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Textual Fragments, Openness of Enquiry and Information Systems: An Example From an ERP Implementation

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Abstract

We anchor our study of an ERP implementation in the verbatim words of a Registrar at a major University. Building on an earlier work, we explore six approaches to analyse the text. The first three are referred to as the textual realm and examine issues such as the veracity of the original text (textual criticism), the meaning of words and phrases (literary criticism) and the purpose and genre of the text (literary criticism). The second three comprise the social realm and here we look at the history, context, process and outcomes described or implied by the text (historical criticism), the traditions and practices of the community from which the text was obtained (form criticism) and the influence of the author in constructing the text (redaction criticism). Using the hermeneutical circle, we write and re-write the meanings we see in the text and in particular suggest the influence of the management elite in using the heavily modified ERP system to inscribe their vision of how the university should be managed and controlled. The paper ends with suggestions about recovering the meaning of the text, uncovering hidden meanings in the text and discovering new meanings and applications of the text.

Keywords: Hermeneutics, interpretation, exegesis, hermeneutic circle, organizational texts, information systems development, ERP systems

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TEXTUAL FRAGMENTS, OPENNESS OF ENQUIRY and INFORMATION SYSTEMS: AN EXAMPLE FROM AN ERP IMPLEMENTATION

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Abstract

We anchor our study of an ERP implementation in the verbatim words of a Registrar at a major University. Building on an earlier work (Boland *et al.*, 2008), we explore six approaches to analyse the text. The first three are referred to as the textual realm and examine issues such as the veracity of the original text (textual criticism), the meaning of words and phrases (literary criticism) and the purpose and genre of the text (literary criticism). The second three comprise the social realm and here we look at the history, context, process and outcomes described or implied by the text (historical criticism), the traditions and practices of the community from which the text was obtained (form criticism) and the influence of the author in constructing the text (redaction criticism). Using the hermeneutical circle, we write and re-write the meanings we see in the text and in particular suggest the influence of the management elite in using the heavily modified ERP system to inscribe their vision of how the university should be managed and controlled. The paper ends with suggestions about recovering the meaning of the text, uncovering hidden meanings in the text and discovering new meanings and applications of the text.

Keywords: Hermeneutics, interpretation, exegesis, hermeneutic circle, organizational texts, information systems development, ERP systems.

1. INTRODUCTION

The following is a fragment of text from a recent case study exploring the implementation of a complex ERP¹ system in a university.

“PeopleSoft were involved already in the North American and Australasian higher education market, with products and services that had a good and well-proven track record. PeopleSoft kept abreast with changes in the computing environment, and also issues like student funding etc, and they had an idea of the sort of issues that might arise in years to come with regards and coupled with their deep knowledge in the area of higher education, they were the best choice. There was already an existing partnership with Oracle in place at the University of [Vulcan²]......The president of the University of [Cornfield] came from the right environment and had experience of the implementation of large I.T systems. He was the Vice Chancellor of the University of [Elsewhere], where they implemented a

¹ Enterprise Resource Planning system. Large packaged software solutions that integrate information from various parts of the organization drawing on a common database.

² The names have been changed. Anonymity was a condition of access.

similar system. Therefore, he was aware of all the issues, pitfalls and expectations, which he was able to share and disseminate throughout the business. There was ample of support from the board of governors also. The project was agreed at the highest level and was sensibly costed and resourced. Top management support is arguably a critical success factor for the overall success of the project.”

Registrar / Vice Principal (03/05/07, p. 1).

What kind of process does this describe? On the surface the registrar describes a positive experience particularly for those at the top of his organization. Board support and top management support are both evidenced by the resources devoted to the project. In this paper we will use this textual fragment to critique this understanding coming to a deeper view of the development process and to see the project from a variety of perspectives, shedding light on the conundrum of success and failure in Information Systems projects. This will augment some of the previous findings from other studies in this area (see Boland *et al.*, 2008). As a further contribution it will also show that by maintaining openness of inquiry we can make sense of text by moving from the detail (text) to the whole (context) and vice versa in a hermeneutic circle (Klein and Myers, 1999). Our primary goal is to understand the ISD process in detail and at the same time maintain openness of inquiry.

The paper proceeds by detailing the main prior research, focusing on the textual and social realms for interpreting organizational texts. We then present and analyse the textual fragment using these textual and social approaches showing what each can contribute to our understanding of the text. We augment the original text by importing other fragments to show a variety of organizational understandings of events which sometimes challenge the original reading. The paper ends with a discussion of the findings showing how other case studies might benefit from a similar analysis.

2. PREVIOUS RESEARCH

Different hermeneutic traditions approach interpretation as either a process of recovering the author's original, intended meaning, uncovering a hidden meaning operating behind the author, shaping the true meanings, or discovering a meaning beyond its author or context of creation: as soon as the text is produced, it becomes distant from its author and available for its readers to appropriate meaning as they see fit (Gibbons, 1987). These different theories of interpretation have implications to which we will return later in the paper. But whichever tradition we follow, the hermeneutic circle and the techniques of exegesis remain as basic elements guiding our interpretive effort (Newman, 1989). Although they may appear to be very different the approaches constitute a comprehensive view on interpretation. The six approaches we use are presented below (Boland *et al.*, 2008):

- Textual criticism: establishing an accurate version of the original text for subsequent analysis.
- Linguistic criticism: establishing the accepted meaning of words and phrases in the community in which the text was produced at the time of its production.
- Literary criticism: establishing how the meaning of a text is shaped by genre and literary devices, and how different

- ideologies used in reading the text yield different meanings.
- Historical criticism: establishing how the historical context at the time of writing affects the meaning, and what the historical meanings were.
- Form criticism: establishing how local social practices and oral traditions up to the time of committing the text to writing affect the meaning.
- Redaction criticism: establishing how the author's personal characteristics and actions in the creative act of writing affect the meaning.

Locating the Techniques of Exegesis in the Hermeneutic Circle

We use the hermeneutic circle as an analytic device - moving back and forth between detail and sense of whole - brings together two different realms during the process of interpretation. One is a textual realm and the other, parallel to it, is a social realm. In the textual realm, interpretation tacks back and forth between the detail of a particular word and a sense of the whole grammatical structure and literary traditions within which it is being employed. Similarly, in the social realm, interpretation tacks back and forth between the detail of an act or a moment being discussed and a sense of the whole historical political and cultural setting within which it is situated. Following Boland *et al.* (2008) we further propose that the six techniques of exegesis can be located in these two different realms of the hermeneutic circle. The first three techniques focus on the textual realm within which writing and reading take place. The last three techniques focus on the social realm of a text's production and use. In practice there is no clear separation between text and society, language and culture, myth and history, but posing these distinctions as an analytic device allows us to consider how each of the techniques of exegesis plays a distinct role in exploring the interpretive field when analyzing a textual fragment.

-----Figure 1 about here-----

In figure 1 we place each technique of exegesis in the textual or social realms of the interpretive space. The placement indicates that each is associated with a particular aspect of how the hermeneutic circle links detail and whole in an interpretive reading. The first three techniques take us through the textual realm including a concern with the accuracy of the textual record itself (textual criticism), a concern with the definition of words and grammatical conventions at the time of writing (linguistic criticism) and an appreciation of the literary genre the author employed and the purpose for which the text was produced as well as our own approach to reading the text (literary criticism). The next three techniques take us through the social realm, including a study of the physical, cultural and political contexts in which the text was produced (historical criticism), a concern with how the local community's forms of practice shape the text (form criticism), and a recognition that the author's personal history, world view, social setting and psychology have also influenced the text (redaction criticism).

3. SYSTEMS DEVELOPMENT AT THE UNIVERSITY OF CORNFIELD

Text with added superscripts for indentifying sentences

“¹PeopleSoft were involved already in the North American and Australasian higher education market, with products and services that had a good and well-proven track record. ²PeopleSoft kept abreast with changes in the computing environment, and also issues like student funding etc, and they had an idea of the sort of issues that might arise in years to come with regards and coupled with their deep knowledge in the area of higher education, they were the best choice. ³There was already an existing partnership with Oracle in place at the University of [Vulcan].....⁴The president of the University of [Cornfield] came from the right environment and had experience of the implementation of large I.T systems. ⁵He was the Vice Chancellor of the University of [Elsewhere], where they implemented a similar system. ⁶Therefore, he was aware of all the issues, pitfalls and expectations, which he was able to share and disseminate throughout the business. ⁷There was ample of support from the board of governors also. ⁸The project was agreed at the highest level and was sensibly costed and resourced. ⁹Top management support is arguably a critical success factor for the overall success of the project.”

