Hermeneutics, Exegesis and Organizational Texts: Maintaining an Openness of Inquiry in Interpretation

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> Hermeneutics achieves its actual productivity only when it musters sufficient self-reflection to reflect simultaneously about its own critical endeavors, that is, about its own limitations and the relativity of its own positions. (Gadamer, 1976, p. 93)

Introduction

Our understanding of organizations and the social world are not fixed and exhaustive, but always tentative and incomplete. Because their meanings to us can be expected to change, maintaining an open and ongoing process of inquiry in our research is an end in itself (Churchman, 1971; Popper, 1982; Rorty, 1982). For interpretive research in organizations, an openness of inquiry is evident as we reflect upon and challenge the way our traditions and prior beliefs shape our meanings (Gadamer, 1976; 1984). Traditions of scholarship from the humanities, especially from the interpretation of texts, provide one way to encourage an open exploration of meaning in organizational research (Zald, 1996; Prasad, 2002).

In this paper, we show how organizational scholars can draw upon the principles of hermeneutics and the techniques of exegesis from the field of biblical studies in order to maintain an openness of inquiry and a transparency of method in developing their interpretations. We do so by developing a framework of hermeneutical exegesis and showing how it can be applied to a text fragment from a field study of information system development. The techniques of hermeneutic exegesis have a long history, but they are needed now more than ever because the world of textual resources is expanding faster than ever. Within organizations, and in the world at large, growth of intranet and Internet resources continues. Through blogs and wikis, individuals and organizations are creating vast textual resources but the task of interpretation has not thereby ceased (Burnett et al., 2003).

Hans-Georg Gadamer described the process of interpreting a text as the fusion of one's own *horizon* with the *horizon of the text*. He has defined *horizon* as "The totality of all that can be realized or thought about by a person at a given time in history and in a particular culture." While written before the advent of the World Wide Web, this definition of “horizon” seems an apt way to express the current phenomenon. The interpretation of any particular piece of text is interdependent with an increasingly large body of other texts. The horizon is receding faster than ever and interpretation of text is increasingly problematic.

In response to this problem, some particularly influential voices in the design of the Internet have advocated the creation of a Semantic Web (Berners-Lee et al., 2001; Shadbolt et al., 2006). The basic idea of the Semantic Web is to attach machine-readable "tags" to various textual and visual elements on web pages, so that computers can interpret their meaning. In so doing, the interpretation of the tagged elements supposedly becomes fixed, transparent and unchanging, and the problem of interpretation is solved. While appealing in many respects, this project overlooks the fundamental issues of interpretation as identified by hermeneutic analysis. We will return to this issue later.

Hermeneutics: the art of interpretation

Hermeneutics is the "classical discipline concerned with the art of interpreting texts," (Gadamer, 1984, p. 146) and it originated with the study of religious texts, especially biblical analysis (Brown, 1968). Hermeneutics is the theoretical framework within which specific techniques of exegesis are employed in interpreting a text. The hermeneutic experience has been likened to translation in that the original language of a text is replaced with another that yields a new understanding (Gadamer, 1976, p. 19; 1984, pp. 345-351). This interpretive translation is a playful conversation in which different vocabularies are tested against the text. Rorty characterized it as "...looking for a vocabulary in which a puzzling object could be related to other, more familiar objects, so as to become intelligible." (Rorty, 1982, p. 199) An open and ongoing hermeneutic conversation with a text is essential because interpretation "has no metaphysical or epistemological guarantee of success. Further (and this is the crucial point) we do not know what "success" could mean except simply continuance." (Rorty, 1982, p.173).

Before the 17th century, biblical interpretation relied on the authority of tradition. As the enlightenment developed, the power of critical reasoning displayed by figures such as Newton, Descartes, Bacon and Locke inspired biblical scholars to begin challenging traditional interpretations of scripture. Since then, biblical scholars have adopted approaches and methods from philosophy, linguistics, literature and history in a continuing process of interpreting and reinterpreting the Bible (Morgan and Barton, 1988; Rogers and McKim, 1979; Krentz, 1975). As a result, the techniques of biblical exegesis have come to reflect a spectrum of philosophical positions ranging from the extreme realist to the extreme relativist, and of literary traditions ranging from the author-centered to the reader-centered (Aichele et al., 1995).

We are interested in the lessons to be learned from biblical interpretation not because organizations are somehow analogous to the bible, but because the field of biblical exegesis is a continually evolving survey of theory and practice in textual interpretation. As in Ricoeur (1981) and Gadamer (1984), we accept that a wide range of discursive actions from organizational discourse (Boland and Pondy, 1986; Hatch and Ehrlich, 1993; Martin, 1990), to institutional discourse (Myerson, 1998) to personal narratives (Murnighan and Conlon, 1991; Pitt, 1998) can be interpreted as texts. Given this broad view of what constitutes a text, biblical exegesis usefully presents an array of approaches reflecting the ongoing struggle of humankind to make sense of their world and their lives. It is one of the best places to look in order to see how the full breadth of the human and social sciences have been brought to bear on the problem of interpretation and meaning. It can thereby provide a way to overcome an inherent limitation in interpreting texts. Unless one is attempting a deconstruction, one looks for a coherent and consistent meaning in making an interpretation of a text, and is always subject to a desire for closure. Any particular interpretive act will be at risk of making a coherent reading at the expense of its own possibilities for further inquiry. Because biblical exegesis represents interpretive strategies from many conflicting and contending voices, it can provide a key for alternately opening and closing the search for meaning in texts, and maintaining an ongoing process of inquiry.

In this paper, we rely upon the principle of the **hermeneutic circle** as a way of discussing how one might enter into an interpretive process and keep it open and ongoing. "Hermeneutic circle" is the term used to describe the structure of an interpretive act (Klein and Myers, 1999). It refers to the way in which any act of interpretation is a simultaneous consideration of some detail (word) in light of a larger sense of the whole (theory). The hermeneutic circle is a tacking back and forth between detail and whole, in which the two stand in a relation of reciprocal validation. Each depends on the other for plausibility. A detail (word) is understood in a particular way and is worthy of being attended to because of the sense of whole (theory) with which it is approached, and the sense of whole (theory) is believable and deemed appropriate because of the way the details (words) are being attended to. The hermeneutic circle of interpretation as a "tacking" back and forth between detail and whole, alternately challenges the appropriateness and plausibility of each, and opens the text for further questioning.

In this paper, the hermeneutic circle is used as a backdrop for locating six techniques of exegesis. By arguing that each technique of exegesis is situated in the hermeneutic circle, we are proposing that each can serve as a possible entry point for stimulating the dynamics of hermeneutic inquiry. Each technique offers a starting point for tacking back and forth from detail to whole, and can promote the continuance of an interpretive effort rather than its closure. These six exegetic techniques are not presented as an exhaustive or fixed set, but as a representative summary of practices that have evolved through the years, and will continue to evolve over time. The paper proceeds by first developing a framework of hermeneutical exegesis that relates the six exegetical techniques to the interpretive space of the hermeneutic circle. Then, an example is given of applying the techniques of exegesis in order to maintain an openness of inquiry when interpreting a textual fragment from an organizational field study in information system development (Newman and Robey, 1992). Finally, we consider the challenges posed by the construction of the "semantic web" and contrast that endeavor with hermeneutic exegesis.

Hermeneutical Exegesis

Within the broad field of hermeneutics there are different strongly held beliefs concerning the nature of interpretation and the kind of meaning that can be gained from a text (Palmer, 1969; Gibbons, 1987; Mitchell, 1985). For some hermeneutic theorists, the meaning of a text is to be found in the intentions of its author and the techniques of exegesis are employed to recover this originally intended meaning (Hirsch, 1967). For other hermeneutic theorists, the intentions of an author are always suspect and the techniques of exegesis are employed to uncover underlying generative structures (myth, the unconscious, ideology, etc.) which operate behind the author, shaping the true meanings (Levi-Strauss, 1963). For yet other hermeneutic theorists, the text is a free document, separate from any intention of its author or any dominant ideology that may have shaped it. 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, making their own meanings, for their own selves, in their own worlds (Fish, 1980; Ricoeur, 1981).

