

# Traversing the Edge: Using Discourse Analysis to Understand IS Power Relations

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## Abstract

Our project attempts to understand the operation of power in the development of computer-based information systems using Foucault's conception of discourse. Foucault's "genealogy" sees power not in the characteristics or resources of particular actors, but as a continuing chain of power/knowledge encounters. The "knowledge" aspect of these encounters is partly understood through Foucault's "archaeology". Thus long-term power/knowledge chains characterise systems of formation that pervade discourse, and influence immediate power/knowledge encounters. In particular we look at systems of formation that could be labeled "management" and "information technology" and their entanglement in the "process" of information systems development.

This distinct understanding of "discourse analysis" influences our approach to our interpretive research methodology. In this paper we will demonstrate how our approach to interpretive analysis works for a pilot interview, positing several tests from the pilot interview for further investigation. This rarely seen approach to IS research presents a benefit when studying the topic of power, because we may be able to grasp through exteriority the deep structures that influence the narrative of an individual. This may represent a gain in the provability of the interpretative IS research choice.

## Keywords

Power-relations, archaeology, Foucault's discourse analysis, knowledge, alternative research

## 1. Introduction

In a business organisational context a hierarchical, juridical or sovereign interpretation of power results in trivial analyses of events - 'A told B to do this' 'B didn't do what A said' - that does not permit an unraveling of the place and complexity of power in organisational life, particularly with respect to B's response. We wish to understand and research the significance of the operation of power - hypothesising it has an important but not fully acknowledged, known or described influence in the development of Information Systems, especially in such business contexts. In looking for power, in seeking to describe its operation and dimensions in the practice of information systems development, several salient characteristics emerge that make Foucault's discourse analysis a suitable means:

- firstly information systems come to existence in a multi-disciplinary organisational environment, where client and developer mostly come from different backgrounds, worlds, cultures or 'discourses';
- secondly, they represent collections of created objects in a created space ('cyberspace') that opens the way for strategic choices and ultimately systems of formation that determine what is valid knowledge;
- thirdly, their birth & evolution in a business context relies predominantly on the exchange of language based ideas and concepts between related actors in a dialectical manner;
- fourthly the relationship between the created objects and physical bodies is a

relationship which ties the physical into that discourse.

Foucault's early writing, his archaeological period, (roughly from 1963 through to the translated publication of the *Archaeology of Knowledge* in 1972) is used here as the methodological basis for an analysis of a pilot interview.

This paper will firstly explore the theoretical background, briefly highlight what other researchers have done with the idea of discourse and power, present the outline of the pilot interview narrative, present a brief normative analysis, provide a more detailed Foucauldian discourse analysis testing some practical rules for further research testing, then finish with concluding remarks.

## 2. Theoretical approach.

After a period of theorizing about the nature of power and fixing on discourse as an analyser of power-relations, a pilot interview *attempted* an archaeological approach, seeking to "excavate" a coherent working-life narrative of a practitioner who has a long history of experience in information systems development. The working-life approach was taken because the archaeological approach is essentially an historical method.

A predominant aspect of archaeological analysis is that it is "not an interpretative discipline" and its texts are "not a sign of something else" (Foucault, 1972:155) since it insists on a focus on the exteriority. This quality is seen as very useful alternative to the study of power as a hidden mechanism. If power is in the exterior then the questionable attribution of power to an interior is unnecessary and therefore more compelling, more discovered. We will not seek to infer anything, but instead seek a "regulated transformation of what has already been written [said]...it is the systematic description of a discourse-object" (ibid. 156).

An archaeological approach "tries to define not the thoughts, representations, images, themes, preoccupations that are concealed or revealed in discourses, but those discourses themselves, those discourses as practices that obey certain rules" (ibid. 155). This refers to the examining each utterance, each statement, not as something to be better understood, but as monument, to be examined in its exteriority.

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The *exteriority* is an important research quality in that the researcher applying the method is to remove the desire to explain, to theorise, to invent, to reassemble a dispersion (according to pre-set classes or framework for example – a favourite of IS researchers), and thereby not move from the exterior to a "interior secret" (ibid. 136), but instead to look for contradictions, for relations that act as rules, for exterior relations between concepts that differ between narratives and their discourses, for entrances and exits; to look for the historical emergence of concepts, rules and relations, and the disappearance or destruction of the same.

Foucault's emphasis on exteriority establishes a link with a previous College de France chair, Merleau-Ponty, in his rejection of Cartesian dualism, the emphasis of the body-subject over the cogito and the phenomenological emphasis of the lived world (Keltner, 2005:397-398).