(Registrar / Vice Principal (03/05/07, p. 1).

Our initial reading of the text would be the following:

This was a successful project in the eyes of senior managers at the University of Cornfield (s9). It replaced legacy systems [though not referred to] with a state-of-the-art PeopleSoft ERP system (s1-2). The vendor was selected because Cornfield had a positive past experience with them and that the President had experience with implementing a similar system in another university (s3-6). There was strong support for the change from the University’s board and the top management team and this support was seen as critical to the success of the project (s7-9). The project was well-resourced (s8).

Textual realm

Textual criticism

One of the first issues we try to resolve is to establish an accurate version of the original text for subsequent analysis. This is part of the process of recovering the author’s original meaning. This can be a major issue when it involves ancient texts such as the Bible or Koran as all that may exist is odd fragments of text in poor condition. This is not such a problem here as the interview and text production are so close to one another in space and time³.

The interview setting was Cornfield’s Academic Registrar’s office on 3rd May 2007 a relatively plush office free of too much extraneous noise. The questioning about the ERP project followed generally accepted principles in qualitative interviewing (Myers and Newman, 2007; Rubin and Rubin, 1995) designed to encourage the subject to reflect on specific events and contexts and to express his story in his words. We

³ Of course, in some circumstances a short time span does not eliminate interpretive disputes and contested meanings as in the case of the assassination of John F. Kennedy, for instance.

would use principles such as mirroring where the interviewer would try to use the subject's responses in forming subsequent questions (e.g. "...we experienced some problems ..."; "can you elaborate on those problems?") and drill down further to specific details to form the basis for the storyline.

All interviews were tape-recorded⁴. Also the subjects are still in the organization and could be sought out for further clarification. The accuracy of transcription could be a problem in some circumstances as the trans-scriber could introduce his/ her interpretations (Boland *et al.*, 2008) or have misunderstood the subject's comments. In this case the interviewer and trans-scriber was the same person, reducing this danger. Moreover, the transcripts were sent to the interviewees to confirm their accuracy and no major problems were identified. We are confident that the text reflects the intended words spoken by the subject.

However, textual criticism also reveals interviews are not neutral exchange of information between two disinterested parties. Researchers, as sentient human beings (gender, race, personality, appearance, demeanour, etc.) have expectations about each other and the physical setting of the interview can be of great importance to what is revealed (Bryman, 1988; Kvale, 1983, 1996; Rubin and Rubin, 2005; Myers and Newman, 2007). Because the subject knew that the interviewer was a graduate student of business studying successful and unsuccessful systems projects and a consultant by training, he may have revealed details which he believed would find an empathetic response (c.f. Boland *et al.*, 2008). He might even say things to the interviewer as a stranger which he could be more reluctant to share with some of his colleagues. Certainly the text (and other texts produced by the subject) shows the open nature of the exchanges between the two. But it is the unique combination of interviewer and interviewee which has produced the current text. Other combinations might have produced other texts and tell other stories.

Linguistic criticism

Linguistic criticism attempts to clarify the definition in use by a local community for individual words and phrases in the text (Ladd, 1967)⁵. These definitions may vary between countries and even between regions in the same country. For example, in the USA they drive on the pavement, but in the U.K. the pavement is for pedestrians. When Rolls Royce Motors tried to sell the Silver Mist car model in Germany they were told that the word *mist* means something very different in that country entirely inappropriate as a name for a luxury motor car⁶. Marketing of cars in the UK from Germany are not exempt from similar if not such obvious gaffs (e.g. VW's Touareg and Sharan models, both names that can sound derogatory in colloquial English). Tuckett (1987, p. 47) points out, the word "poorly" in referring to one's state of health means "slightly off-colour" in the South of England but means "seriously ill" in the

⁴ Overall, we conducted 17 interviews in 2007 with project members, members of the finance office and the wider University community who had direct involvement with the system implementation, its support or use. Four stakeholder groups were covered – users, IT experts, management, and system developers. The interviews lasted between 20 and 66 minutes with a mean time of 45 minutes.

⁵ The semiotic square technique (Greimas, 1987) was applied by Corea (2006) in his analysis of IT-based customer service organizations and has strong similarities to linguistic criticism.

⁶ In German, mist means excrement or manure. The car was subsequently renamed the Silver Shadow.

North. Tea is an afternoon event involving cups, tea pots and scones in the South of England but means the major evening meal in the North.

The interviewee is the registrar at Cornfield, part of the senior management team. The chosen fragment contains elements of his understanding of what took place, what meaning he attaches to those events, and reveals some of his causal map. Among those words and phrases he uses, we selected the following for clarification: “PeopleSoft”, “Oracle”, “Cornfield”, “Board of Governors”, “President”, “Pitfalls and expectations”, “Large I.T. systems”, “Sensibly costed and resourced”, “Top management support”, “Critical success factor”. Unsurprisingly, he focused on expressions and words congruent with senior management’s world of Presidents, boards, vendors, budgets and success. Revealingly, he did not refer to end users, customers or clients in his interview. What people do not mention can be as significant as what they do talk about.

-----Table 1 here-----

These unique elements in the vocabulary of local practice can sometimes only be recognized by a reader who has spent an extended period in this or closely related communities. In our case the interviewer was a practicing consultant before his university experience and was fully aware of most of the terms the subject was using. An English dictionary or even a glossary of standard business terms could result in misinterpretations, or at least lead to partial and less interesting ones.

Literary criticism

Literary criticism completes the movement from specific words and phrases to a sense of the whole within the textual space of the hermeneutic circle (figure 1). It is concerned with such questions as: who wrote a text (the subject), for what purpose, and in what genre? Answers to these questions help locate the text within its author's larger body of work, and within extant narrative forms and styles⁷.

We will treat genre and purpose together as the author’s purpose of a piece of writing is often inseparable from its genre. Genre provides what Kermode has called “a context of expectation” that guides interpretation (Kermode, 1979). For us as organizational analysts, subjects describing organizational events may also use a variety of literary devices within an interview or a conversation. These could include understatement, humour, irony, exaggeration, metaphor, allegory or sarcasm. We will apply literary criticism by first exploring who the subject is and how the moment of this interview was situated for him. Then we will explore how its genre, the literary devices found in the text and the perspective we take in reading it, affect the kinds of meanings we interpret from it.

In our case the subject was the Academic Registrar at the University of Cornfield⁸, a post he had held since 1997, pre-dating the merger of Vulcan and Umbra in 2004. He was formerly the Registrar for Vulcan, the larger of the two Universities. He joined Vulcan in 1988, having spent the early part of his career in local government specializing in finance, planning and resource management within an educational

⁷ Literary criticism is also concerned with how different assumptions in approaching a text (e.g., feminist, structuralist, reader-centred) yield different meanings.

⁸ Some of this information was derived from the University’s website.

context. Since joining the University he has spent six years in the Finance Office becoming Deputy Bursar in 1990 and almost three years as Head of the Strategic Policy, Planning and Information Unit. He has also been a member of the Vice-Chancellor's Senior Management Team since 1994.

Genre

What sort of text is it? It reads like a mixture of a highly guarded confessional, sharing insights with an IT expert while at the same time revealing the subject's highly logical approach and top-down understanding of how the ERP system was chosen and implemented successfully at Cornfield. We suggest it portrays his *causal map*, describing what occurred *as if* the events were part of a “factor” research study in information systems, relating independent variables (i.e. top management support, resources, proven technology, Presidential experience and support) to the dependent variable (successful implementation). Pictorially, the causal map could be displayed as follows:

-----Figure 2 here-----

The map could have been extracted from a popular text book of Management Information Systems (e.g. Laudon and Laudon, 2007, pp. 572-575) but with one exception: the map does not include end user involvement which is often thought to be the *sine qua non* of successful projects. As we shall see it is the latter issue that could produce problems in future, emanating from the users who became “angry orphans” in the process (Hanseth and Ciborra, 2007, p39). There is also a hint in the text that appointing the President was partially influenced by his PeopleSoft experience at the University of Elsewhere as well as his experience with overseeing a merger at Nearby.