Thus, different hermeneutic traditions approach interpretation as either a process of recovering the author's original meaning, uncovering a hidden meaning operating behind the author, or discovering a meaning beyond its author or context of creation (Gibbons, 1987). We will return to the implications of these different theories of interpretation later in the paper, but whichever tradition one follows, the hermeneutic circle and the techniques of exegesis remain as basic elements guiding an interpretive effort. The exegetical techniques we will consider are:

- 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

The hermeneutic circle is the ontological structure of interpretation and applies to the full range of situations, actions, or texts we encounter in our everyday lives (Gadamer, 1984). The hermeneutic circle of reciprocal relations between part and whole is fundamental to all the approaches to interpretation discussed above, from the objectivist recovery of original meaning to the subjectivist discovery of possibilities for self (Palmer, 1969). We propose as an analytic device that the hermeneutic circle - the tacking 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 and cultural setting within which it is situated. 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 context 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).

An example of openness in interpretation from the Old Testament

The ways in which interpretations of the first five books of the Old Testament, known as the Pentateuch, have changed over time can provide a good example of how a community of scholars, employing the techniques of exegesis, have maintained an openness of inquiry. Since the mid 17th century, when Richard Simon argued that the Pentateuch was compiled from a number of different sources, the number, sequence and process of compilation of the sources has been a contested arena of interpretation (Campbell and O'Brien, 1993), and it remains so to this day (Knoppers, 1997). At different times, all six exegetic techniques identified here have come in and out of play, producing arguments based on word usage, literary styles, oral traditions, archaeological evidence, other historical records, and the redaction of its compilers.

To take one episode in this debate as an example, Morgan and Barton (1988, pp. 78-88) have charted the way that historic, linguistic and literary criticism during the 19th century changed taken-for-granted beliefs about the sequence in which the sources of the Pentateuch were recorded. Culminating in the work of Julius Wellhausen (1957) in 1878, this line of research concluded that the sections known as the Priestly Document, which contain most of the laws and customs of ancient Israel, were unknown until after the exile and were one of the last sections to be written, rather than one of the first as had been commonly assumed. This challenge to the order in which the sources emerged opened radically new possibilities for interpretation of the Old Testament. Before Wellhausen, religious laws and customs of the Priestly Document had been seen as the origin and ethical authority for interpreting other Scriptures. The change in sequence he proposed undermined that strategy of interpretation. Instead of laws and regulations, Wellhausen argued that the original ethical obligation was a "spontaneous overflow of devotion", and a "...personal and freely given response of obedience to a personal and gracious God, untrammeled by ethical 'systems' " (Morgan and Barton, 1993, p. 84). This changed both the field of biblical studies and its assumptions about the relation of readers to their own faith.

> It is not a minor adjustment to a theory about the Pentateuch; it is a new way of seeing the entire Old Testament. (Morgan and Barton, 1993, p. 82).

Even though our interpretation of organizational texts is unlikely to touch such deeply held beliefs or have such wide spread consequences as this example, our interpretive efforts can benefit from a similar commitment to openness which the techniques of exegesis make available.

An Example From a Study of System Development in an American Insurance Company

In order to explore how the techniques of exegesis can maintain an openness in the interpretive process and add richness to the evolving meaning of a text, we will apply them to a text fragment from a field study of information system development in a large American insurance company, here called the Hartfield Company (Newman and Robey, 1992). The Hartfield has several billion dollars in annual revenues and is headquartered in New England with branches throughout the United States. In 1983, the company initiated a project to change its claims processing system from a primarily manual system with centralized batch processing to a state-of-the-art distributed computing system with a token ring network of 1,500 microcomputers in field offices. The project was named CAIS, for Claim Automation Information System. The projected financial benefits were considerable and the new system promised an improved service for the customer through more timely and accurate data. The estimated cost of $16 million was expected to generate annual savings of $10 million, mainly from staff reductions. Three years later, the hope of financial benefits had disappeared, the expected costs had doubled and even the name of the project had changed to emphasize improved service rather than cost reduction.

The tradition of information system development at the Hartfield featured projects led by system analysts from their head office. The CAIS project was the first attempt to use a team approach to systems development (known as Joint Application Design) in which clerks and managers from the claims offices actively participated in and even lead parts of the system development project. When the CAIS project entered its pilot testing phase, two significant problems were discovered. First, CAIS had difficulties handling joint claims. For example, if an automobile collides with a building this could result in several claims; one for the automobile, one for the building and possibly one for bodily injuries. Such multiple claims could not be fully handled by CAIS. The second and more significant problem was one of capacity, rooted in the database design. The claims data were downloaded each morning from the servers to the desktop computers in the field offices. As volumes of data increased, the performance of CAIS deteriorated to such an extent that the claims staff were waiting several minutes for their data to be transferred from the server to their own hard disk so that work could proceed. This problem was solved by keeping the claims data on the server, accessing particular claims data only as needed. It was a major change involving a recall and rewrite of the entire system.

After the system had been re-written, response times were down to a more acceptable level of 3 or 4 seconds. These setbacks in the system's development were serious enough to affect the morale of the users as well as the development staff. The delay was almost two years, and there was clearly a lot of disappointment when the system was withdrawn for rewriting. The text we will consider comes from an interview with the CAIS project leader, HJ, in August 1989. At the time of this interview, HJ had just been promoted to the position of internal consultant to the information system development group with the formal title of "Manager, Competitive Analysis and Financial Research". His main task in this new role was to ensure that the lessons learned from the Claim Automation Information System (CAIS), would be adopted on all major new information system development projects. HJ was seen as the visionary behind Hartfield's new approach to system developments reflected in CAIS. HJ was an ambitious person who preferred to deal with the "broad brush" side of systems work. By his own admission, he was not a details person, preferring to leave that to others (interview of January 7, 1986). HJ was young (mid thirties), bright and had received formal training in systems development through one of the local colleges. This training seemed to him to be of some importance in influencing his views. He contrasted his view of system developments with the approach of other project leaders at the Hartfield. In one interview he referred to them as "traditional systems people":

> HJ:(1-7-86) "..traditional systems people who don't want to know anything about users at all are still holding to the concept that they [the users] don't understand what systems do. 'They don't understand technology; they have no ability to understand that so let's not even bother to talk to them about it'" (p.5).

At our last visit in December, 1992, HJ had left the Hartfield to join another company within the same city. In spite of repeated requests, we were not able to interview him again in order to discuss the points we raise below. This is not an uncommon problem for researchers engaged in extended field studies (Buchanan, Boddy and McCalman, 1988).

The Textual Fragment

We will demonstrate how the techniques of exegesis can repeatedly "open up" the question of meaning by applying each in turn to an emerging interpretation of the meaning of the following text fragment from HJ. Below is the text fragment as originally transcribed:

> HJ: That's right 1. It's surprising that with only a couple of years, and even with a project that had difficulties, we were able to convert the organizational philosophy of developing systems into that kind of environment. 2. Things like joint application design are an absolute gimmick. 3. Having the customer be the project manager and actually having the systems people report to them is a gimmick. 4. That's just the way we set projects up. 5. And being here, it didn't seem that it was a radical change. 6. But when you step back from the organization, you say, "It's only then - two years or three years ago - and an organization that used to be, 'We're in charge; we make all the decisions; we design it; and then we'll throw it back over the wall when we've done and you see if you like it', to having, maybe not demolished the wall, but there are some really big doors there". 7. And I don't know how you codify that sort of process in order to be able to sit down with an organization and say,

> "These are the five steps you need to do in order to accomplish that change" (p.7 of transcription, interview with HJ, 12 August 89).

An Initial Reading

In the process of an organizational field study, one might initially read this fragment at its "face value" as meaning some thing like the following:

> Although system developers think of Joint Application Design as a gimmick, we succeeded in creating a joint development mindset on a difficult project in a relatively short period of time. My problem now is how do I spread that joint development approach more widely throughout the organization?

