across cultures*, Nicholas Brealey, London
- Lyles, M.A., 1981 : Formulating strategic problems - empirical analysis and model development. *Strategic Management Journal*, Vol. 2, pp 61-75
- Malhotra, Y., 1998 : 'BPR', University of Pittsburg, Katz School of Business taken from: <http://www.brint.com/paper/bpr>, 12 January, 1998, 2pm
- Malone, T.W., & Rockart, J.F., 1993 : 'How will IT reshape organisations? : Computers as co-ordination technology'. In Bradley, S.P., Hausman, J.A., & Nolan, R.L., (eds) *Globalisation, technology and competition. The fusion of computers and telecommunications in the 1990's*, Harvard Business School, Boston, MA
- Mangham, I.L., 1986 : *Power and performance in organisations ; an exploration of executive process*, Blackwell, Oxford
- Martin, J., 1998 : *Organisational Behaviour*, International Thomson Business Press, London
- Martindale, D., 1967 : *The nature of sociological theory*, Routledge, London
- Marx, K., 1975 : *Early writings*, Penguin, Harmondsworth
- Marx, K., 1976 : *Capital*, Penguin, Harmondsworth
- Marx, K., & Engels, F., 1946 : *The German Ideology*, Lawrence & Wishart, London
- Maunter, Th., 1996 : *A dictionary of philosophy*, Blackwell Publishers, Oxford
- May, T., 1993 : *Social research : issues, methods and process*, Open University Press, Buckingham
- Mcdonald, K., & Tipton, C., 1996 : 'Using documents'. In Gilbert, N., (ed) *Researching social*

life, Sage London

McDonald, M., 1997 : Business ethics in Canada : integration and interdisciplinarity. *Journal of Business Ethics*, Vol. 16, No. 6, pp 635-643

McKinsey Global Institute, 1998 : *Driving productivity and growth in the UK economy*, McKinsey, London

McLaughlin, J., Rosen, P., Skinner, D., & Webster, A., 1999 : *Valuing technology. Organisations, culture and change*, Routledge, London

McQuail, D., & Windahl, S., 1981 : *Communication Models*, Longman, Harlow

Mead, M., 1951 : *Cultural patterns and technical change*, UNESCO, Paris

Medland, A.J., 1986 : *The computer-based design process*, Kogan Page, London

Miles, M.B., & Huberman, A.M., 1984 : *Qualitative data analysis : sourcebook of new methods*, Sage, Beverly Hills – CA

Miner, J.B., & Crane, D.P., 1995 : *Human resource management : the strategic perspective*, Harper Collins, NY

Mintzberg, H., 1978 : Patterns in strategy formation. In *Management Science* / May, pp 934-948

Morgan, G., 1983 : *Beyond method : strategies for social research*, Sage, CA

Morgan, G., 1997 : *Images of organisation*, Sage, London

Morris, D., & Brandon, J., 1993 : *Reengineering your business*, McGraw-Hill, NY

Mumford, A., 1988 : 'Learning to learn the management self-development'. In Pedlel, M., Burgoyne, J., & Boydell, T., (eds) *Applying self-development in organisations*, Prentice-Hall, NY

Neal, M., 1998 : *The culture factor : cross - national management and the foreign venture*, Macmillan, London

Nelson, B., 1996 : 72-hour hospital wait now down to an hour. *Leicester Mercury*, Feb. 2nd, pp 1

NHS Centre for Reviews and Dissemination, 1999 : Getting evidence into practice. *Effective Health Care* / February, Vol. 5, No. 1, pp 1-16

Norburn, D., 1974 : Directors without direction. In *Journal of General Management*, Vol. 1, No.2, pp 37-48

Oakshoot, L.A., 1997 : *Business modelling and simulation*, Pitman, London

Obeng, E., & Crainer, S., 1996 : *What is wrong with the organisation anyway ? - making reengineering happen*, Pitman, London

Ouchi, W.G., 1981 : *Theory Z : how American business can meet the Japanese challenge*,

