

December 1998

# Analysts and Clients in Conversation: Cases in Early Requirements Gathering

Cathy Urquhart  
*Sunshine Coast University College*

Follow this and additional works at: <http://aisel.aisnet.org/icis1998>

---

## Recommended Citation

Urquhart, Cathy, "Analysts and Clients in Conversation: Cases in Early Requirements Gathering" (1998). *ICIS 1998 Proceedings*. 11.  
<http://aisel.aisnet.org/icis1998/11>

This material is brought to you by the International Conference on Information Systems (ICIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICIS 1998 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# ANALYSTS AND CLIENTS IN CONVERSATION: CASES IN EARLY REQUIREMENTS GATHERING

**Cathy Urquhart**  
Sunshine Coast University College  
Australia

## Abstract

This paper discusses a number of interviews with analysts and clients about their aims in early requirements gathering, carried out as part of three case studies in analyst-client interaction. Analysts and clients were asked about their aims, their professional role, and other issues that arose in their interactions with each other. The paper explores themes that emerged from these case studies that can be seen to be embedded in the social context of early requirements gathering—how the issues to be discussed were put forward, professional relationships, and the overall organizational context in which the interaction takes place. Some observations are made about the varying social contexts of early requirements gathering and the role of individual differences, and the possibility of using typical contexts as “repertoire building research” (Schön 1983).

## 1. INTRODUCTION

The starting point of early requirements gathering is a verbal interchange between analyst and client. As such, it uses language, and language has been characterised as the “surface realization of...communicative strategies involved in the interactive procedures working amongst...various social, contextual, and epistemological factors” (Candlin 1984). Viewed in this way, early requirements gathering can be seen as a far from simple process, given the complexity of language itself as a vehicle for expressing not only social and contextual factors, but also the interpretative schemes that the analyst and client bring to the situation. The requirements verbalised by the client will be interpreted into a set of system requirements by the analyst, and in turn become the reality of the new system. Understanding is critical at this point. If the initial precepts on which the system is based are false or inaccurate, then there is every possibility of system failure.

Given the complexity of early requirements gathering, it is not surprising that the issue of communication skills and the analyst-client relationship have been a consistent issue in IS literature for over 20 years. In 1977, Edstrom found that poor communication at any stage in a project was found to be negatively correlated with its success. As recently as 1994, the Australian Computer Society devoted a whole issue of its practitioner magazine to the problem of communication with users (Kennedy 1994). IT professionals are still seen as lacking credibility, not in expertise but in relationship building (Bashein and Markus 1997). Previous research on analysts and clients has found many differences between the two groups in the areas of beliefs, attitudes, personalities and motivations (Benbasat, Dexter, and Mantha 1980; Cronan and Means 1984; Dengate, Cougar and Weber 1990; Ferret and Short 1986; Gingras and McLean 1982; Kaiser and Bostrom 1982; Pettigrew 1974).

More recently, researchers have examined analyst-client relationships, and the accompanying social context, from a number of perspectives: modeling analyst-client interaction as a social process (Newman and Robey 1992); the limits of developer knowledge (Jones and Walsham 1992); the implications of particular methodology use for analyst-client relationships (Beath and Orlikowski 1994; Hirschheim and Klein 1994); the relationship between social and technical perspectives in user requirements (Westrup 1997). There have also been studies of analyst-client relationships from the cognitive perspective of differing “frames” (Davidson 1996; Orlikowski and Gash 1994).

Hirschheim and Klein (1989) put forward four paradigms of information systems development (ISD), where the analyst was variously seen as systems expert, facilitator, labor partisan, and emancipator, illustrating both implicit and explicit assumptions made in the ISD process.

Hirschheim and Newman (1991), using a symbolic approach, identified a number of tacit assumptions that underlie the social process of information systems development and used the concepts of myths, metaphors, and magic to demonstrate these tacit assumptions. For instance, they pointed to “myths” such as the notion that information systems should always be integrated wherever possible, that the use of a top-down approach leads to successful design, and that the system developer is the best person to make decisions about the system. Their study casts light on a number of facets of information system development, and the corresponding relationship between analyst and client in the organization, as very much a social and political process. In the case studies in this paper, individuals involved spoke at length about tacit assumptions regarding organizational context and the professional relationships in which they were engaged. This is significant when one considers the critical role of communication in shaping user requirements, and in turn how this might be influenced by the social context of interaction. The purpose of this paper is to discuss how individuals might choose to operate within the social contexts of early requirements gathering, and to represent their reflections through the use of themes that emerged in the case studies.