Beginning with this initial reading, we will apply the exegetic techniques of the hermeneutic circle as we have located them in order to more fully develop our interpretation of this text fragment. The hermeneutic circle of tacking back and forth between detail and whole is the engine, as it were, for keeping the search for meaning open. Each technique provides a different way of entering the hermeneutic circle and opening up possible lines of inquiry. We will first move through the textual space, beginning with textual criticism, and then address the techniques of the social space.

Textual Criticism

Textual criticism establishes the accuracy of the original text being analyzed. For the biblical scholar this is a significant problem. In the case of the New Testament, for example, the writing was carried out several decades after the events of the gospels; we do not possess even a partial text dating earlier than the second century (Tuckett, 1987), and the authors used a particular form of Greek (koine) which was common at that time but is now a dead language (Tuckett, 1987). By way of contrast, establishing the original text in a contemporary study would seem to be a relatively straightforward task. However, even if the researcher chooses to tape-record interviews and then have a clerical assistant transcribe them, there is always the possibility of transcription errors, especially if the interview involves technical language unfamiliar to the transcriber. If the choice is made not to tape-record the interview or conversation, then the reader is left to rely on the researcher's memory and interpretation of whatever notes were taken at the time. Although this approach may reduce obtrusiveness, it also significantly limits the chance of obtaining an accurate text.

The interview with HJ was conducted by one of the authors, and took place in HJ's office. It was tape recorded with a portable tape recording system using standard C90 tapes. The tape recording was transcribed soon after the interview by an experienced transcriber. Textual criticism was applied to this text fragment by having both authors simultaneously read the transcription and listen to the tape. This process was repeated several times until no discrepancies were noted. The task required more than six cycles through the tape. The new version of the text is reproduced below. We have adapted a coding scheme used by researchers from ethnomethodology (Schegloff and Sacks, 1974), namely:

/	indicates upward intonation
(...)	indicates a pause proportional to the number of dots

( )	indicates something said but not transcribed
(word)	indicates probable, but not certain transcription
but	indicates emphasis
emPLOYee	indicates heavy emphasis
(INT:)	comments from the interviewer

> HJ: That's right. 1. And it's it's surprising that with only a couple of years (....) and even with a project that had (..) difficulties (..) we were able to convert (..) the organiSATional philosophy of developing systems into that kind of environment. (INT: yes) umm. 2. Things like (.) joint application design (.) are an absolute gimmick. (INT: yes) um. 3.Things (.) having the customer be the project manager (.) and actually having the systems people report to them is a gimmick. 4. It's that's just the way we set projects up/ (laugh) um. 5. And (.....) *being* here it didn't seem that was a radical change (INT: yeh) (..). 6. But when you step *back* from the organization, you say, " Well it's only been two years or three years or something and you take in an (.) and an organization that used to be (..) (as if quoting) (sigh) 'We're in charge (.) we make all the decisions (.) we design it and then we'll throw it back over the wall when we've done and you see if you like it' (..) to (..) having (....) maybe not demolished the *wall* but there are some *really* big doors there" (laughter) ( ) (..). 7. And (...) I don't know (..) how you can codify that kind of (.) process or that ( ) in order to be able to sit down with an organization and say "These are the five steps you need to do in order to accomplish that change (.) (INT: um) er" (Revised transcription of interview with HJ, 12 August 89).

Even though the original transcription seems to have captured the essence of the subject's statement, our textual criticism has revealed several additions, omissions and modifications which were introduced in the transcription process. In comparing the two versions, we can see that several words were initially missed:

sentence 1	From: And it's surprising... To: And it's and its surprising...
sentence 3	From: Having the customer... To: Things (.) having the customer...
sentence 4	From: That's just the way... To: It's that's just the way...
sentence 6	From: It's only then - two or three years ago - and an organization that used to be... To: Well it's only been two or three years or something and you take in an (.) and an organization that used to be...
sentence 7	From: ...how you codify that sort of process in order to...

To: ...how you can codify that kind of (.) process or that ( )
in order to...

In addition, we can see several words which were changed, or perhaps misheard on the recording by the transcriber:

sentence 6	'then' instead of 'been'
sentence 6	'ago' instead of 'or something'
sentence 7	'sort' instead of 'kind'

The transcriber has also introduced their own interpretation of the punctuation, using commas, semi-colons and quotation marks as he felt was appropriate. Although this is normally acceptable, these have been mostly removed from the second version and replaced by the actual length of the pauses (....). In any subsequent interpretation, such timings could be important. We have left the quotation marks as introduced by the transcriber as we believe they do represent the subject's stream of thoughts.

It is unlikely that our textual criticism of this fragment is unique. It is almost certain that other transcripts will also produce additions, omissions and modifications to the originally recorded interview. Although many of these transcription errors may not be material to the subsequent interpretation, there may be some which lead the interpreter to make false assertions. Textual criticism in this instance has introduced new dimensions concerning the 'voice' of the subject, including examples of paralinguistic devices. We can see that the role of laughter was missing from the original version but has now been restored (sentences 4 and 6). Similarly, where the subject has placed emphasis on certain words, it has been shown in the text according to the conventions mentioned above (sentences 1, 5 and 6). In the new version of the excerpt we can also see something of the role of the interviewer, as he emits encouraging or approving sounds (sentence 1, 2, 5 and 7). These involuntary noises are part of most conversations where the one party is listening intently to the other and encouraging him/ her to continue a line of thought.

Through textual criticism we begin to see that this interview is not a neutral exchange of information between two disinterested parties. Who we are as researchers, as human beings (gender, personality, dress, demeanor, etc.), and what we expect from each other is of great importance to what is revealed (Bryman, 1988; Kvale, 1983, 1996). For example, because the subject knew that the interviewer was a professor of business studying successful and unsuccessful systems projects, he may have revealed details which he believed would find an empathetic response. He might even say things to the interviewer as a stranger which he could be more reluctant to share with some of his colleagues. It is the unique combination of interviewer and interviewee which has produced the current text. Other combinations might have produced other texts and might tell other stories. Each additional degree of accuracy in representing the original text opens possibilities for appreciating the process of its co-production and for changing our interpretation of it.

Finally, we note how HJ starts several thoughts and then abruptly terminates them. In sentence 2, he had been talking about Joint Application Design using the phrase "things like...". In sentence 3 he begins a parallel thought using the same phrasing but then terminates it. In sentence 6, the phrase "and you take in an" is another one of these orphan fragments which is terminated abruptly. In this case HJ moves from a personal comment ("you" is used by him elsewhere to refer to himself) to talk more abstractly about "and an organization ...". This could indicate that he wants to separate himself from the old way of doing things ("and an organization that used to be..."). It also shows that discourse is not something that is mechanically produced by subjects to simply present an understanding they already have, but is instead part of creating that understanding while it is being spoken and reflected upon. The very act of speaking is part of the creative process. Interviewees are to some extent developing their thoughts and "theories" as they articulate their ideas in interaction with their interviewer.

Summarizing, we can see that producing and reproducing the textual evidence in this and similar studies may be more problematic than is often presented. Not only is it likely that transcribers will introduce errors, they will also interpret the words, phrases and punctuation as they understand them: transcribers are part of the interpretation process. Whether this is significant will depend on the interviewee, the interviewer, the transcriber, the recording technology and, of course, the use to which the text is put. In the present case we note several instances in the transcription where textual criticism opened new possibilities for interpretation. These include the way the interviewer encouraged responses from HJ, the existence of orphan phrases which reveal the ongoing reflexive cognition at work during the interview, and the presence of laughter which we will consider further under literary criticism.

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). The contemporary researcher may recognize such problems of translation if he or she is working on a cross-cultural study. Yet problems abound with the meanings of words or phrases, even in the same language. Within each organization and professional specialty there are unique situated practices or 'forms of life' (Wittgenstein, 1953) and distinctive ways of knowing associated with them (Boland and Tenkasi, 1995). Nationally and regionally we also see pronounced differences in the meaning of common English words. In the USA we drive on the pavement, but in the U.K., the pavement is where pedestrians walk. Even within the same country there are major differences. As Tuckett (1987, p. 47) points out, the word "poorly" in referring to one's state of health means "slightly off-color" in the South of England but means "seriously ill" in the North. The semiotic square (Greimas, 1987) provides a useful framework for interpretation. Within the set of hermeneutic techniques we outline here, it would fall most naturally within linguistic criticism. This technique was applied by Corea (2006) in his analysis of IT-based customer service organizations.