The relationship between an individual and discourse is now worth a mention. Since in this method the interview text represents a series of statements excavated together as a monument, to be examined in its exteriority, the individual and their agency is removed from the excavated text-as-monument. *The monument does not represent the individual per se once excavated, but represents an exposed part or fragment of a discourse.* This is not to say that those statements become a representation of a "kind of collective consciousness", "communal opinion or collective representation" but is an "anonymous field" where statements are "not said from anywhere. It [the statement] is caught up in the play of exteriority". (Foucault, 1972: 137-138)

In addition to exteriority as a feature of the archaeological method, the statements or enunciations of individuals, author or texts are subject to *systems of formation*, which are "a complex set of relations that act as a rule: it lays down what must be related for such and

such an enunciation to be made, for such and such concept to be used, for such and such strategy to be organized" (ibid. 82). They are the long-term power/knowledge chains that pervade discourse and discursive practices, they may differ across disciplines, and they influence or dominate (depending on your view of agency cf. below) in our immediate daily encounters.

From the perspective of this method, the individual doesn't resurface. They are more like a carrier of discourse, who through interaction with institutions, become inscribed with deep structures and rules, and whose statements derive or are caused by systems of formation.

This approach is not a philosophical comment on human agency; rather, we see it as removing an obstruction to analysis. It is true that analysing text using this method could be construed to deny some degree of agency and may represent a point of departure for some researchers. However, looking at the outcome, the objective of this research, and perhaps what Foucault himself did achieve with it, it is better to see its purpose as removing bias, revealing something more than is now known with more accuracy and thereby to speak a truth, rather than "posing the question of the speaking subject" (ibid. 138).

### 3. Discourse and power in the IS and Management Literature

Gordon et al (2009) put discourse to good use in analysing power-relations effect on ethics. Theirs is a concept codifying methodology using Nvivo analytical software to establish frequency of occurrence in interview narratives between power themes (differentiation, domination, de-differentiation, democracy) and organisational structures, forms, practices and effects, to ultimately "argue that ethics will be forged in the midst of power relations" (ibid. 93). The positive in this paper is that extensive justification of the use of discourse analysis is not undertaken – it is accepted that it is a valid approach.

Silva (2007) tackles the epistemological issues in studying power relations from an interpretative position by turning deeper to epistemological & theoretical issues of power in IS, suggesting an integration of Clegg's theory of "circuits of power" with Actor Network Theory and arguing along with Clegg that this is a compelling way to study power and IS.

As examples of how cumbersome the task of "selecting" a non-positivist research ontology can be in management literature, we look at Shepherd (2009) and Stahl (2008), noting that it is potentially misleading to attempt a schematisation of very different and complex modern philosophical discourses within a normative framework that IS and management literature perhaps favours (in its Taylorist scientificity?) with the promise of comparing them to find the "right" one.

Shepherd et al (2009:82-84) after about 2.5 pages of descriptive text, and 3 pages of comparative tables categorising the essentialist and non-essentialist views, justify their choice of discourse analysis by stating in one sentence: "it is impossible to step outside of language and arrive at an objective understanding of the social world."

Stahl(2008:57) seeks to harmonise the dividing ontologies of realism (analytical tradition) and anti-realism (continental tradition) by applying "tertium non datur" (either p or not-p) stating: "This proposition is nevertheless widely accepted and forms one of the basic tenets of our scientific system". Surely, this is ironic for a book that expends much volume of text about critical theory. Again: "Foucault stands for the investigation of the influence of power and bodily discipline on historical discourses". (ibid. 20)

In the Gordon example above, the mention of Foucault comes from the perspective of what he said rather than what he is supposed to have stood for, concluding: "power and knowledge are mutually implicated in framing those truths that are held as self evident and thus shape reality" (Gordon, 2009:75).

On the Australian academic front, this paper may be an example of being close to the edge of what is acceptable to say while still being considered part of the IS academic discourse.

#### 4. About the interview

This pilot interview involved 'DB', who has been in the Australian workforce for nearly thirty years. The purpose of the pilot interview was to test if the theory presented in the previous section was feasible to use as an analyser of power relations. To this end an extract of DB's personal narrative history was undertaken, being careful to simply let the narrative unfold, and then to perform Foucault's discourse analysis on it using the theory. From a discursive viewpoint, we were especially interested in the following aspects:

- Do discourses intersect or "leak" into each other?
- Did relations appear and disappear in that history?
- How does the surface of the narrative change, what elements came and went, what conflicts and forces existed?
- What relations act as a rule to shape or determine outcomes?