## 2. METHODOLOGY

The research strategy adopted for the case studies was essentially to examine an analyst client interaction in depth, and to collect as much contextual information around that interaction as possible. This echoes Pettigrew’s (1985) approach, and also incorporates a self reflexive element (Schön 1983), where participants individually and together reflect on the interaction. Thus the data sources surrounding the interaction enable varying constructions on that interaction, which can subsequently be distilled into a consensus construction using hermeneutic techniques (Guba and Lincoln 1994).

### 2.1 Case Study Design

Case studies are growing in importance in the IS interpretive field, providing opportunities not only for theory building but also for development of concepts, drawing specific implications, and the contribution of rich insight (Walsham 1995). The case studies described here all employ multiple data sources. According to Yin (1984), case studies can involve single or multiple cases and numerous levels of analysis. Each videotaped interaction discusses a real life case of systems requirements and takes place at either the analyst’s or the client’s workplace. The other data sources give differing perspectives on that interaction, and most importantly, are from each participants’ perspective. Table 1 summarizes each data source and method of collection.

**Table 1. Data Sources in the Case Studies**

<b>Data Source</b>	<b>Order of Collection</b>
Paragraph on issues to be discussed during the interaction.	Submitted approximately 10 days before the interaction by each participant.
Individual interview	Audiotaped on the day of the interaction, prior to the videotaped interaction
Individual questionnaire on background and training	Administered prior to the videotaped interaction
Interaction between analyst and client	Videotaped after both participants completed interview and questionnaire
Review of interaction by analyst and client	Videotaped after the interaction
Individual interview	Audiotaped after review

**Table 2. Characteristics of Participants**

		<b>Job Title</b>	<b>Previous Job</b>	<b>Age Range</b>	<b>Educational Background</b>
Case 1	Analyst	Information Technology Projects Officer	Structural Engineer	30-39	Engineering Computer Science
	Client	Manager of Building Surveying	Development Coordinator	50-59	Architecture
Case 2	Analyst	Information Services Programmer	Computer Operator	20-29	Business Computing, Mathematics
	Client	Waste Management Coordinator	Senior Environmental Health Officer	40-49	Environmental Health Environmental Studies
Case 3	Analyst	Computer Systems Officer	Training consultant	20-29	Information Technology Library Studies
	Client	Customer Service Officer	Assistant Fitness Center Manager	30-39	Environmental Design Architecture and Town Planning

## 2.2 Conducting the Case Studies

All the case studies were carried out in the public sector in Tasmania, Australia, in 1995. These public agencies tended to represent larger concentrations of ISD activity in the state of Tasmania. IS managers were asked if systems analysts in their employ were undertaking development work and would be willing to participate in the research project.

The criteria for inclusion in the project were that the development work was at an initial stage (generally the first or second meeting between analyst and client) and that the interaction should be about the development of a new system or substantial amendment of an existing system.

Some characteristics of the individuals in the case studies are given in Table 2.

During interviews, educational background seemed to have an influence on how individuals characterized issues to be discussed, for instance, as did their previous job experience.

## 3. ANALYSIS OF THE CASE STUDIES

The case studies were subjected to successive analyses, as shown in Figure 1. The videotaped interaction was subjected to coding using grounded theory techniques (Glaser 1978, 1992; Glaser and Strauss 1967; Strauss 1987; Strauss and Corbin 1990). In order to capture processual and chronological elements, the analysis was built up and outward by grouping the interaction into topics. These topics were then grouped into themes. Those themes were then extended and explored in the data sources and used as a thematic framework for the purposes of cross data analysis (Miles and Huberman 1994). In this way, a clear chain of analysis, from concepts to topics through to themes, enabled an essentially grounded view of the data, working as it did from the smaller units of analysis upward and across data sources.

This paper concentrates exclusively on three themes extended and uncovered in those *individual* data sources, with the aim of investigating individual perspectives on the social context of information gathering. The shaded part of the figure indicates the analysis that is discussed in the following sections.