HJ is a professional system analyst, and this text fragment from his interview contains numerous words and phrases that are used frequently in system analysis practice. Among those words, we selected the following for clarification: "project", "convert", "organization philosophy", "developing systems", "joint application design", "customer", "project manager", "system people", and "the wall".

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We have selected these words and phrases because our experience of working with system analysts in this and other field research suggests they are used in unique ways within the local practice of a system development department. 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. Without an effort at linguistic criticism, the reader may interpret "organization philosophy" to refer to an organization level set of beliefs rather than a department specific one, or may interpret "customer" to refer to the corporation's customers instead of the workers affected by a new computer system. In the absence of linguistic criticism, a reader might also be unaware of the rich symbolic imagery of a particular kind of system development process that is associated with the word "wall" in this context. The local meanings of these familiar terms emerges in the language games of system development practice as a form of life (Wittgenstein, 1953). An interpretation that uses a collegiate English dictionary or even a glossary of standard business terms could result in misinterpretations, or at least in thinner and less interesting ones.

Literary Criticism

Literary criticism completes the tacking from specific words to a sense of the whole within the textual space of the hermeneutic circle (figure 1). Literary criticism is concerned with such questions as: who wrote a text, 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 the narrative forms and styles of that time. Literary criticism is also concerned with how different approaches to reading a text (e.g., feminist, structuralist, reader-centered) yield different meanings. For example, Joanne Martin (1990) analyzed a textual fragment of a story told by the male president of a large, multi-national corporation in which he intended to show that the company had a genuine concern for female workers with children. Both the feminist and deconstructionist modes of analysis employed by Martin are examples of literary criticism. The feminist critique she makes provides a good example of how an interpretive study of necessity becomes self-sealing and achieves coherence through closure[1].

Two important aspects of literary criticism which have a bearing on our subsequent analysis are genre and purpose. We will treat these together as the 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 the biblical exegete, it is not always clear what the genre is in Scripture. For example, the Bible contains Gospels, letters (e.g. 1 and 2 Corinthians), apocalyptic writing (Revelation and Daniel), love poems (Song of Solomon) and wisdom literature (e.g. Proverbs). Moreover, an individual piece may reflect several different genres.

For the organizational analyst, subjects describing organizational events may also use a variety of literary devices within an interview or a conversation. These could include understatement, humor, irony, exaggeration, metaphor, allegory or sarcasm. We will apply literary criticism by first exploring who HJ 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.

To begin an exploration of how the genre and purpose of this text affect its meaning, we note that the context of the seven sentence fragment was a series of questions and answers on project development at the Hartfield. HJ had just previously commented on Joint

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[1] Martin's (1990) analysis is a provocative and challenging one that stands on its own merits as a contribution to our literature. But, when viewed in light of her own desire for maintaining openness and ongoing inquiry in its interpretation, we suggest that hermeneutical exegesis as presented here can provide a wide range of opportunities for entering into the hermeneutic circle of interpretation and for stimulating further inquiry into the meaning of Martin's textual fragment.

Application Design being the *de facto* design approach ("We build systems that way"). The interviewer then asked him to reflect on the old ways of doing things ("But you didn't. You didn't used to") (p.7, paras. 1 and 2). What follows in the eight sentence fragment above is HJ's response to that invitation beginning with the remark, "That's right".

We characterize the genre of his response as a confessional guarded with irony and understatement. HJ is at one and the same time revealing himself to a trusted equal (the researching professor) and hiding behind self effacing understatement and self deprecating irony. He is simultaneously making himself close and familiar, as well as distant and incongruous. To the professor's knowing remark on HJ's current system development practices ("You didn't. You didn't used to."), HJ begins to reveal an intimate portrait of his experience over the past six years. But the portrait is masked with understatement in which he refers to the length of time as "only a couple of years", and to the failure and recall of the initial system as "a project that had (.) difficulties (..)".

He refers to the joint application design process that he is now instituting throughout the organization as a "gimmick", "an absolute gimmick", and "just the way we set projects up". He frames the changes in organizational practices which he is being rewarded for achieving as invisible to him during the project ("being here it didn't seem that was a radical change"). He further intimates that he is not aware how the changes were made or how they could be made again, even though he is expected to do so. (And (...) I don't know (..) how you can codify that kind of (.) process...).

His laughter compounds the irony by coming immediately after his reference to "gimmick" and "set up" in sentence 4, and also after his reference to the change as a "really big door" in the wall between the systems professionals and the field office customers. His laughter also, we suggest, reveals HJ as trying to establish a closeness with the interviewer, inviting the interviewer into an inner circle with privileged knowledge of the organization and seeking agreement and approval from him.

A complex literary device that HJ employs in sentences 6 and 7 further supports the interpretation that he is seeking a special relationship of acceptance and shared inner knowledge with the interviewer. In these two sentences, he first lets the organization speak in its traditional voice, ("We're in charge (.) we make all the decisions (.) ...") and then adopts the persona of his interviewer. He uses a teaching metaphor, reminiscent of the professor, and questions how he can "sit down with an organization" and instruct it on "the five steps that you need to do to accomplish that change...".

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 HJ alternately revealing and hiding himself while seeking approval from and closeness to the interviewer. Other critics might approach it with a different sense of its genre and a different eye for its literary devices, thereby opening further possibilities for interpreting its meaning.

The Implication of Different Hermeneutic Perspectives for Literary Criticism

Beyond a concern for genre and literary devices, literary criticism also brings to our attention the importance of how we ourselves approach a reading of the text, or the hermeneutic perspective we take toward the text. Do we assume that the text contains an author's message and attempt to ***recover*** the author's originally intended meaning? Or, do we assume that the text is an artifact generated by underlying social/psychological structures operating through the author and attempt to ***uncover*** those underlying structures? Or, do we assume that the text is a free standing entity, distant from both its author and its context of production, from which we are free to ***discover*** a meaning for our own selves and situation? (Gibbons, 1987) Each of these perspectives for approaching the text provides possibilities for keeping the search for meaning open and for maintaining an ongoing process of inquiry. Much of the interpretation thus far has implicitly dealt with recovering the author's original meaning, and we will now briefly explore how uncovering and discovering meaning in the text might be approached.

We can begin the uncovering of meaning in this text by considering the way it reflects the contradictions inherent in organizations and the way these contradictions are highlighted in times of stress such as the CAIS project at the Hartfield. The text can be read, for instance, as reflecting a contradiction between organizational rules and organizational performance. Managers are supposed to maintain organizational control by establishing rules for organizational functioning. Yet, the manager's rules do not control behavior. The performance of the organization may reflect some rule-like qualities, but they are not ones under the manager's jurisdiction. The text also reveals a contradiction between the appearance and the reality of managerial knowledge. The manager is paid for having expert knowledge of how to make things happen in an organization. Managers maintain a facade of expertise, but they experience a lack of knowledge and uncertainty over how to develop it. The text also reveals a contradiction between the public and private face of a manager. Publicly HJ supports the user-led teams and other trappings of joint application development. Privately he worries that they are a trick ("gimmick") to fool people and to hide the true feelings of system developers.

We can also stand before the text and seek to discover the possibilities for meaning in our own lives that it opens up to us. We can read this text as speaking about us as teachers and researchers, especially the way we experience ambiguity and the need for moral courage. As researchers we employ a set of methods that appear to be reliable for gaining knowledge, and the techniques of exegesis would be one example. But in the end, we know that a successful, insightful study may owe as much to happenstance and serendipity as it does to method. If we have been fortunate enough to have had some success at research and are pushed on how to design studies that will be important contributions to knowledge, we have to admit we don't know how to say, "These are the five steps you need to do in order to accomplish that...". As teachers, we go day-to-day knowing that the papers and arguments we make students produce are not what we really want from our students. What we are really after is genuine growth in knowledge and increased inquisitiveness. Papers are a "gimmick", "just the way we set things up". Yet, after just a few years at the University we see remarkable improvement in the students' development, which we really do not know how to reproduce.