On the few occasions I have had reason to interact with DB, he presents as an articulate, fast and energetic individual. He is second in charge to a CIO of a publicly listed entity in Australia.

#### 5. Brief summary of the interview

DB left school at the age of 19, he did not gain entrance to university and his mother passed away at about the same time. His father and he did not see "eye to eye" (l. 8)<sup>1</sup> He held a variety of clerical positions until at about age 26 he gained entrance to a university to study accounting. For some undisclosed reason he changed universities several times after initial entrance and did not complete a degree, favouring working instead. At this time, he changed careers from accounting to IT (l.30-43), specifically at the time personal computers were coming into use in the workplace. This was even though he had a pathway into management, but it wasn't fast enough for him (l. 50) Through a number of mergers and acquisitions, management of the companies he was working for changed and the new management stated that "you run superannuation products on mainframe [not PC]" (l. 82). He then had a stressful incident with this job, where, after gaining support of Managing Director for a expensive new LAN (Local Area Network), his employment was terminated while he was on leave, in contravention of HR policy and union rules, after 4 years of employment. Reasons given by management were relayed in terms of business risk not systems, and the narrative is extensive at this point. Specific recollections of dates and times, PC model numbers and specifications are given.

DB moved into a contracting model of remuneration thereafter, which in Australia is equivalent to freelancing in UK. In this capacity he managed larger and larger teams of PC and network support staff, progressing to multi-state teams of about 150 support staff. All throughout this period he benchmarks himself in terms of money, even at one point comparing how much he gets with how much computing equipment costs (l. 71).

DB then had the opportunity in 1999 to work on an intense project for the Sydney Olympics, there being an explosion of IT related work at that time. This time it was as a project manager with strict deadlines. At this point in the narrative he focuses on two key aspects, one being project management as a discipline, and the second eliminating underperforming people from teams, describing himself as "an enema".

DB's final chapter in his narrative to-date tails off because it is close to the current work context where I encountered him, finishing with how he got his current job through contact with current CIO.

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<sup>1</sup> This refers to the line number of the pilot interview transcript

## 6. Normative analysis of the interview

A normative study of power-relations would see power-relations as conflict or hierarchy or force - power-to and power-over (Gohler, 2009). Here DB has "risen" from a less powerful worker, being told to do things, through middle management to today's powerful senior management position with distinct hiring and firing responsibilities and a penchant for "getting the right people on the bus and those people in the right seats" (and getting the "wrong people" off the bus also).

DB's early proposal to the MD of a company, which was accepted, and his subsequent demotion and dismissal are classic examples of the exercise of power, even in contravention of policy or external union rules. His reaction to this brutal incident scarred him for anywhere between 5 to 7 years (l. 151). DB's need to contract/freelance was driven by his financial situation and need to support his family and the abruptness with which he was dismissed. Once contracting he found that the levels of remuneration were advantageous and contributed to his self-esteem.

Looking at what is said from the place of the individual, DB has had the opportunity to grow and he has successfully pursued his ambitions, moving from accounting to PC's, PC's to network administration and network management, then to project management and senior IT management. Academic knowledge has not played a specific role in this success, yet he prides himself on the commercial worth of his commercial knowledge. Ironically the pivotal early career dismissal has resulted in him applying the same behaviour towards others. Yet throughout this career he has applied the service ethic that he possessed at the very beginning and this has remained with him to this day, even being a part of his current job title, though he has no operational responsibilities.

## 7. Discursive analysis of the interview

Bearing in mind the critical features of discursive analysis, in that the narrative represents an extract of discourse itself, where the individual somewhat recedes, and statements are indicative of the discourse they are perhaps involuntarily enrolled in, several interesting potential insights for further research testing the idea of discourse emerge from the pilot narrative, which in general make the narrative less causally driven and more "random":

The boundaries (edge) of discourse are known through friction or struggle (between surfaces)

Part of the issue with using the idea of discourse is that a boundary of some sort is required. Normatively it may be equated with a profession or practice or for Foucault, a discipline, such as economics, biology or medicine. But looking at this narrative there is a very clear distinction between mainframe and PC/Network, to the extent that a member of the PC/Network discourse could be seen to have been ejected from the management/mainframe discourse.

*"When this other company took over the first small life insurance company I first worked at, that company were so mainframe focused. I'd put in a superannuation LAN and a word processing LAN as well as PC standalone, they came in and the management said were going to get rid of this superannuation LAN, you run superannuation systems on a mainframe and this, you know, it was about the way their brain worked, that was the intelligence; there was a clear, ah...commitment away from personal computing so it was career death even if they wanted to fit me into the organisation after special projects was over" (l.78-85)*

Friction or power may be indicated where there is competition for one knowledge to be “right” and the other to be “wrong”. This may be indicating the boundary of a discrete discourse.