Addison-Wesley, Reading-Mass

Ould, M.A., 1995 : *Business process modelling and analysis for reengineering and improvement*, Wiley, Chichester

Oxford Dictionary - *Thumb Index Edition*, 1990 : Oxford University Press, Oxford

Parsons, T., 1951 : *The social system*, Free Press, NY

Parsons, T., 1966 : *Societies – evolutionary and comparative perspectives*, Prentice-Hall, NJ

Perrow, C., 1967 : 'A framework for the analysis of organisations'. In *American Sociological Review*, Vol. 32, pp 194-208

Peters, T.J., & Waterman, R.H., 1982 : *In search of excellence : lessons from America's best - run companies*, Harper & Row, NY

Pettigrew, M.A., 1979 : On studying organisational cultures. *Administrative Science Quarterly*, Vol. 24, No.4, pp 570-581

Pettigrew, M.A., 1985 : *The awakening Giant : continuity and change in ICI*, Blackwell, Oxford

Pettigrew, M.A., 1987 : *The management of strategic change*, Basil Blackwell, Oxford, UK

Pettigrew, M.A., 1990c : 'Is corporate culture manageable?'. In Wilson, D.C., & Rosenfeld, R.H., *Managing Organisations : text, readings and cases*, McGraw-Hill, London

Pettigrew, M.A., & Whipp, R., 1991 : *Managing change for competitive success*, Blackwell, Oxford

Platt, J., 1981a : 'Evidence and proof in documentary research : 1 Some specific problems of documentary research'. In *Sociological Review*, Vol. 29, No. 1, pp 31-52

Plummer, K., 1990 : *Documents of life : an introduction to the problems and literature of a humanistic method*, George Allen & Unwin, London

Porter, M.E., 1990 : *The competitive advantage of nations*, Free Press, NY

Porter, M.E., 1997 : 'Location , knowledge, creation and competitiveness'. In Das, M., (ed) *Symposium knowledge capitalism: competitiveness re-evaluated*, American Academy of Management, Boston

Prahalad, C.K., & Hamel G., 1994 : The core competence of the corporation. *Harvard Business Review* / May-June, pp 79 –91

President & Fellows of Harvard College 1996 : 'Meditations on the bottom line'. In *Harvard Business School Bulletin*, December, p 36

Price, D., 1965 : *Networks of Scientific Papers - Science*, Vol. 149, pp 510-515 (Cited from the module Literature Review Handouts given by Jennifer Wilby on June 1997-as part of a postgraduate Research Training designed for the students of Hull University, Hull

Pruijt, H., 1998 : 'Multiple personalities: the care of BPR'. In *Journal of Organisation Change Management*, Vol. 11, No. 3, pp 260-270 taken from BIDS ISI Services:

<http://www.bids-isi@alpha.bids.ac.uk>, 23 March 1998, 1:12 pm

Poole, M., 1990 : Editorial : Human resource management in an international perspective. *International Journal of HRM* / June, Vol. 1, No.1, pp 3-5

Pumpin, C., 1984 : Unternehmenskultur, Unternehmensstrategie und Unternehmenserfolg (transl. Business culture, business strategy and business success). *GDI Impuls*, Vol. 2, pp 19-30

Punch, K.F., 1998 : *Introduction to social research: quantitative and qualitative approaches*, Sage, London

Quinn, R.E., & Kimberly, J.R., 1984 : Paradox, planning and perseverance : guidelines for managerial practice. In Kimberly J.R., & Quinn, R.E., (eds) *New Futures : the challenge of managing organisational transitions*, Irwin Homewood- Down Jones, Ill

Ragin, C.C., 1987 : *The comparative method : moving beyond qualitative and quantitative strategies*, University of California Press, Berkeley

Ragin, C.C., 1994 : *Constructing social research : the unity and diversity of method*, Pine Forge Press, Thousand Oaks

Ragsdell, G., 1997 : *Creative management of creative management - a critical systems approach*, University of Hull PhD Thesis, Hull

Raimond, P., 1993 : *Management Projects: Design research and presentation*, Chapman & Hall, London