Each of these hermeneutic traditions, of recovering, uncovering, or discovering meanings in a text serve as a broad platform for generating different kinds of readings. As mentioned above, though, we expect the techniques of exegesis reviewed here will apply regardless of the hermeneutic perspective being employed.

Historical Criticism

We now shift from the textual space to 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, perhaps, the technique of exegesis that organizational researchers will feel most familiar with.

In studying ancient texts, the gap between antiquarian practices and contemporary ones is often large enough that the meanings of texts would be lost without an historical explanation. To illustrate, consider the following example from the New Testament (Ladd 1967; Newman, 1989). In Paul's letter to the Roman Christians he writes, "One man believes he may eat anything, while the weak man eats only vegetables" (Romans 14:2). The passage is set in a chapter discussing the practice of offering meat to idols and how a believer might respond to it. The believers were living in a pagan society and most of the meat for sale in the market place, if not all of it, had previously been offered as a sacrifice to one of the many idols. The question was: should believers eat the "contaminated" meat or refrain and eat only vegetables? Paul identifies two types of believers: one whose faith is strong and who knows that the idols are false. He feels free to eat anything. The other kind of believer ("the weak man") is not so certain and fears his conscience will be damaged if he consumes the meat.

For an organizational analysis, it is also vital that we try to situate the text in its historical setting. Although it is unlikely that we will come across such conundrums as the one above, the features of the context which have some impact upon the course of behavior in the organization can alter our understanding of events and open new readings of a text. Many elements of historical criticism were covered 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 many elements of this text fragment point to landmarks in the trajectory of the project over its life span. We present these major features diagrammatically in figure 2 and map a summary of the text onto the diagram giving links to the key events and dates.

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

We will take one element from this overview to explore how historical criticism provides new possibilities for interpreting HJ's interview fragment. Each field office at the Hartfield was a profit center with significant autonomy. This autonomy was manifest in the claims staffs' concern to keep local control over "their data". In the original design for CAIS the workstations reflected the staffs' concerns:

> HJ (1-7-86): "We said, 'It's yours today. It's in the paper in your desk drawer. We're going to keep it yours. It's on your desk; on your machine'. So the guy says, 'It's still mine'" (p.15).

The inference from this earlier interview with HJ is that he recognized the need to support traditional patterns of data ownership for claims workers, presumably because they would then more readily accept the new computerized system. Technically, this meant that all their files were to be held on a hard disk at their own local work station. A year later this feature proved to be the downfall of CAIS, requiring the system to be largely rewritten.

Identifying the desire to keep data on the desktops of the users as a potential cause of the CAIS original failure, allows us to open another line of interpretation. Even though the Hartfield systems group publicly blames its system failures on a lack of communication with users, we see in this project that the system failure may have resulted from communicating too well, from listening too closely and from following a user request too uncritically. In an effort to make the system mimic familiar work practices and patterns of autonomy, they pursued a data storage strategy that was infeasible. This throws new light on HJ's struggle to create new system development standards: he cannot codify what he has not accomplished.

Joint Application Design as a system development strategy was being popularized in the computer industry press and was being adopted by the Hartfield as a "solution" to their system failure problems. But in this project it may have created a new problem of listening too well and too uncritically. This new line of interpretation calls the whole narrative they have put forward to explain their need for and success with new system development practices into question. It suggests that a technical weakness led to the failure with the original CAIS project, but they have portrayed it as a weakness of communication practices.

Form Criticism

In tacking from the sense of whole provided by historical criticism toward the detail of word and author, we next encounter the exegetic technique of form criticism. Form criticism is 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 tradition carried the material in many pieces in the form of anecdotes, stories, sayings, teachings, parables, etc., before it was assembled as a linear text. Here, 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.

Certain New Testament scholars believe that the "historical Jesus" has been lost in the process of producing the Gospels as we know them today. The oral tradition, according to these scholars, modified the contents to fit the life of the then contemporary believing community (McKnight, 1969). For radical interpreters of the New Testament such as Rudolph Bultmann and Ernst Kasemann, form criticism means that it is impossible to recover the historical events apart from a few "genuine" fragments. "At the hands of the extreme form critics, the Gospels lose much of their trustworthiness as historical records...." (Ladd 1967: 147).

Form criticism is highly relevant to many organizational studies because most of them have a 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). In describing events, an individual may use colorful language with origins in oral traditions among managers or in the work-place. In the course of describing events, some of these traditions may be exaggerated or their origins confused as, of course, accuracy may not be the primary concern of an interviewee.

This does not mean we have to adopt an extreme perspective in declaring that we can never get back to the events in a reliable way. On the other hand we do not want to fall into the trap that there is one best description of the 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.

As an example of form criticism, we will focus on the issue raised in sentence 6. HJ views the old way as one where the systems group is firmly in charge, making all the significant decisions, and returning the completed system by throwing it back over the wall. He is separating himself from this tradition, and a well-read copy of Zuboff's book, ***In the Age of the Smart Machine*** which was on his desk, during the interview might be indicative of the user-centered influences on his design philosophy. The idea of "throwing it" reinforces the lack of contact between the systems and user communities and perhaps the practice of excluding users from involvement in projects. HJ uses the word 'wall' twice as a metaphor (once emphasizing the word) for the barrier between groups in the Hartfield.

It is tempting to wonder if the "wall" metaphor was a common one circulating in the organization just as military and sporting metaphors are among some systems staff (see Hirschheim and Newman, 1991). The strength of metaphors is that they reduce our need to deal with unique situations each time. For example, if a systems developer sees himself at war with users and expects battles with them during projects, this reduces his or her need to deal with users as individuals, believing perhaps that they will always resist change. However, this expectation of conflict with users could also precipitate conflict, further reinforcing the metaphor. Similarly, the common use of the wall metaphor could further reinforce the separation of the two groups. Was this idea of wall and throwing systems over it to the users a common metaphor in the Hartfield?

On a visit to the Hartfield in December 1992, CAIS was largely completed and rolled out to the branches, HJ had left for another company in the same city, and his successor, LG, had taken on the task of documenting the new development approach, now called Business Systems Engineering (BSE). One of the documents we were able to obtain at this visit concerned the new BSE method which HJ had struggled with codifying three years earlier (see sentence 7). The new Hartfield manual began by describing BSE as not being "a throw it over the wall mentality". This suggests that 'the wall' was indeed a part of the oral tradition at the Hartfield.

Recognizing this feature of their oral tradition opens the possibilities to further develop the line of interpretation we began through the use of historical criticism. The framing of failure as a lack of communication between system developers and users may be an example of the way an oral tradition such as "the wall" can shape a sense making process with respect to the CAIS failure (Weick, 1996). Expecting to see a 'wall', between themselves and their users, they do see one - even though they had listened to the users quite closely. Expecting the wall to be a source of problems, it becomes one in the analysts' reconstruction of events - even though it may well be that a question of technical competence was the root cause.

Redaction Criticism

The final exegetic technique in tacking from whole to detail in the social realm is redaction criticism. 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 recording and assembly process. In contrast, redaction criticism sees the writer as far more creative and active in shaping the text (Perrin, 1969). Redaction helps us to remember that to describe a situation is to narrate it (Marcus, 1986). Narrating the situation involves naming it as a setting for action, giving motivations to its characters and endowing it with a story line or a plot. The way an individual adapts material from oral traditions and colors the material in narrating it has become known as "redaction" and the analysis of it "redaction criticism" (Tuckett, 1987, p.117).