Literary criticism, with its attention to genre and literary devices, has opened a new realm of interpretive possibilities with this text fragment. Our brief exploration of the text as a guarded confessional portrays the author revealing his plans to the interviewer and how they unfolded in a logical and successful fashion (Figure 2). Other critics might approach it with a different reading, thereby opening further possibilities for interpreting its meaning. The movement back and forth between the detail (text) and a greater sense of the whole (linguistic and literary criticism) leads to deeper insights into recovering the subject's meaning and, going forward, to appropriate the text for our own purposes in a process of discovery.

Social realms

We now emphasise the social space of the hermeneutic circle (Figure 1) and follow a tacking from the whole economic and organizational context in which the text was produced (historical criticism), through the social practices of the local community which produced it (form criticism), to the details of its author and situated moment of production (redaction criticism). Data from an organizational field study arise in the historical, cultural, and socio-political contexts of organizational events. These contexts and their importance for interpreting a text are the concern of historical criticism. It is this approach that organizational analysts will be most familiar with.

Historical criticism

Many elements of historical criticism were mentioned earlier in the paper in our introduction of this text fragment. Much of our interpretive effort so far has relied on that historical context. In light of that brief overview, we can see that features of this text fragment point to landmarks in the trajectory of the project over its life span. The subject reflects on past events (antecedent conditions), describes the successful process and talks about the current situation (a successful system as outcome). We present these major features diagrammatically in figure 3 and map a summary of the text onto the diagram giving links to the key events and dates. Below we discuss these issues and others not mentioned in the original textual fragment but yet significant to our overall understanding.

-----Figure 3 about here-----

ANTECEDENT CONDITIONS.

Cornfield is the product of merging two major universities (Vulcan and Umbra) in October 2004

Within the pre-merger University, the IT governance was a devolved tri-partite structure where responsibilities were delegated from the centre to faculties and schools. Shortly after the merger, there was a substantial drive towards further decentralisation. Subsequently, this strategy changed again and there is a new drive back to a more centralised approach. In one sense this could be viewed as an attempt to be more inclusive: to create a shared model and allow the ownership to stabilise as the university adapted to its new post-merger structures. More cynically, we can see the move as top management taking greater control of the organisation by centralising decision making when the opportunity arose (Bob-Jones *et al.*, 2008).

2015 strategy and the *Cornfield Agenda*

The Mission of the *Cornfield 2015 Agenda* is “to make The University of [Cornfield], already an internationally distinguished centre of research, innovation, learning and scholarly inquiry, one of the leading universities in the world by 2015”. It will be an educational and research powerhouse committed to regional as well as national and international agendas.

According to the university's strategic plan (which is remarkably similar to the president's earlier *Elsewhere Agenda* in 2002) the University aims to have five Nobel Laureates on its staff by 2015, at least two of whom will have full-time appointments, and three of which it is intended to secure by 2007. (The University of Elsewhere has three Nobel winners working part-time on campus).

The President had implemented a similar system elsewhere in a large university (s5-6) and is aware of the problems during such implementations (s6)

The President came from the University of Elsewhere to Cornfield in October 2004 as President and Vice-Chancellor to plan for the launch of the single University. Prior to his appointment at Elsewhere, he was Vice-Chancellor of the University of Nearby, where he oversaw a merger with that university's main competitor, the Nearby

Institute of Technology. There is a hint in the subject's sentences that there were problems implementing a similar system at Elsewhere that the President was very much involved with and supported. His support would be seen as invaluable in the new project at Cornfield and therefore his experience would be a key point in his appointment.

But the new President is not without his critics. A recent book by two authors from Elsewhere claim that he left that university a "quasi-privatised institution in the corporate mould". The book claims that, in its marketing and self-promotion, Elsewhere has lost sight of its fundamental role as a public institution; that managers wield too much power and don't understand the needs of academics; and that the democracy of the institution has been eroded (reference deleted).

He played the key role in establishing and subsequently developing Elsewhere University Private Limited (EUP), a private university established to work alongside the University of Elsewhere, so as to circumvent regulations limiting the money-making educational ventures of universities. Unfortunately, the venture was a financial disaster and was widely criticised by academics, politicians and the media. To rescue EUP, the Governing Council borrowed \$150 million from a Bank and agreed to provide additional money from its investment reserves (reference deleted).

PeopleSoft have proven up-to-date software used in a variety of markets (s1-2)

This is supported by statements from the Registrar:

"PeopleSoft were involved already in the North American and Australasian higher education market, with products and services that had a good and well-proven track record. PeopleSoft kept abreast with changes in the computing environment, and also issues like student funding etc, and they had an idea of the sort of issues that might arise in years to come with regards and coupled with their deep knowledge in the area of higher education, they were the best choice. There was already an existing partnership with Oracle in place at the University of [Cornfield]."

[Registrar / Vice Principal, 03/05/07, p. 1]

However there have been many dissenting voices in the past over the quality of PeopleSoft's software For example, Kennedy (1999) reports on severe dissatisfaction expressed by 8 of 10 major US universities:

*"In a damning indictment of PeopleSoft's famous customer satisfaction mantra, eight of the Big Ten US universities have pooled their collective muscle and written to CEO Craig Conway slamming the poor performance, poor quality and poor deployment of their PeopleSoft applications..."*⁹.

Oracle took over PeopleSoft

On December 13th 2004 the takeover was announced by Larry Ellison, CEO for Oracle Corporation¹⁰.

⁹ http://www.cbronline.com/article_cg.asp?guid=87E9AF58-CDC4-4D23-95E8-7C9FB1CE3463

¹⁰ http://www.oracle.com/corporate/press/2004_dec/acquisition.html

**Cornfield had experience with Oracle (s3):
The legacy systems were inadequate but well-liked**

Legacy systems at Vulcan were:

- Alta HR (HR Payroll)
- Symmetry Financials (finance)
- Oracle Education System (OES) (students)

Umbra had an IT programme to change all of their systems a few years ago so they were using brand new systems by the time of the merger. These systems included:

- Agresso (Financials)
- SITS (students systems)
- Alta HR (payroll system)

Vulcan's OES was a very old terminal-based Oracle system developed by a partnership between Vulcan, Oracle and an accounting consultancy, with the university system being sponsored by the government. This entire project collapsed with some acrimony. Some useful components were delivered and Vulcan were using these components at the time of the merger. It is strongly suggested that the Oracle connection was crucial to the decision to buy the PeopleSoft ERP system.

The PeopleSoft choice

In response to what management expected to achieve from the information system, the University Registrar / Vice Principal responded:

“A system that is completely fit for purpose, does the job and does it well was of the greatest importance. Flexible, robust, future proof and would last a period of around 8-10 years, in line with the University's 2015 vision. Improve business processes, leading to better services for staff and students. Overall achievement of economy of scale and efficiency gains.”

[Registrar / Vice Principal, 03/05/07, p. 1]

“the current system, whilst providing the functionality necessary to effect the basic functions of student administration, ...and some external and internal statistical reporting, lacks integrated functionality to provide a ‘cradle to grave’ administration for all enquirers, applicants, students, graduates, alumni and life long learners.”

[Student System Project – Business Case, Release 2.0 (October 2004)]

Perhaps significantly, it was the Vulcan institute who:

“...exhibited a culture to have an expensive and very glossy system.”

[Senior Technical Manager, 10/05/07, p. 2]

“A key meeting took place with regards to ‘options’ on the students system. Now the project started with a view to buy in a new students system before the merger started and this project was not halted. In this meeting, there were 8 ‘options’ tabled, such as:

Option 1: keep SITS for 2 years, then go back out to tender;

Option 2: get rid of OES;

Option 3: get rid of SITS and keep OES;

Option 4: go out to tender for a brand new system etc...