Ribeaux, P., & Poppleton, S.E., 1978 : *Psychology and work : an introduction*, Mcmillan, London

Risto, H., 1990 : Sociology as a discursive space - the coming age of a new orthology?. In *Acta Sociologica*, Vol. 33, No.4, pp 305-320

Roberts K., & Boyacigiller, N.A., 1984 : Gross-national organisational research : the gap of the blind men. *Research in Organisational Behaviour*, Vol. 6, pp 423-475

Rotter, J., 1966 : Generalised expectancies for internal versus external control of reinforcement. *Psychological Monographs*, Vol. 80, No.1, pp 1-28

Samuel, R., 1982 : 'Local and oral history'. In Burgess, R., (ed) *Field research : a sourcebook and field manual*, George Allen & Unwin, London

Saunders, M.N.K., & Lewis, P., 1997 : Great ideas and blind alleys? - a review of the literature on starting research. In *Management Learning* / September, Vol. 28, Issue 3, pp 283-301

Schein, E.H., 1985 : *Organisational culture and leadership*, Jossey-Bass, San Francisco –

CA

- Schein, E.H., 1988 : Innovative cultures and organisations. In *MIT Sloan School of Management, Management in the 1900's - Working Paper / November*, Vol. 88 No. 064, Cambridge, MA
- Schutz, A., (transl by Walsh, G., Lehnert, F.,) 1967 : *The phenomenology of the social world*, Northwestern University Press, Evanston
- Schutz, A., & Luckman, T., 1973 : *The structure of the life world*, Northwestern University Press, Evanston
- Scott, J., 1990 : *A matter of record : documentary sources in social research*, Polity Press, Cambridge
- Sharrock, W., 1974 : On owning knowledge. In Turner, R., (ed) *Ethnomethodology*, Penguin, Harmondsworth
- Shannon, C., & Weaver, W., 1949 : *The mathematical theory of communication*, University of Illinois Press. Urbana, Ill
- Silverman, D., 1970 : *Theories of organisations*, Heinemann, London
- Skocpol, T., 1984 : 'Emerging agendas and recurrent strategies in historical sociology'. In *Vision and Method in Historical Sociology*, Cambridge University Press, pp 356-391
- Smith, N.C., & Dainty, P., (eds) 1991 : *The management research handbook*, Routledge, London
- Smith, N.C., (2nd ed) 1991 : *A Guide to Business Research*, Nelson-Hall, Chicago
- Stake, R.E., 1994 : 'Case studies'. In Denzin, N.K., & Lincoln, Y.S., (eds) *Handbook of qualitative research*, Sage, Thousand Oaks – CA
- Stoddard, Jarvenpaa & Littlejohn *HBS Working Papers* taken from :
<http://mex.cox.smu.edu:80/mis/talks/amba/bpr/intro.html>, 28 February, 1998, 10am
- Storey, J., 1992 : *Developments in the management of the human resources - an analytical review*, Blackwell, London
- Strauss, A., & Corbin, J., 1990 : *Basics of qualitative research : grounded theory, procedures and techniques*, Sage, Newbury Park – CA
- Spinner, M.P., (2nd ed) 1992 : *Elements of project management: plan, schedule and control*, Prentice Hall, NJ
- Sundow, D., 1967 : *Passing on : the social psychology of dying*, Prentice-Hall, NY
- Taguchi, G., 1985 : *Introduction to quality engineering: designing quality into products and processes*, White Plains, NY
- Thevenaz, P., 1923 : *What is phenomenology ?*, Quadrangle, NY
- Thomas D.M., & Alderfer, C.P., 1989 : 'The influence of a race on career dynamics : theory