Redaction is illustrated in our text fragment with the metaphor of "wall" mentioned above. HJ elaborates on the wall metaphor by claiming that the wall has been breached by the methodology he was instrumental in introducing through the CAIS project. He implies that the ideal situation is to bring the wall down altogether, but he is pragmatic enough to accept an intermediate condition in which there are "some *really big* doors there". His emphasis may indicate the breaches made in the wall are big enough to have affected peoples' attitudes. As HJ is the visionary behind the joint approach to design in CAIS, it is not a large leap to speculate that he sees himself as the one who has made these big doors in the wall and has the key to open up similar possibilities in other projects if only others were sufficiently enlightened. This interpretation would not be inconsistent with the last sentence (7) in the fragment where he questions how the process can be codified. There is a certain amount of sophistication involved in elaborating an organizational story such as this one, and his redaction with the wall metaphor can be interpreted as an element in his use of the genre of a guarded confessional discussed above. He takes the ideas of "wall" and "throw" and adapts them for his own purposes to claim success with Joint Application Development, yet subdues his claim with understatement. By redacting the wall metaphor in this way, he is able to put himself forward, yet maintain a tone of irony and further develop his relation of closeness and a sharing of insider knowledge with the interviewer.

Redaction criticism ends our use of each exegetic technique to open new possibilities for interpretation with this text fragment from HJ. 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 an openness in interpretation.

Interpreting the World Wide Web

Our analysis is limited to a single fragment of text, from a slightly esoteric context, and somewhat displaced in time. Like a Biblical passage, it *requires* interpretation, because the meaning for most readers is not self-evident. Still, as a single fragment, it presents the simplest possible case. On the World Wide Web, text becomes hypertext: web pages, blogs and wikis that are interconnected in ways that were not possible when the principles of hermeneutic interpretation were created. While the hermeneutic circle has always implied the need for merging horizons – and interpreting texts in light of related texts – the growth and connectedness of the World Wide Web makes the problem of interpretation more obvious and more challenging than ever.

In response to this problem, computer scientists have proposed using ontologies to pre-define the meaning of textual and visual elements on web pages. This strategy is known as the Semantic Web, which is still a work in progress. Even advocates of the Semantic Web note that progress has been slow (Shadbolt et al., 2006**).** Designers of the Semantic Web propose to make interpretation machine-readable by adding metadata (XML tags with properties) to data on the web. Consider this simple example from Wikipedia (http://en.wikipedia.org/wiki/Semantic_Web, downloaded May 23, 2008). Using Extensible Markup Language (XML), one can define what is meant by the symbol "cat".

Non-semantic web:

```
<item>cat</item>
```

Semantic web:

```
<animal Kingdom="Animalia" Phylum="Chordata" Class="Mammalia"
Order="Carnivora" Family="Felidae" Genus="Felis">Cat</animal>
```

The "meaning" that gets encoded this way is basically fixed – pre-defined – in terms of whatever ontology has been used for formulate the metadata. In this case, the ontology is biological, and the metadata in the XML tag makes clear exactly what kind of animal is denoted by the expression "cat." But what is the significance of this animal in the context of other elements on the page (people, things, places, events)?

While the chosen ontology may help refine the meaning of "cat" (or any other symbol), each ontology generated by consortia such as w3c, or whomever, is itself a document, connected to other documents. Some aspects of the ontology may correspond very closely to physical phenomena, but the interpretation of signs (symbols) tagged by meta-data from any particular ontology depends on the hermeneutic circle – coherence and context rather than correspondence. And of course, there are many ontologies: high-level, low-level, domain-specific, and so on, each taking a small place within the ever-expanding textual horizon of the WWW. While these ontologies will facilitate machine-readability for some purposes, they cannot escape the demands of the hermeneutic circle.

From a hermeneutic point of view, the Semantic Web is intended to close off or remove openness of interpretation. By providing a specific interpretation, from the point of view of a pre-defined ontology, it attempts to short-circuit the interpretive problem. For some purposes, such as Electronic Data Interchange, where a specific ontology can be agreed upon in advance, this may prove workable. But for the larger problem of interpreting textual artifacts on the World Wide Web, it does not help.

Conclusion

Applying hermeneutical exegesis to organizational texts brings a possibility for openness and ongoing inquiry to the interpretive enterprise that can enrich insights and improve the possibilities for recovering, uncovering and discovering meaning. Taken together, the techniques of exegesis encompass a hermeneutic circle which reciprocally relates detail to whole and word to world, illuminating how we can move from a text fragment through the organizational experience in which it is embedded, to meaning. In this paper we applied hermeneutical exegesis to a textual fragment from a system development case study, and discuss it's potential application to the World Wide Web. We saw how each exegetic technique enabled distinctive and valuable opportunities for reinterpreting such organizational texts. To emphasize this, we review the unique contribution made by each exegetic technique.

Textual Criticism: Even with a careful initial transcription, textual criticism was able to reveal important missing parts of the original texts. In addition to revealing missing words and mistranscribed words, it also revealed laughter, pauses, emphasis, non-word sounds and interviewer comments. The addition of laughter to the text provided an opportunity to enrich our interpretation of HJ's intentionality in this interview and of the relation between HJ and the interviewer that was being enacted. The addition of orphan phrases, and ungrammatical, disconnected segments allowed us an insight into what thinking and speaking in an organizational setting is like. With these corrections provided by textual criticism we can better see thinking as action. This opens a new possibility for interpreting the ambiguity and uncertainty in HJ's own understanding of this situation and its meaning for him.

Linguistic Criticism: We employed linguistic criticism in the rather restricted sense of traditional exegetic studies, focusing on the generally accepted "surface" meaning of words and phrases in HJ's community. More committed semiotic analysis could no doubt have additional interpretive dimensions here (Fiol, 1990, 1991; Barley, 1983). Nonetheless, linguistic criticism enabled us to understand the meaning of the unique jargon of system development, and how familiar words and phrases are used in distinctive ways in this setting. We clarified for example that "organizational philosophy" is not the philosophy of the organization, and that "customer" is not its customer.

Literary Criticism: It is through literary criticism that HJ's intentionality as author of this text was brought into focus. The genre of this text alternates between one of a guarded confessional, a revelatory initiation, and a teaching lecture. His laughter and his use of "gimmick" could then be explored in light of the genres being employed, further illuminating his intentionality to build a particular kind of collaborative relation with the interviewer. Literary criticism also helped us to consider how the perspective we took in reading the text opened different possibilities for recovering, uncovering or discovering meaning from it

Historical Criticism: Historical criticism, by locating the text in a multi-year stream of activity and in its larger organizational context, allowed us to see how the fragment reaches out and connects with parts of the whole organization across time. Historical criticism allowed us to read the understatement in such phrases as "difficulties" and to appreciate how this project had transformed from one intended to save costs to one intended to improve organization effectiveness. It also raised questions about the basic premise of HJ's claim that communication failure with intended users was the cause of system development failure. We were then able to begin a reading that suggested it was a lack of technical competence that may have been a cause for system failure.

Form Criticism: Form criticism enabled us to see how the oral traditions of system developers at the Hartfield shaped this text. The metaphor of "the wall" formed part of the oral tradition of system developers. It was used to frame tales of the relations between developers and users. Through form criticism we were able to see how, for HJ, coming to understand the system development process in a new way involved repeating this familiar oral tradition. Coupled with the line of interpretation begun with historical criticism, we opened the possibility for seeing the oral tradition of the "wall" as a self fulfilling prophesy driving HJ's sense-making of the CAIS project.

Redaction Criticism: Through redaction criticism we considered HJ's creative role in shaping the text, and saw how he took the oral tradition of "the wall" and uniquely modified it in his own telling of the tale. Redaction criticism provided insight into the ways that finding a new understanding involves finding a way out of familiar oral traditions. His redaction with the oral tradition of the "wall" metaphor also opened the possibility of revisiting our interpretation of his narrative genre as a guarded confessional.

We do not propose that hermeneutical exegesis solves the problem of textual interpretation in organizational studies. Instead of leading us to a clear, definitive interpretation as proposed in the semantic web, it provides a useful guide for maintaining an open and ongoing process of inquiry. It does so by explicitly recognizing the overarching structure of interpretation as captured by the idea of the hermeneutic circle, and by locating each technique of exegesis as situated in a comprehensive interpretive space. Each technique provides a unique entry point into the hermeneutic circle and enables a renewed tacking back and forth between detail and sense of whole.

References

Aichele, G. et. al. (1995). The Postmodern Bible. New Haven: Yale University Press.