..... the case for each of those options for discussion. The majority of people (from Vulcan) would not accept that SITS would have been capable so the decision was made to go out to tender for a brand new system”.

[Senior Technical Manager, 10.5.07, p.2]

PROCESS OF IMPLEMENTATION (2002-07).

Strong board support (s7) and Top management support (s8-9). Top management support seen as critical for success (s9)

“Programme Board called IS Programme Board (ISPB) – consisted of senior management and YES there was definitely top management support for the project, and huge commitment.

Each project was charged with establishing its own goals. But these goals had to be aligned to the 2015 vision set out by the university, which is a separate document and campaign to become a world leader in HE. Strong commitment was given from the highest level otherwise the budget would not have been approved in the first place” [Project manager, 01.05.07, p.7].

Generally, this view was uncontested by management and users. Both sets of stakeholders felt that the top management and board support was strong and was sustained throughout the project.

Sensibly resourced (s8)

The students system alone was budgeted at \$21 million. The overall budget for the entire suite of systems from PeopleSoft including financials was \$85.6m. The budget was not a limiting factor in this project.

Outside consultants

“CIBER used Australians, who had some awareness of how [Cornfield] systems would work – these were functional specialists who helped build the system through knowledge transfer. They had a good working knowledge of the University institution ... but also worked closely alongside the 3-Tiered user groups (T1 - senior users, T2 – representatives on a department / faculty basis, T3 – department / faculty groups) that were set up for each project, by attending meeting etc.”

“Yes a great deal of trust was given to the specialists who were brought in and as a result, they were given full control of their area of expertise within the University context during implementation. However, they did what was asked of them, it was a partnership”.

“Roles [of consultants]: Knowledge transfer – ‘fit gap’ i.e. identifying where gaps were between the system and the University’s requirements and recommending how best to fix them. Consultants were also involved in ‘hands-on’ implementation” [Project manager, 01.05.07, p.11].

Contrast this comment with the following two comments:

“The only real nightmare was the consultancy firm [CIBER] who were terrible. They lied on numerous occasions especially during the tendering process, made poor decisions and were extremely expensive.” [Senior Technical Manager, IT Services 10.05.2007, p.11].

“Bad relationships with the implementation partner CIBER, which required a lot of managerial involvement, time and effort. CIBER were poor, they did not deliver on their promises. The quality of the patches was bad and riddled with errors. General performance from CIBER was unsatisfactory. Oracle have been handed the job of UK localisations” [Programme Manager, 14.5.07, p.6].

This was clearly a contested area with radically different views from various stakeholders.

Deficits

While the systems were being implemented a huge building programme was on-going at Cornfield. Up to 2007, \$777.0m had been spent on new buildings, funded in part by government grants, the sale of other assets, expanding student numbers, and synergistic savings. However the President announced that due to increases in salary costs, energy bills and lower than expected revenue, the University was about \$60m (5% of its annual turnover) in deficit. He announced plans for 400 redundancies and he and the university management were criticized by the Union. However the president has, as of 2007, honoured his pledge to achieve the staff reductions without compulsory redundancies, and in October 2007 announced that the university's budget had been brought in to "a modest surplus" mainly as a result of the voluntary redundancy scheme.

Little or no user involvement resulting in marginalised users.

While the registrar and other senior managers were well pleased with the new ERP system (s9), many of the end users we spoke with felt ignored and marginalised during the development period. For example one of the end users (also a functional trainer) laments:

“Issues were brought up in meetings but astonishingly, they were not addressed prior to go-live. As a result when the system was operational, these issues (mainly to do with post graduates) started to appear on a regular basis and the users were subject to repeated logging and reporting of problems which were initially addressed but were never incorporated into the system. A series of meetings with the project management team and implementation team were arranged as a result to devise a solution to addressing the problem, post system rollout [End User and Functional Trainer, November 2006].”

Another user expressed their frustration with the technical staff¹¹:

“...users were told of problems at the last minute and were informed that certain functionalities won’t work when the system went live. There was no prior warning or period of notice to help prepare users for the setback to the system. It was simply dumped onto their laps and left to cope...The technical staff do not seem to understand how the post-graduate students fit into the system”.

“One of the main issues raised was to do with fees collection (bench fees¹²). There was a genuine concern that the information that was previously inputted into the old legacy system regarding bench fees for students would appear in the new system. This reassurance was not upheld and in fact such information was missing. Therefore some students have subsequently not been invoiced for bench fees totalling in the hundreds of thousands of pounds.” [Project officers, 29.05.07, p.1].

All of the users we spoke to expressed similar opinions of the events as they saw them. While some were consulted, all their requests for changes and comments concerning the workings of the new system were ignored:

There is a general feeling of non-involvement in the system design and it doesn’t incorporate user’s needs. Manual ‘paper-based’ systems and indeed spreadsheets have been used frequently as a supplement to the new system when doing certain procedures. This could be because of the steep learning curve of a brand new system and is probably a step backwards! [PG Admissions, 25.5.07, p.2].

An example of deficiency of the ERP system: group marks:

To input group marks, you have to go into 3 or 4 screens and then make sure that the weighting (credits) of the course are correct, so that when everything is totalled up, the final total is correct. Once final checks of the marks are made, they are then exported out to a spreadsheet. However the flaw with the system is that it only represents whole numbers and not decimals. So if a 3 students did 3 pieces of coursework all worth equal

¹¹ PeopleSoft used a group of technical consultants [called CIBER] to modify and implement the ERP system at Cornfield.

¹² A fee paid depending on the project a student is currently on. This fee is paid to supplement the use of equipments, chemicals etc.

marks out of a total weighting of 100% (33.33% each), the system cannot represent this. It can only recognise whole numbers such as 25%, 25% and 50% etc. this means that marks generally cannot be broken down further in Campus Solutions. This means that a lot of the time, it is the final group marks that have to be put into the system as it cannot be broken down to show the individual students marks. In terms of examination marks, the system cannot represent what questions were answered. It will only accept the final mark of the exam. Therefore all of the work that goes into calculating the individual exam question marks has to be done using a spreadsheet. This is a very time consuming task! [PG Admissions, 25.5.07 p.3].

All of the users we spoke to expressed similar opinions of the events as they saw them. While some were consulted, all their requests for changes and comments concerning the workings of the new system were ignored:

OUTCOME

Perceived as a successful project by top management (s9)

The senior management believed that the system was successful and some also saw the way it was impacting the decision making at Cornfield:

“It’s having a beneficial effect in that there were lots of areas in VUM that did not use any kind of centralised system for lots of things and now [the system] is bringing an air of centrality to processes and tasks, which was absent in the past. Therefore, [the system] is steadily driving the culture of change” [IT services, 10.05.2007, p.3].

But these views were contested by others:

“[The system] has NOT been a success for the following reasons:

- *It is very complex*
 - *It is not user-friendly.*
- It has alienated people. Some not so savvy computer people find it is too hard to use”. [PG Administration, 22.5.07, p.4].*

Marginalised users. Users resort to work-a-rounds

Here are some examples of how the users responded to the system as delivered and the methods they used to overcome its limitations.

“...certain work-a-rounds are being used to address the deficiencies of the new system by administration staff for eGTP¹³. The eGTP system process follows a cycle from the point of student information being entered into the new system right through to student’s enrolment onto WebCT courses. However there are several ‘breaks’ in the cycle therefore the work-a-round

¹³ eGTP: electronic Graduate Training Programme

involves troubleshooting checks to find out what the problem is, where it occurred in the process and highlight potential solutions. There are some processes that require a generic work-a-round to address common problems; but other more specific processes and problems require a manual individual work-a-round."

"...in order for the new system to work, it had to be appreciated and taken on board straight away, without delay. However, there are some schools where this was not the case. Certain schools just didn't use it, for example to set up programmes. They continued to do things the old way."

"Users kept using the old legacy system (OES) until it got switched off, even though Campus Solutions was now in operation. This was because the users didn't want to start getting acquainted with [the student system]. There was definite user resistance to adopting [the student system]." [PG Administration 22.5.07, p.3].