- and research on minority career experiences'. In Arthur, M.B., Hall, D.T., & Lawrence, B.S., (eds), *Handbook of Career Theory*, Cambridge University Press, Cambridge
- Tilly, C., 1984 : *Big structures, large processes, huge comparisons*, Russell Sage Foundation, NY
- Training Commission, 1988 : *Classifying the components of management competencies*, Training Commission, Sheffield
- Trice, H.M., & Beyer, J.M., 1984 : Studying organisational culture through rites and rituals. *In Academy of Management Review*, Vol.9, pp 653-669
- Trist, E.L., & Bamforth, K.W., 1951 : 'Some social and psychological consequences of the long-wall method of coal-getting'. *In Human Relations*, Vol. 4, No. 3
- Trist, E.L., Higgin, G.W., Murray, H., & Pollock, A.B., 1963 : *Organisational choice*, Tavistock, London
- Trompenaars, F., 1995 : *Riding the waves of culture : understanding cultural diversity of business*, Nicholas Brealey, London
- Turner, B., 1971 : *Exploring the industrial subculture*, Macmillan, London
- Turner, R. J., 1993 : *The handbook of project-based management*, McGraw-Hill, London
- Ulrich, V., 1992 : *Philosophical arguments; philosophy - objectives and methodology*, Academic Publications, Oxford
- Venkatraman, N., 1992 : 'IT – induced business reconfiguration'. In Morton S., (ed), *The Corporation of the 1990's : IT and organisational transformation*, Oxford University Press, Oxford
- Venkatraman, N., 1994 : IT – enabled business transformation : from automation to business scope redefinition. *In Sloan Management Review / Winter*, pp 73-87
- Wang, H., & Li, J., 1991 : *Computer-aided process planning*, Elsevier, Amsterdam
- Watson, T.J., 1987 : *Sociology, work and industry*, Routledge, London
- Watson, T.J., 1994 : *In search of management - culture, chaos and control in managerial work*, Routledge, London
- Weber, M., (transl by Henderson, A.R., & Parsons, T.,) 1947 : *The theory of social and economic organisation*, William Hodge, London
- Weber, M., 1958 : *The protestant ethic and the split of capitalism*, Scribners, NY
- Weber, M., 1968 : *Economy and society*, Bedminster Press, NY
- Weber, M., (transl by Secher, H.P., 3rd ed) 1968 : *Basic concepts on sociology*, Peter Owen, London

- Webster, F., 1995 : *Theories of the information society*, Routledge, London
- Weicher, M., Chu, W., Lin, W., Van, L., & Yu, D., 1995 : 'BPR', Baruch College, City University, NY taken from: <http://www.netlib.com/bpr/htm>, 5 March, 1998, 12pm
- Wellins, R., & Murphy, J.S., 1995 : 'Reengineering: plug into the human factor'. *In Training & Development*, January, p 33
- Werr, A., Stjernberg, T., & Docherty, P., 1997 : The functions of methods of change in management consulting. *Journal of Organisational Change*, Vol. 10, No. 4, pp 288-307
- Wheatley, R., & Parker, N., 1996 : *Changing corporate culture - Management Directions*, The Institute of Management Foundation, Corby
- White, J., 1996 : 'Reengineering gurus take steps to remodel their stalling vehicles'. *Wall Street Journal*, Nov. 26, p 1
- Willmott, H., 1995 : 'The odd couple? : reengineering business processes; managing human relations'. *New Technology, Work and Employment*, Vol. 10, No. 2, pp 89-98
- Willmott, H., 1997 : 'Critical management learning'. In Burgoyne, J., & Reynolds, M., (eds) *Management Learning : integrating perspectives in theory and practice*, Sage, London
- Willoch, B.E., 1994 : *Business process engineering-Vinnende arbeidsprosesser og organisasjonsstrukturereiforandringens decennium (transl. Winning work processes and organisational structure / - a decade of change)*, Fagbogforlaget, Norway
- Wilson, D.C., 1992 : *A strategy of change : concepts and controversies in the management of change*, Routledge, London
- Wilson, D.C., & Rosenfeld, R.H., 1990 : *Managing Organisations : text, readings and cases*, McGraw-Hill, London
- Wolcott, H.F., 1990 : *Writing up qualitative research*, Sage, London
- Zikmund, W.K., (4th ed) 1993 : *Business research methods*, Dryden Press, Chicago
- Zuboff, S., 1988 : *In the age of the smart machine*, Basic Books, NY