Barley, S. R. (1983). "Semiotics and the Study of Occupational and Organizational Cultures." Administrative Science Quarterly, 28, pp. 393-413.

Berners-Lee, T., Hendler, J., and Lassila. O. (2001), "The Semantic Web" Scientific American. 284:5, p. 35.

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. J. and L. R. Pondy (1986). "Micro Dynamics of a Budget Cutting Process: Modes, Models and Structure", Accounting, Organizations and Society, 11:4/5, pp. 403 - 422.

Boland, R. and Tenkasi, R. (1995). "Perspective making and perspective taking in communities of knowing. Organization Science., 6:4, pp. 350-372.

Brown, R. E. (1968). "Hermeneutics." In R. E. Brown, J. A. Fitzmyer, and R. E. Murphy (Eds.) The Jerome Biblical Commentary. Englewood Cliffs, NJ: Prentice-Hall.

Bryman, A. (1988). Quantity and Quality in Social Research. Routledge: London.

Buchanan, D. Boddy, D. and McCalman, J. (1988). "Getting in, Getting on, Getting out, and Getting Back." In A. Bryman (Ed.) Doing Research in Organizations. Routledge: London.

Burnett, G., Dickey, M.H., Kazmer, M.M. and Chudoba, K.M. (2003) "Inscription and interpretation of text: a cultural hermeneutic examination of virtual community" Information Research, 9(4) paper 162 [Available at http://InformationR.net/ir/9-1/paper162.html]

Campbell, A.F. and O'Brien, M.A. (1993). Sources of the Pentateuch. Minneapolis: Fortress Press.

Churchman, C.W., (1971) The Design of Inquirying Systems , New York: Basic Books.

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.

Fiol, C. M. (1990). "Explaining Strategic Alliance in the Chemical Industry." In A. Huff (Ed.) Mapping Strategic Thought. Chichester: John Wiley & Sons.

Fiol, C. M. (1991). "Seeing the Empty Spaces: Towards a More Complex Understanding of the Meaning of Power in Organizations", Organization Studies, 12:4, pp. 547-566.

Fish, S. (1980). Is There a Text in this Class? Cambridge: Harvard University Press.

Gadamer, H. G. (1984). Truth and Method. Crossroads, New York.

Gademer, H.G. (1976). Philosophical Hermeneutics. Berkeley: University of California Press.

Gertz, C. (1973). The Interpretation of Cultures. New York: Basic Books.

Gibbons, M. T. (Ed.) (1987). Interpreting Politics. New York University Press.

Greimas, A. (1987). On meaning: selected writings in semiotic theory (trans. P. Perron & F. Collins). London: Frances Pinter.

Hatch, M. J. and Ehrlich, S. B. (1993). "Spontaneous Humor as an Indicator of Paradox and Ambiguity in Organizations", Organization Studies, 14:4, pp. 505-526.

Hirsch, Jr., E. D. (1967). Validity in Interpretation. New Haven, CT: Yale University Press.

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.

Knoppers, G. N. (1997). "The Vanishing Solomon: The Disappearance of the United Monarchy from Recent Histories of Ancient Israel", Journal of Biblical Literature, 116:1, pp. 19-44.

Krentz, E. (1975). The Historical - Critical Method. Philadelphia: Fortress Press.

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.

Levi-Strauss, C. (1963). Structural Anthropology. New York: Basic Books.

Marcus, G.E. (1986). "Contemporary Problems of Ethnography in the Modern World Systems," in Clifford, J. and Marcus, G. E. (Eds.) Writing Culture: The Poetics and Politics of Ethnography, pp. 165-193. Berkeley: University of California Press.

Martin, J. (1990) "Deconstructing Organizational taboos: The suppression of gender conflict in organizations" Organization Science 1:4, pp. 339-359.

McKnight, E. V. (1969). What is Form Criticism? Fortress Press: Philadelphia, PA.

Meyerson, D. E. (1998). "Feeling Stressed and Burned Out: A Feminist Reading and Re-Visioning of Stressed-based Emotions with Medicine and Organization Science", Organization Science, 9:1, pp. 103-118.

Mitchell, W. J. T. (Ed.) (1985). Against Theory: Literary Studies and the New Pragmatism. Chicago: University of Chicago Press.

Morgan, G. (1986). Images of Organization. Beverly Hills: Sage.

Morgan, R., and Barton, J. (1988). Biblical Interpretation. Oxford: Oxford University Press.

Murnighan, J. K. and Conlon, D. E. (1991). "The Dynamics of Intense Work Groups: A Study of British String Quartets", Administrative Science Quarterly, 36:2, pp. 165-186.

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.

Palmer, R.E. (1969). Hermeneutics. Evanston: IL Northwestern University Press

Perrin, N. (1969). What is Redaction Criticism? Fortress Press: Philadelphia, PA.

Pitt, M. (1998) "A Tale of two Gladiators: 'Reading' Entrepreneurs as Texts", Organization Studies, 19:3, pp. 387-414.

Poper, K., (1982) The Open Society and its Enemies , London: Routledge and Kegan Paul.

Prasad, A. (2002). “The Contest Over Meaning: Hermeneutics as an Interpretive Methodology for Understanding Texts”. Organizational Research Methods 2002:5, 12.

Ricoeur, P. (Ed. and Trans. by Thompson, J.) (1981). Hermeneutics and the Human Sciences. Cambridge: Cambridge University Press.

Rogers, J.B., and McKim, D.K. (1979). The Authority and Interpretation of the Bible. San Francisco: Harper & Row.

Rorty, R. (1982). Consequences of Pragmatism. Minneapolis: University of Minnesota Press.

Schegloff, E. and Sacks, H. (1974). "Opening up Closings." In R. Turner (Ed.) Ethnomethodology. Middlesex: Penguin.

Shadbolt, N., Hall, W., and Berners-Lee, T. (2006) "The Semantic Web Revisited" IEEE Intelligent Systems. 21:3, p. 96.

Tuckett, C. M. (1987). Reading the New Testament: Methods of Interpretation.

Weick, K.E. (1995). Sensemaking in Organizations. Thousand Oaks: Sage Publications.

Weick, K. E. (1979). The Social Psychology of Organizing, 2nd ed. Reading, MA: Addison-Wesley.

Wellhausen, J. (1957). Prolegomena to the History of Ancient Israel. Cleveland: World Publishing (1883 2nd. ed, 1878 orig.)

Wittgenstein, L. (1953). Philosophical Investigations. New York: MacMillan.

Zald, M.M. (1996). "More pragmatics? Unfinished business in linking the social sciences and the humanities". Administrative Science Quarterly, 41, pp. 251-261.