"The interfacing properties are poor because there are so many screens which the user needs to access in order to get the information required. In the old OES system, everything pertinent to the group of information, say personal details, was held on one screen, which was easy to access and read. This functionality was not carried over into [the student system]." [Project Officers, 29.05.07, p.2]

Conclusions:

The evidence shows that this is clearly a contested arena: differing views of success and failure co-existed. We see a satisfied management elite who have delivered a system that can effect better management control co-existing alongside unhappy/ angry orphans (users) who were ignored when the system was designed and are now marginalised and resort to work-a-rounds to muddle through and cope with a what they see as a cumbersome system.

Form criticism

Originally, form criticism was a study of the pre-literary period between the events of the Bible and their committal to writing. The term "form" refers to the various forms which the oral tradition took as it was passed from person to person before being recorded in writing (Ladd 1967, McKnight 1969). Oral traditions carried the material in many pieces in the form of anecdotes, stories, sagas, sayings, teachings, parables, etc., before it was assembled as a linear text. In our analysis, we use form criticism to address the way social practices in the local communities of the organization and its environment shape the texts we are interpreting.

Form criticism is highly relevant to many organizational studies because of their retrospective element. If one is interviewing organization members and asking them to recall events from several years ago, form criticism may help us to understand what sources were important to them and what influenced their perspective. Here we are interested in the oral traditions of an organization which our subjects draw upon. For example, there are often organizational stories, anecdotes and myths which are passed

orally from one person to another (Boje 1991; Morgan 1986; Hirschheim and Newman, 1991; Newman, 2008). In describing events, an individual may use colourful language with origins in oral traditions among managers or in the work-place. Some of these traditions may be exaggerated or their origins confused as accuracy may not be the primary concern of an interviewee.

In the University of Cornfield, a professional bureaucracy (Hardy 1994), there would be a combination of “forms” and media in which the information and understandings about past events was conveyed some of which would be recorded (memoranda, emails, reports) and some transmitted orally (stories, anecdotes, myths, metaphors and sagas). These would combine to form mental traces and causal maps revealed in the interviews as part of the story telling. For example, Boland *et al.*, (2008) identified a metaphor, the “wall”, that they discovered was common in that organization signifying a physical and mental gap between the technical and user communities. The traces from past experience seemed to coalesce into a *causal map* of how problems and misunderstandings can arise between technical staff and users. The users (often seen as resistant) give the technical designers their requirements for a new system and then some months or even years later the technical people would “throw back” the solution (the system) to the users “over the wall” which the users might then reject as being too late, too expensive, or irrelevant to their current needs (Hirschheim and Newman, 1988). This metaphor was eventually written down in a document on Business Systems Engineering circulated in that organization.

Through our textual fragment, the Registrar reveals something of the causal map that he employs to understand how the world works and this is likely to relate to current managerial mythology¹⁴ held at Cornfield. As stated before (figure 3), our reading is as follows: through a strong coalition of senior managers and the vendors (Oracle/ PeopleSoft) (s1 and s3), the President’s experience and influence (s4-6), top management and the boards’ support (s7-9), and sufficient funds (s8), we delivered a successful system (s9) that will provide up-to-date functionality well into the future (s2).

However, we see also at Cornfield (i.e. informed by the historical criticism above) several of these issues are contested by other stakeholders. As with most stories, there is more than one view of events. We accept that each individual is interpreting the events as he or she sees them, and by using multiple witnesses we acknowledge our attempt to triangulate on the events. Furthermore, we accept that the same person may interpret events differently in different social circumstances. Form criticism helps us to begin to understand how an interviewee's reports of events are influenced by the oral traditions and social practices in an organization and the communities of practice they draw upon, opening up possibilities for further interpretations.

Form criticism says that the oral traditions in ancient times were mechanically recorded in written form. Here we observe a modern-day equivalent: the ERP system **in its standard, packaged form** would have **inscribed the vision of PeopleSoft designers**, often employing the so-called best practices in higher education (often US educational practices) (Wagner and Newell, 2004). This implies that the organization would have to comply with the software and where necessary, re-engineer its administrative processes. However, as we shall see below, the managerial elite

¹⁴ Mythology is used here in the sense of a commonly held view of causality

heavily modified the standard system and this had profound and on-going implications for Cornfield and how the “complex business” of Cornfield would be run. These changes became Cornfield management’s “redactions”.

Redaction criticism

The final exegetic technique in tacking from whole to detail in the social realm is redaction criticism (Boland *et al.*, 2008). Because form criticism emphasizes the role of oral tradition in shaping a text before it is committed to writing, its adherents often portray the act of writing as a mechanical assembly and recording process. In contrast, redaction criticism sees the writer as far more creative and active in shaping the text (Perrin, 1969). The way an individual adapts material from oral traditions and colours the material in narrating it has become known as "redaction" and the analysis of it, "redaction criticism" (Tuckett, 1987, p.117).

In the case of the registrar, we see an actor with a developed and sophisticated causal map able to reflect on six or more years of history and make sense of it (see above). He is a creative producer of his story (i.e. the text)¹⁵. He makes light work of the interview offering a plausible explanation of why the project was successful and detailing the critical success factors (s9). As noted, what is missing from his story is the users who do not figure at all in the whole interview. This is a reflection of a subtle change in the way the university is to be run in the future. The users, just like the schools, are marginalised. He also seems supremely confident that his explanation is correct: having identified that the system was a success, he offers reasons why it was successful. There is no scintilla of uncertainty portrayed here.

As we noted, Cornfield’s managerial elite did not implement the standard package supplied by PeopleSoft as a so-called “vanilla” solution. Instead they spent a significant proportion of their budget on modifying the system to tailor it to their needs. The ERP system, **in its modified form** (i.e. what we might now call the redaction), **inscribes senior management’s vision of how the university should operate, be managed and controlled** i.e. as a top-down, command and controlled organization (Bob-Jones *et al.*, 2008; Elbana, 2007). This was done by enrolling the technology supplier into a coalition and inscribing the new processes with the help of the ERP system. Top-management envisaged the ERP technology as an enabler. In particular the Registrar/ Vice Principal spoke of a need to quicken the pace of work, the importance of communication across departmental lines, and the notion that Cornfield was a ‘complex business’. With the newly modified system, managerialism becomes a possibility, replacing the outmoded ‘fiefdoms’ of schools and departments (Bob-Jones *et al.*, 2008; Heiskanen *et al.*, 1998). For the final piece of the jigsaw, the management elite and their coalition with the vendors were powerful enough to overcome the views of other groups. Whether this is sustainable in the long run is not possible to tell at this point. Received wisdom would also say that you ignore users at your peril (e.g. Damodaran, 1996; Newman and Noble 1990). The level of grass roots dissatisfaction with the ERP system as it was rolled out indicates that there will be serious problems in the future but they will have to be the subject of future analyses.

¹⁵ It is beyond this study to uncover how this creative process takes place. What we can comment on is the outcome of the process.

Redaction criticism completes our use of each exegetic technique to open new possibilities for interpretation with this text fragment from Cornfield. We have used them sequentially as a didactic strategy to highlight the unique contribution each exegetic technique can make to an evolving interpretation. In practice, the techniques would more likely be used in combination, intertwined with each other in a mutually informative way. Also, as indicated in several places, any one exegetic technique can reinforce or modify a line of interpretation raised by another technique. This further promotes a tacking back and forth in the hermeneutic circle, and an alternating inquiry into details and sense of whole that maintains openness in interpretation.

4. DISCUSSION AND CONCLUSIONS

Returning to our task, different hermeneutic traditions approach interpretation as either a process of recovering the author's original, intended meaning, uncovering a hidden meaning operating behind the author, shaping the “true” meanings, or discovering a meaning beyond its author or the context of creation. Here we conclude our analysis by discussing all three approaches in the light of our textual analysis and the hermeneutical circle as we move around the textual and social realms.

Recovering the author's original, intended meaning

The textual criticism, together with linguistic and literary criticisms, focuses on the meaning of the words and phases in our textual fragment. One of the first issues we try to resolve is to establish an accurate version of the original text for subsequent analysis and our analysis confirms that this is not such a major issue in our case compared with examining ancient texts.