In discarding normative definitions of disciplines, it is interesting how the mainframe was part of the management discourse, but personal computers were not. Computing at that time must have been divided differently than today, and instead of seeing a regular whole it was dispersed.

#### Traversing discourses is possible.

DB clearly moved from an accounting discourse to the PC/Network discourse to the project management discourse, assuming that the friction between those disciplines qualifies them as separate discourses.

*“...and he said there’s this job in computing, this thing called computing, so I thought you know I’m not going to get anywhere in life insurance, I was interested in computing in terms of...I had a bit of a bent at school, not much, but certainly that is how I chose it (hesitantly spoken) – here is an opportunity, looks like a better opportunity...”*

*Interviewer: Why didn’t you think you wouldn’t get anywhere in life insurance?*

*DB: I thought life insurance, I’m pushing the memory banks here – I think I thought (laughs) – at the time it was more interesting – and I could also see - I certainly didn’t see the internet or anything [coming] – but I could see that there was an opportunity there as opposed to the other area where there are a lot of other people in front of me – I also say the paper work side was similar to the accounting paper work side – I sadly now reflect that I did find interest in accounting (laughs) but I have always found computing more interesting and particularly – not wanting to jump right ahead – but projects: in terms of one of the challenges with white collar work you can go to work all day and feel like you haven’t achieved anything, but with projects you actually build a widget, and real project management is you have an idea and you transform that into a system, and sometime you’re given more than an idea and you have to extract from peoples heads and getting them to work together so I mean it is very challenging...(l.40-59)*

Instead of seeing an individual making deliberate choices about what they choose to do, an ANT (Actor Network Theory) style script is in operation with machines (PC’s in this instance) attracting actors to their discourse

It is interesting to note some retrospective contradictory self-justifying statements in the narrative related to this enrollment – “I sadly now reflect that I did find interest in accounting (laughs) but I have always found computing more interesting and particularly...projects” (l. 52-53)

#### How discourses “struggle to be”

Earlier on, DB moved from one company where PC’s were not in vogue, having about 4 support staff, to the larger company, where they had 20 support staff (the company where he was dismissed), contributing his participation to the PC/Network discourse there. The PC/Network “love affair” seemed to terminate abruptly, however, in favour of a project management one, but left the argot in place (refer below).

The narrative contains an element of a coming to be, as believers or subscribers to the discourse see what is a valid object and defend that (refer l.78-85 above)

There appears to be an existential quality to discourse that can signpost its separate

existence.

#### The "language of the machine" - argot as sign of a separate discourse

*"At around the end of 1986, we're talking about PCXT being state of the art, eight oh eight oh eye processor, the first PC had twenty mega bytes, six hundred and fourty k of ram" (l. 37-38)*

*"Comtech loved me I was a corporate buyer, so I put in synoptic chassis hubs with original blades you could put those things in and you-tee-pee, I think it was CAT4 in those days" (l.158-160)*

Enrollment in the discourse or discipline is indicated by use of, normatively, specific jargon, but in this case given we are talking about something that happened 20 years ago, as the interviewer I was somewhat shocked at the fluidity and readiness that the "language of the machine" surfaced in the narrative. This seemed to be something beyond jargon but more like an argot or patter that indicated deep inscription of the discourse.

#### Root elements common to all discourse?

Throughout the narrative the idea of service was constantly attached to whatever the current context happened to be. It is also really interesting how, later in his career, the initial impetus for a person to be in one discipline for all his life, that being his earlier passion for PC's, vanished, but the underlying service ethic remained and grew.

The idea of service could have traversed from an earlier pre-work discourse, whether parental or religious (DB did indicate strong religious beliefs), but it is very interesting how it has been carried across. Normatively this would be a core value or ethics, but discursively, maybe the idea of service is a root element of many discourses. It is a core motivator for DB, and he incorporated it into his current job title which he chose himself.

#### Evidence of 'System of formation'.

*"...you run superannuation systems on a mainframe, and this you know, was about the way their brain worked, that was the intelligence; there was a clear...[management] commitment away from personal computing so it was career death..." (l.82-84)*

This is a statement that comes from the management discourse, about how things should be related – superannuation systems AND mainframes – that acts as a rule. The interesting thing is that it is about IS content, yet it comes from the management discourse, and it is a relation that acted as a rule. The seriousness of this rule was that it appears to have resulted in the dismissal of DB, affected his family, and scarred him for 5 to 7 years. Normatively this would simply be seen as a management decision, as opposed to two discourses seeking dominance – the mainframe discourse which was a subset or parallel to (sponsored by) the management discourse, and the isolated personal computing discourse, seeking existence.