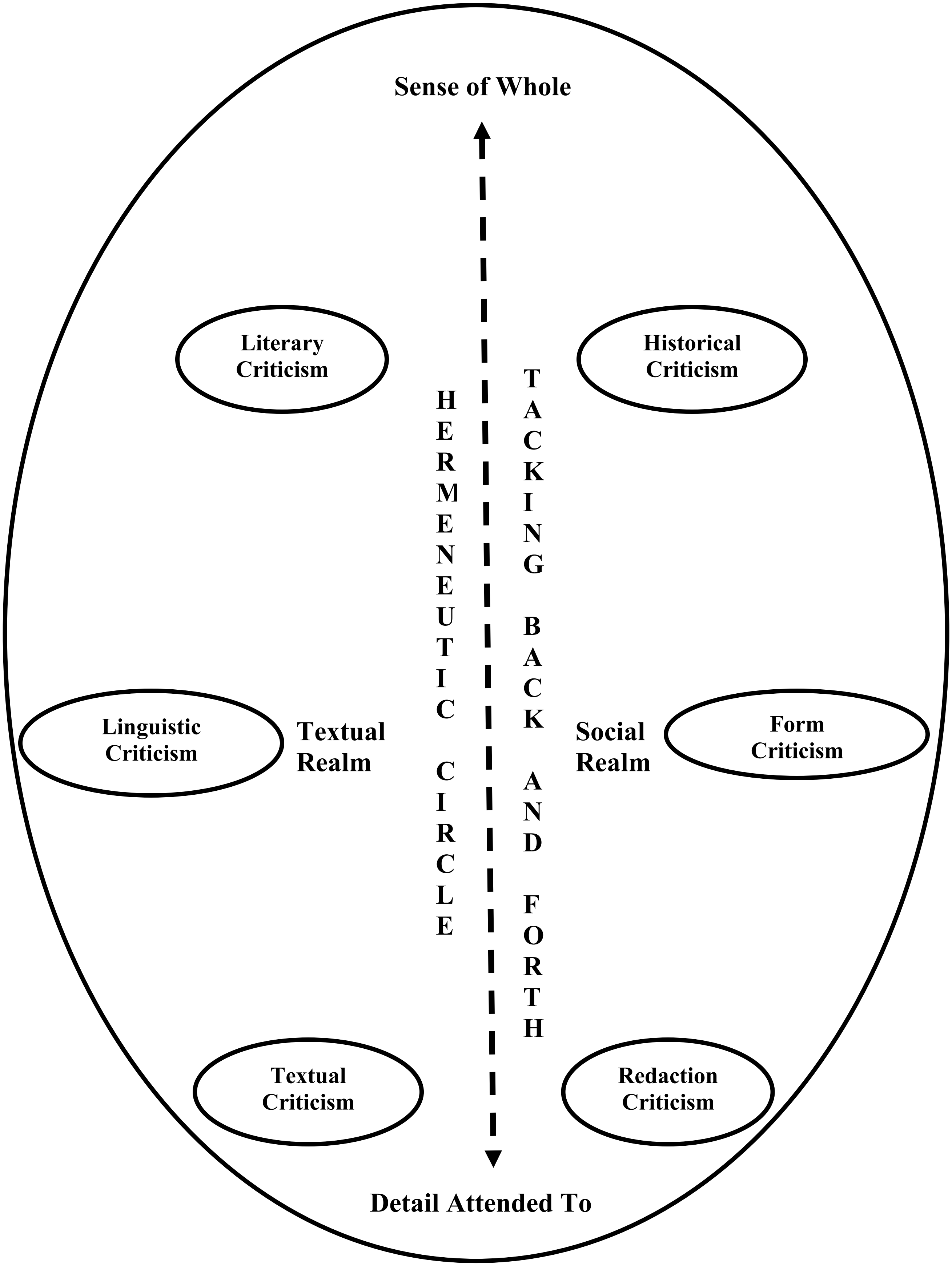

Figure 1: Techniques of Exegesis as Elements in the Hermeneutic Circle

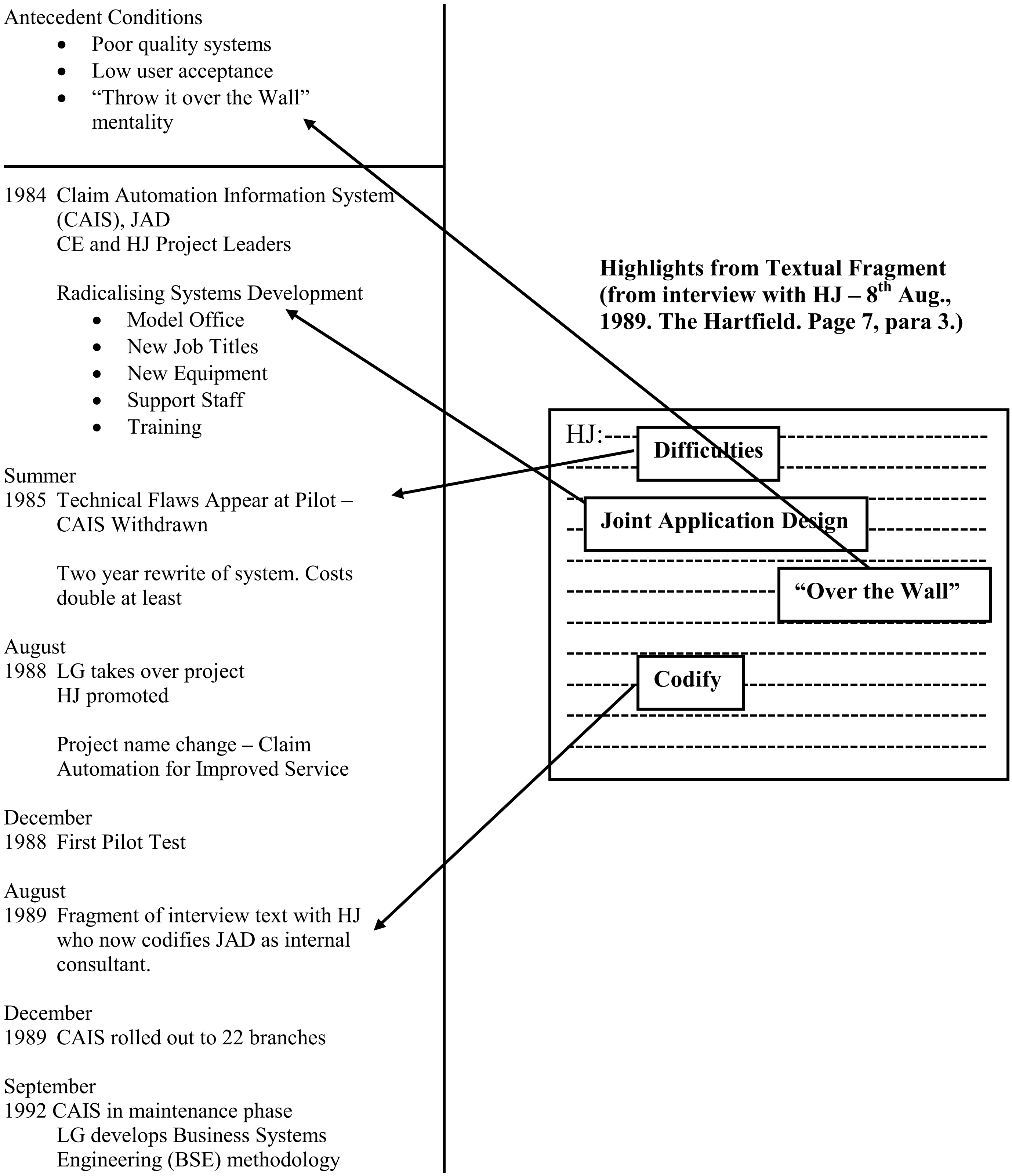

Figure 2: Historical Criticism Map

Table 1: Linguistic Criticism of Key Terms in HJ's Text

Project:	The activity of developing an information system. A project is composed of stages, moving from an initial survey and feasibility study to the actual installation of hardware, software and procedures. The project is conducted by a team composed of representatives from the central information system staff as well as affected departments.
Convert:	Variant from of "conversion", a term used by system development professions to refer to the process of implementing the new hardware and software as well as new work practices and organizational procedures associated with new information systems.
Organizational Philosophy:	The espoused theory within the information systems department for organizing, leading and evaluating projects.
Developing Systems:	A variation of "Information Systems Development" which is a set of methods and procedures for analysing, designing, constructing and installing a new computer-based method of data-processing and related operating practices of the firm. See "project" above.
Joint Application Design:	An approach to conducting information system development projects that emphasises a leadership role for representatives of user departments on the project team. Joint Application Design is a rather recent innovation in systems development methods, associated at least in part with a recognition that projects led by information system professionals frequently failed to provide the hoped for benefits.
Customer:	A term used by system analysts in a centralized information system development to refer to other members of the organization for whom the information system is designed. Customers are frequently referred to as users.
Project Manager:	Leader of an information system development project. The project manager is responsible for defining the scope of the project, activities of the project, the goals or "deliverables" of the project and for monitoring performance and revising plans as needed.
Systems people:	Analysts, programmers and technical experts in computer and telecommunications who work for the central information system development.
The Wall:	Recognition of the communication barriers between computer specialists and customers or users. A common joke among system specialists is that users stand on their side of the wall and throw over requests for new computer systems. After a while, the systems people throw back a completed system without really understanding what their customers initially wanted or eventually did with it.