However, textual criticism also reveals that interviews are not neutral exchange of information between two disinterested parties. Researchers, as sentient human beings have expectations about each other and the physical setting of the interview are of great importance to what is revealed. Other combinations would open up the possibilities of other texts and thereby other stories.

Linguistic criticism tries to uncover the meaning of words and phrases as specific communities of practice might use them. Again the interviewer was well versed in both the language employed by Universities and that used by computer consultants as he occupied a place in both spheres. Returning to our original reading of the text:

This was a successful project in the eyes of senior managers at the University of Cornfield (s9). It replaced legacy systems [not referred to] with a state-of-the-art PeopleSoft ERP system (s1-2). The vendor was selected because Cornfield had a positive past experience with them and that the President had experience with implementing a similar system in another university (s3-6). There was strong support for the change from the University's board and the top management team and this support was seen as critical to the success of the project (s7-9). The project was well-resourced (s8).

From our analysis we would confirm that this seems to *recover* the original, intended meaning of the text.

Uncovering a hidden meaning operating behind the author, shaping the true meanings

Literary criticism completes the movement from specific words and phrases to a sense of the whole within the textual space of the hermeneutic circle. It is concerned with such questions as: who wrote a text (in our case, the subject of the interview), for what purpose, and in what genre?

We would suggest that the text *uncovers* the Registrar's understanding of the factors that produced what he believed to be a successful project and how those factors are related (Figure 2). This inferred mental causal model relates independent variables (top management support, resources, proven technology, the President's experience and support) to the dependent variable (successful implementation) rather as if it was describing a IS text book model of successful projects with one exception: the model has no place for users. It is likely also that the subject is unaware of this causality.

Discovering a meaning beyond its author or the context of creation

There are several issues that arose from our analysis of the text that *discover* new meanings beyond the text's author or the context of creation. Issues such as top management and their roles in major IS projects, user involvement (i.e. the lack of it), resources, etc. etc. could be the subjects of more general application. But as we have a plethora of studies exploring those themes, we want to focus on a less travelled path that we identified in the social realm of exegesis: the meaning of ERP systems.

A modern-day equivalent of form criticism reveals that the ERP system **in its standard, packaged form** would have **inscribed the vision of PeopleSoft designers**, often employing the so-called best practices in higher education (often US educational practices) (Wagner and Newell, 2004; Scott and Wagner 2003). This implies that the organization would have to comply with the standard software and where necessary, re-engineer its administrative processes to comply with the systems' template. The university decided that this was a change that would be too costly in an administrative sense. The software was "tuned" for another market where HE practices were very different.

Consequently, Cornfield's management did not implement the standard package supplied by PeopleSoft and change their procedures to conform to the package. Instead they deliberately spent a significant proportion of their budget on modifying the system to tailor it to their needs. The ERP system, **in its modified form** (what we might now call the redaction), **inscribes senior management's vision** of how the university should operate, be managed and controlled i.e. as a top-down, command and controlled organization (Bob-Jones *et al.*, 2008; Elbana, 2007). The software became, in material form, management's understanding of how the new university should work. New releases of the software could, of course, require extensive modifications for Cornfield to incorporate the benefits from such upgrades, adding to the total cost of ownership.

Enforcing compliance from the users was relatively straightforward. This was done by enrolling the technology supplier into a coalition. Top-management envisaged the ERP technology as an enabler. In particular the Registrar/ Vice Principal spoke of a need to quicken the pace of work, the importance of communication across departmental lines, and the notion that Cornfield was a ‘complex business’. With the newly modified system, managerialism becomes a possibility, replacing the outmoded ‘fiefdoms’ of schools and departments (Bob-Jones *et al.*, 2008; Heiskanen *et al.*, 1998). This is entirely consistent with marginalising the users who would only have slowed the pace of the implementation and demanded all kinds of changes to suit their narrow focus if they had dictated the development process.

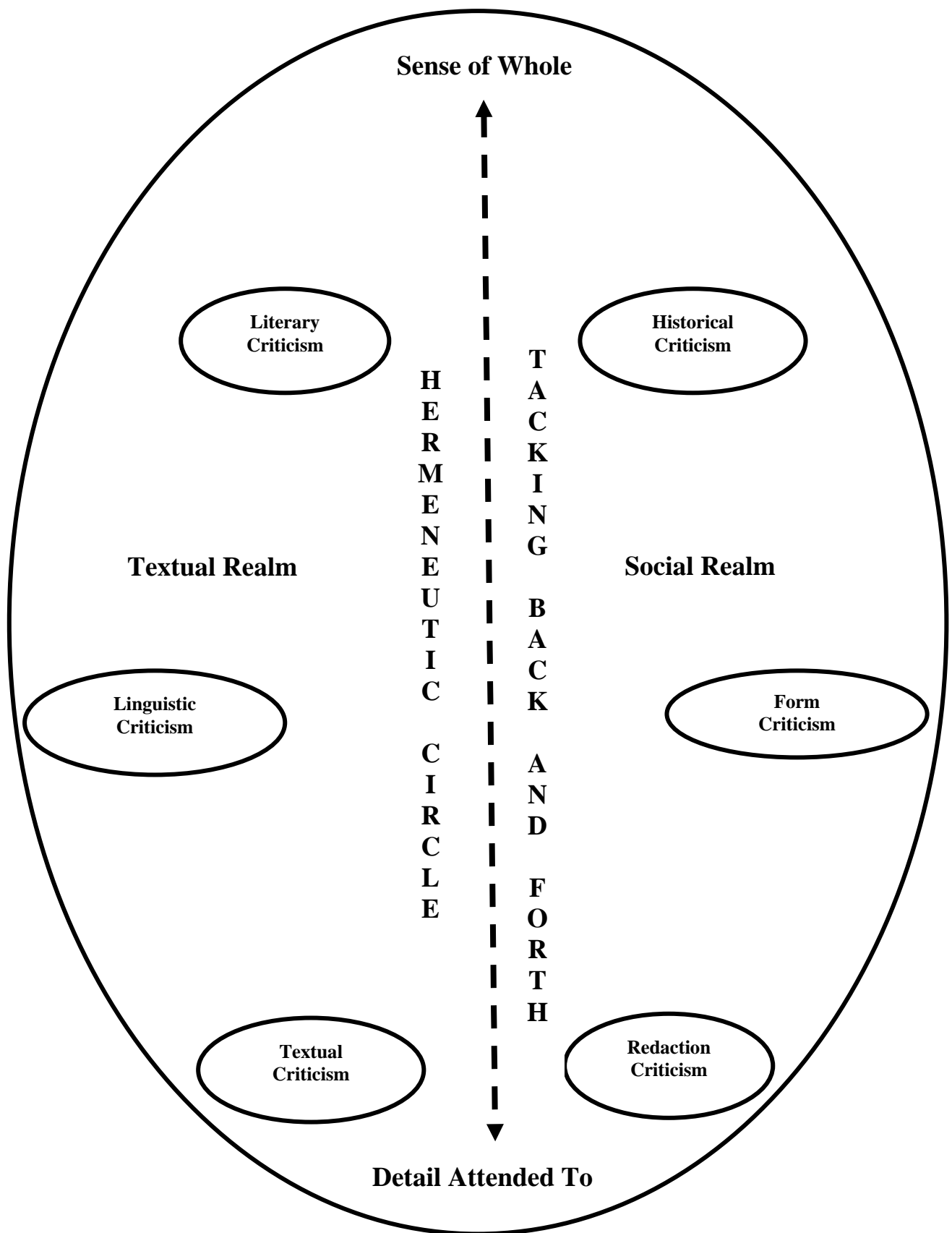
Finally, we would suggest that the original reading could be re-written in the light of our further analysis:

In the eyes of senior managers at the University of Cornfield (s9) this was a successful project but the users are universally unhappy with a system that they see as clumsy to use and lacking essential functionalities, thus requiring many work-a-rounds. It replaced legacy systems well-liked by the users with a state-of-the-art PeopleSoft ERP system (s1-2) that was designed for another educational culture and context and that has had many critics world-wide. The vendor was selected because Cornfield had a positive past experience with them and that the highly-controversial President had experience with implementing a similar system in another university (s3-6). The president had been involved in a venture that has been described as financially disastrous by academics, politicians and the media at his last university. The choice was also a highly political process with managers from Vulcan and Umbra disagreeing and wanting to promote their particular legacy systems which had recently been updated.