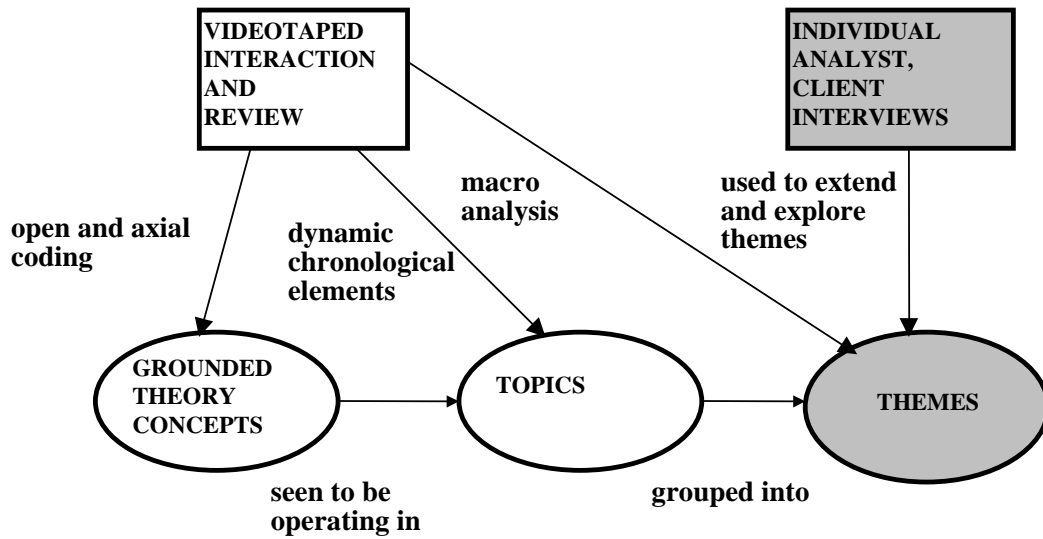


Figure 1. Sequence of Analysis

#### 4. THEMES FROM THE CASE STUDIES

During individual interviews in the cases presented here, participants were asked about their aims for the interaction and how they perceived their role. In doing so, they gave some interesting perspectives on how they saw the process of early requirements gathering and its accompanying social context. Their views are organized into three themes: issues to be discussed, professional relationships, and organizational context. Considering how the themes played out in each case gives a number of insights into the varying contexts of early requirements gathering.

##### 4.1 Case 1: City Council X—Development Application Tracking System

The analyst and client meet to discuss the requirements of Building Services with regard to a new system that is being designed to track building development applications. There seems to be strong advocacy from the client for his section, and he seems to exploit his superior rank in the organization to some advantage. The analyst to some extent tries to set the agenda by requesting that the client go through a document that represents a “first cut” at requirements. The client responds to this by putting the issues on the document in the context of current processes and possible effects on those processes. As a consequence, a fair amount of time is devoted to establishing boundaries of what will be computerized.

###### 4.1.1 Issues to Be Discussed

The analyst’s statement of initial thoughts about the interview showed that he intended to use a requirements document to structure the discussion.

*OK. What we’ve done...we spent a little bit of time going through the building module, just as a first cut at it, and as a result of that discussion I wrote up these requirements....I really want to clarify X’s procedure with him..and also I’ve got some questions arising from what I wrote up, and I’d like to clarify that. Then following this interview, I’ll incorporate what we’ve discussed into this document, again, and these requirements will*

*be a working document throughout the project. In short, the goals are to get more of a feel for the building module.*

In many ways, this can be seen as agenda setting by the analyst, in the sense that it is likely that only what is contained in the document will be discussed. Alternatively, the tabling of a requirements document could be viewed as a mechanism for achieving clear and open communication with the client.

The goals stated by the client were somewhat different, and were rooted in the need to ensure that the proposed system did not impact on his processes in the way that previous changes had:

*Really, to start to...get down to some more detail, and marry the processes that I go through, marry that to Y's intended outcomes for the programs, to make sure that what he was doing didn't force us to do things we wouldn't normally do, and that the program served us, rather than us changing our ways to fit in with what the program is trying to do.*

So, the approaches to the issues were different – the client entering in with a value that any proposed changes should fit in with existing procedures, and the analyst concerned to establish the content of new processes. As the vignette indicates, this resulted in some time being spent on negotiating exactly where the boundaries of the proposed changes existed.

#### 4.1.2 Organizational Context

The client's approach had its base in previous experiences. He explained that, in this project:

*I have had a lot more freedom to...express my own needs, rather than be compromised by what has been imposed, parts of which I might be talked into accepting...I can now say these are the things I want to achieve....Y has to show me reasons why things can't be done. In comparison with the other system, I never had the opportunity to put those views through, the design occurred first without having the opportunity to explain things.*

He remarks further that there had been a package proposed previously for the tracking system, but now there was a “clean slate,” So this in part explains his attitude to the analyst.