Money being a measure of DB's knowledge, or worth, or skills, is a strong element throughout the later half of the narrative, but not so much in the first half. The relation of how much money you earn with how much you know, or how rare your knowledge is, or how "good" you think you are at your job is a strong element in commerce and is another relation that acts as a rule.

#### The effect of the body.

Perhaps a non-impressive outcome that could be explained normatively equally as well is that bodily proximity to any discourse probably has some measure of influence over what discourse we get attached to. In DB's case, the company had some PC's and, although he

professed an early interest in it, the power of proximity attracted him to it. Subsequent relations with project management behaviours and, particularly given his own brutal dismissal, the ironic “sacking” type behaviour (in Australia when someone is dismissed they are given the “sack”) also derive from proximity to those different discourses, which then also is dependent on the somewhat random or at least diverse way in which IS careers tend to pan out compared with more structured professions which may have a narrower ability to traverse disciplines and hence discourses.

DB was sacked while he wasn't at work, but on leave.

*“At three minutes before the meeting they tried to refuse, [the union rep came] a highly intelligent guy, actuarial student, he asked straight faced, “is DB. being sacked for what he did what while he was on leave or what he did before he was on leave?” he said it with a dead pan face because it [the sacking] was that stupid.” (1.233-236)*

Did they eject him from the discourse because his *body* was disloyal to the management discourse? – he did challenge the superiority of the mainframe approach, he obtained top management support for his PC business case, and after that was demoted and forced to report to a mainframe representative, and then he was physically removed, possibly as a “body of knowledge” that didn't belong:

*“Interviewer: That [sacking] is a major incident. ... Something seemed to change while you were on leave. What is that something that you think changed?”*

*DB: The only thing that seemed to make sense, I bumped into a lady that I have seen many times on and off in my career, she said the GM of IT believed that if you were demoted you would be disloyal, so as soon as he demoted me he didn't believe I would ever be loyal and he had it in for me – that's the only thing that makes sense. We are all very subjective, I already said it took 5-7 years for me to show humility, well maybe what did I do wrong? They didn't say you were running behind and you treated us as a 2 year old in terms of your communications to us – was that all part of it? – that I displayed an attitude? – I was annoyed [indicates a little not a lot] - I did look around [prior to being sacked] – but no jobs in middle mgt – it was a recession – there were no middle mgt jobs around so I couldn't get a job – so I was still there [after the demotion] their perception was very possibly an accurate perception – I was working hard – but they had a perception that I had given them, that I was disloyal.” (1.251-266)*

## 8. Conclusions.

By somewhat removing the individual and seeing the discourses that emerge as interacting “living” bodies of knowledge, whose struggle against each other come from enrolled “combatants”, a gain is made to think that in a discipline like IS, there is no physical science, no epistemological pyramid but, perhaps rather more like Neurath's boat, an existential struggle of knowledge to be valid, to be right or true, and thus to exist, as an object.

Information Systems itself is analysed herein not as a strict discipline, but as a potential collective of discourses, in a constant churn of right or different ways of doing IS that outstrip corporate ability to adopt the new, and the culture of each organization, conservative or innovative, also reflects that. Within each organizational management discourse there are multiple IS discourses, each struggling for a voice or seeking dominance of its own special knowledge, therefore causing conflict with the management discourses whose natural mode is to control, monitor and manage and eliminate unprofitable diversity. In certain circumstances management would be justified to attempt elimination of competing IS discourses to reduce the noise and retain control, and reduce the expense of friction.

Fragments of discourse constantly enter from outside the organization boundary, and new tendrils of new discourses latch themselves onto self-selecting subscribers – for example: “I think...at the time it was more interesting – and I could see that there was an opportunity...I have always found computing more interesting [than accounting]” (1.49-52)

A key element of power-relations that discourse reveals to us is that of struggle and resistance between knowledges, more so than the type of 'A told B to do X' and 'B did or didn't do it'. The ability to understand compliance or resistance in terms of the discourse an individual is attached to or inscribed with provides an interesting point of view to analyse power-relations in diverse disciplines, using some of the tests outlined above as detectors, while benefiting from avoiding any attempt at a psychology of the actor's minds, through sticking to the *exteriority*.

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