There was strong support for the change from the now stream-lined University board and the top management team and this support was seen by both users and management as critical to the success of the project (s7-9). The project was well-resourced (s8) to such extent that it could be seen as management throwing money at the problem. A large proportion of the budget was spent modifying the system extensively to make it conform with local conditions and for to make it easier for senior management to run a more effective “business”. The ERP system was the “embodiment” of the new managerialism at Cornfield, enabling a more command and control approach to running the university. The consultants who conducted the modifications, CIBER, were considered poor: they did not deliver on their promises and the quality of their patches was bad and riddled with errors. The users were marginalised as they would only slow the pace of development and introduce all kinds of changes to reflect their narrow perspectives. But the “angry orphans” and their various Schools may prove troublesome in the long-term. Also new releases of the ERP system will require extensive and expensive modifications in the future in order for Cornfield to enjoy the benefits of upgrades.

The new reading is but one of many but shows the essential openness of our approach to interpreting texts. Other readers may see other insights that recover,

uncover or discover new meanings of our text or relevant to situations and data they are interpreting.



**Figure 1: Techniques of Exegesis
as Elements in the Hermeneutic Circle
(From Boland *et al.*, 2008)**

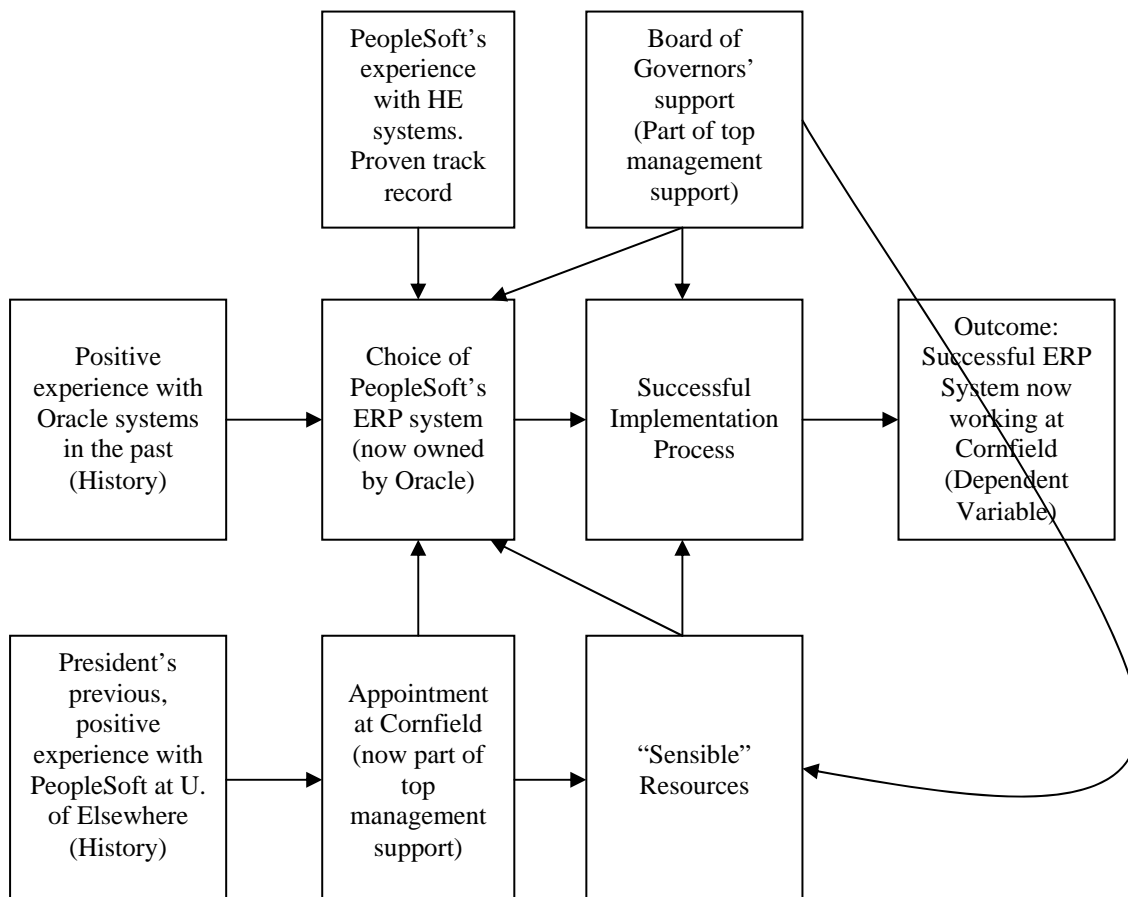


Figure 2: Registrar's (inferred) Causal Map

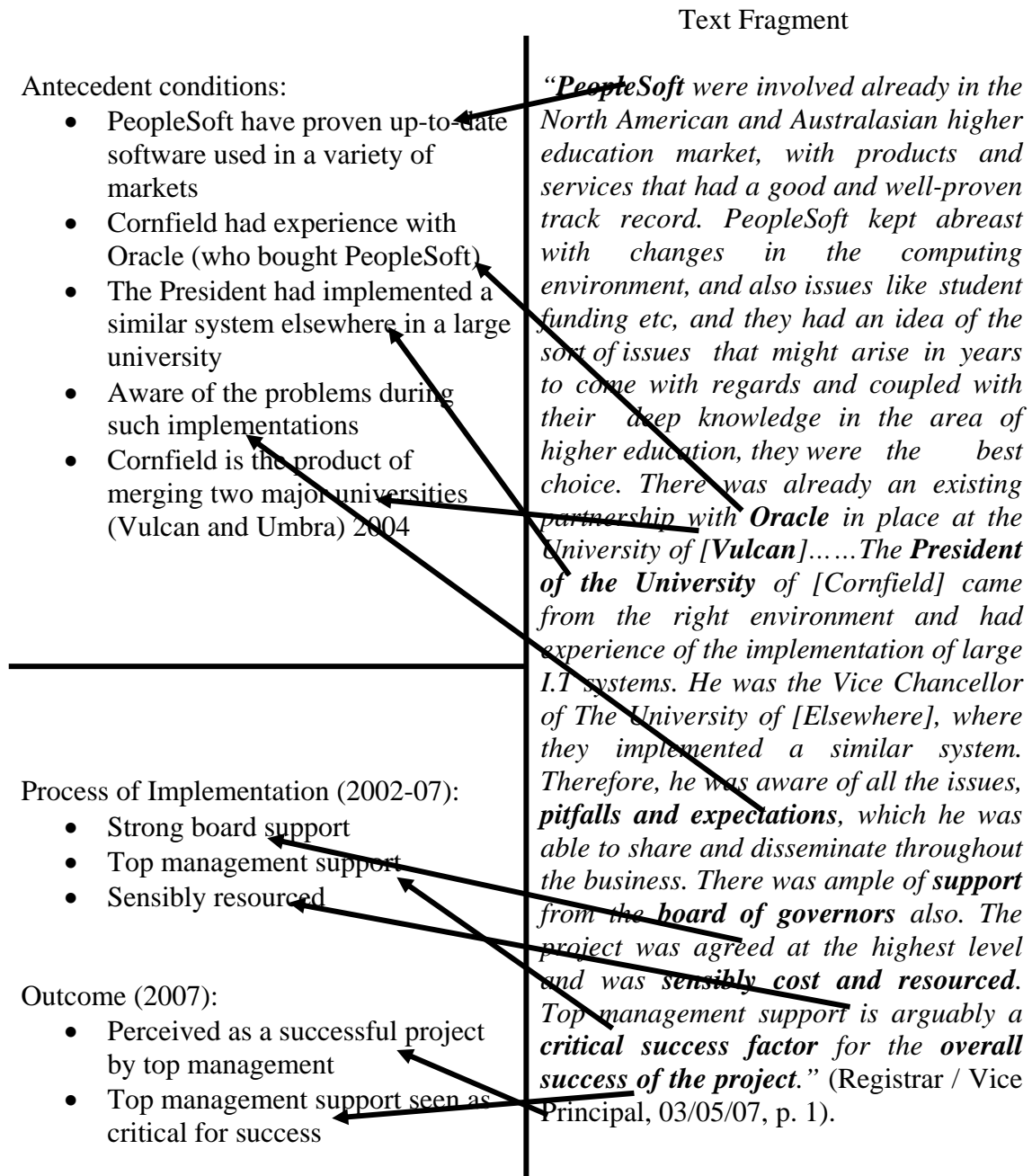


Figure 3: Historical Criticism Map

Table 1: Linguistic Criticism of Key Terms in Text

PeopleSoft	Large US software specializing in supplying Enterprise Resource Planning (ERP) systems ¹⁶ to universities internationally. Recently bought by the Oracle Corporation (December, 2004)
Oracle	Large US software supplier that bought PeopleSoft. Vulcan had experience of Oracle systems before it bought the PeopleSoft software and this probably influenced Cornfield's purchase decision
Cornfield	A large top-ten university formed by the merger of two major universities (Vulcan and Umbra) in October 2004
Board of Governors	Part of the governance structure common in most universities involving senior people from a variety of backgrounds. Their approval would be important in securing the funds for the project
President	The equivalent of the CEO of a company. He was hired in 2004
Pitfalls and expectations	All new systems experience problems (pitfalls) and some raise unreasonable expectations. This phrase is probably an understatement of the President's experience during the implementation of a similar system elsewhere (another country) where coincidentally the same person oversaw a merger of two universities as Vice Chancellor (a similar position to President). These experiences were probably significant for his appointment at Cornfield in 2004
Large I.T systems	Large IT systems are particularly difficult to implement and are often subject to delays and budget overruns. Universities are particularly problematic owing to their decentralised decision-making form which some have referred to as fiefdom-like
Sensibly costed and resourced	Again, probably this was an understatement. Resources were generous for this kind of project (approx. \$27m for the student system alone). Money was never going to be a deciding issue
Top management support	A small group of senior managers (the Registrar, President and others) that were active in negotiating with the supplier, selecting the software, promoting the systems development and providing sufficient resources until the system was delivered
Critical success factor	It is received wisdom that top management support is believed to be an essential (i.e. critical), if not sufficient factor for the delivery of a successful software system

¹⁶ Large integrated packaged software solutions based on modules and a single database

References

- Bob-Jones, B. Newman, M., and Lyytinen, K. "Picking up the Pieces after a "Successful" Implementation: Networks, Coalitions and ERP Systems". Under review.
- Bob-Jones, B. Newman, M., and Lyytinen, K. (2008) "Picking Up the Pieces after a "Successful" Implementation: Networks, Coalitions and ERP Systems", Forthcoming in the *Proceedings of AMCIS 2008*, Toronto, Canada.
- Boje, D. M. (1991). "The Storytelling Organization: A Study of Story Performance in an Office-Supply Firm." *Administrative Science Quarterly*, 36, pp. 106-126.
- Boland, R., Newman, M. and Pentland, B, " Hermeneutics, Exegesis and Organizational Texts: Maintaining an Openness of Inquiry in Interpretation ", Under review.
- Bryman, A. (1988). *Quantity and Quality in Social Research*. Routledge: London.
- Corea, S., (2006) "Mounting effective IT based customer service operations under emergent conditions: Deconstructing myth as a basis of understanding", *Information and Organization* 16 pp.109–142.
- Damodaran, L. (1996) "User Involvement in the Systems Design Process - a Practical Guide for Users", *Behaviour & Information Technology*, 15, 6, 363-377.
- Elbanna, A. R. (2007), "Implementing an integrated system in a socially dis-integrated enterprise: a critical view of ERP enabled integration," *Information Technology and People*, 20, (2): 121-139.
- Gibbons, M. T. (Ed.) (1987). *Interpreting Politics*. New York University Press.
- Hanseth, O. and Ciborra, C., (eds) *Risk, Complexity and ICT*, Edward Elgar Publishing, 2007.
- Hardy, C. (1994). *Managing Strategic Action*. London: SAGE Publications.
- Hardy, C. (1991) Configuration and Strategy Making In Universities: Broadening The Scope. *The Journal of Higher Education*, 62, 363-393.
- Heiskanen, A., Newman, M., And Saarinen, V. (1998), "Innovation In Fiefdoms: Developing A Common Student Information System In Six Finnish Universities", *Proceedings of the IFIP 8.2/8.6 Joint Conference*, Helsinki, Finland, December.
- Hirschheim, R. and Newman, M. (1991). "Symbolism and Information Systems Development: Myth, Metaphor and Magic," *Information Systems Research*, 2(1), pp. 1-34.
- Kermode, F. (1979). *The Genesis of Secrecy: On the Interpretation of Narrative*. Harvard University Press, Cambridge: MA
- Klein, H., and Myers, M. (1999) "A set of principles for conducting and evaluating interpretive field studies in information systems," *MIS Quarterly* 23:1, p. 67.
- Kvale, S. (1996). *Interviews: An Introduction to Qualitative Research Interviewing*. Thousand Oaks: Sage Publications.
- Kvale, S. (1983). "The Qualitative Research Interview." *Journal of Phenomenological Psychology*, 14(2), pp. 171-196.
- Ladd, G. E. (1967). *The New Testament and Criticism*. Eerdmans: Grand Rapids, MI.
- Laudon and Laudon (2007)
- McKnight, E. V. (1969). *What is Form Criticism?* Fortress Press: Philadelphia, PA.
- Meyers, M. and Newman, M. (2007) "The Qualitative Interview in IS Research: Examining the Craft". *Information and Organization*. 17 (1), 2-26.
- Morgan, G. (1986). *Images of Organization*. Beverly Hills: Sage.

- Newman, M. (1989). "Designing a Centralised Admissions System in a Loosely-Coupled Organisation: An Episode in Screen Design." *Office: Technology and People*, 4, pp. 53-73.
- Newman, M. and Noble, F., (1990), "User Involvement as an Interaction Process: A Case Study", *Information Systems Research*, Vol. 1, Issue 1, pp.89–112.
- Newman, M. (1989). "Designing a Centralised Admissions System in a Loosely-Coupled Organisation: An Episode in Screen Design." *Office: Technology and People*, 4, pp. 53-73.
- Newman, M. (2008) A Rural Tale: A Cautionary Allegory for IS Researchers, Forthcoming in the *Proceedings of AMCIS 2008*, Toronto, Canada.
- Palmer, R.E. (1969). *Hermeneutics*. Evanston: IL Northwestern University Press
- Perrin, N. (1969). *What is Redaction Criticism?* Fortress Press: Philadelphia, PA.
- Noble, F. and Newman, M. (1993), "Integrated Systems, Autonomous Departments: Organizational Invalidity and Resistance in a University". *J. Management Studies*, 30 (2): 195-219.
- Quattrone, P. and Hopper, T. (2005) A time-space odyssey: management control systems in two multinational organisations. *Accounting, Organizations and Society* 30, 735–764.
- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing data* (2nd ed.). Thousand Oaks, CA: Sage.
- Scott, S. V., and Wagner, E. L. (2003), "Networks, Negotiations, and New Times: The implementation of Enterprise Resource Planning into an academic administration," *Information and Organization* 13, 285-313.
- Tuckett, C. M. (1987). *Reading the New Testament: Methods of Interpretation*.
- Wagner, E. L. & Newell, S. (2004) 'Best' For Whom?: The Tension Between 'Best Practice' ERP Packages And Diverse Epistemic Cultures In A University Context. *Journal of Strategic Information Systems*, 13, 305-328.
- Wagner, E. L. & Newell, S. (2006) Repairing ERP: Producing Social Order to Create a Working Information System, *Journal of Applied Behavioral Science* 42, 40-57.

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