#### 4.1.3 Professional Relationships

The context described above influenced how the client saw his role in interactions with the IT section in his organization. When asked how he saw his role, he said:

*[M]y feelings are that the best way to achieve an outcome, in a case like this, is to try and be selfish, to the extent that...you want to use Y's abilities to make your own job easier and work better, and really, I don't care much about Y's aims in terms of what his package is going to be like from his point of view. If it doesn't work for me, there is no point in getting involved with it, so I think I've probably learned to be more, what's the word, I suppose selfish comes to mind. I am more determined to not to compromise on things I think shouldn't be compromised just because the program or whatever doesn't do it.*

Interestingly, he enjoyed working with this particular analyst:

*I find Y a really easy going guy to work with, he's enthusiastic, and he listens...I think he's really keen and motivated to try and build something that's going to be of benefit to both of us, we both feel the same I think...that tends to be the working relationship.*

So, although the previous history of the project meant he felt that he had to take a generally defensive approach, he valued the qualities of the analyst.

The analyst's view of his role was no less illuminating:

*Its really to write down what I believe **their** requirements are...I like to let the clients read what I've written, so it's no secret, and I think there's advantages there, in that they can go back and correct them, and say "Yes, but we really need that." So I like to do that, my goal is...as I say, to write down what I think their requirements are, and having written that, use that as the basis for something.*

He seems to be placing emphasis on giving the client ownership of their own requirements, but it is interesting that he says "so it's no secret," indicating perhaps that he is attempting to enact a participative relationship within the "analyst as systems expert" model of systems development, as described by Hirschheim and Klein (1989).

#### 4.1.2 Reflections on Case 1

In this case, the aims of the analyst and client were somewhat different: the analyst simply saw the interaction as a means to gain information about the building module, whereas the client saw it as a crucial negotiation about the effect of the new system on his existing procedures. Interestingly, the analyst had not given thought to this aspect; in the review of the interaction he revealed that he had not considered how the system would allocate the applications to individuals working on them. In his negotiation, we can probably assume that the client was assisted by an age and power differential, although this may not be enough in itself if organizational issues, such as resourcing, constrain systems development, as the next case shows.

### 4.2 Case 2: City Council Y—Amendments to the Property System

The analyst has arranged to meet the client to discuss how tracking of bins and crates introduced in the Council's new curbside recycling scheme might change the property system. They have worked together on various occasions. Most of the interaction is devoted to discussion of how the client envisages the tracking of the crates and bins, and this is interwoven with practical issues such as the need to issue bin replacements and how curbside recycling will work for multiple tenancies. As the property system is to be amended, there is some discussion on what can and cannot be achieved within the limits of that system. As the bins and crates need to be tracked, there is also discussion of how they will be identified in the property system. The analyst is very interested in the processes the client describes and actively seeks exceptions that the system might be called upon to cater for.

#### 4.2.1 Issues to Be Discussed

When asked about his objectives for the interaction, the analyst explains the context for the proposed change to the property system:

*[W]e're going to be talking about new changes to our rating system to allow for the issuing of recycling crates and wheely bins. Council has decided to introduce a new policy of recycling, of issuing to residents in the municipality, recycling crates, similar to what T municipality and S municipality are doing. Also the council is investigating the issuing of wheely bins for garbage collection. Instead of having the plastic bags, two per property, sitting out the front every week, we're going to introduce wheely bins.*

When asked about his aims for the interaction, the client poses it in terms of a negotiation:

*I've jotted a few notes, but I haven't sat down and thought about every possible scenario. I'm hoping that he'll be able to say, "Well yes we can work around that" or "This is the way we can achieve that sort of a goal."*

*So, I am not coming in on the basis of “this is what I want and you deliver it”; I want to see what is achievable. So its not structured in that sense, I’m demanding this that and the other, its more taking a look at what we can do.*

So this client, unlike the client in Case 1, is not taking an overtly adversarial position but is looking to achieve certain objectives within constraints by adopting a cooperative attitude.

#### 4.2.2 Organizational Context

One reason for the client’s negotiative stance may well be pressure on resources within the organization:

*[T]here are a lot of competing interests within the council, everybody wants things done, so whether it’s a matter of resources more than anything else, it might be significant. Certainly on a number of occasions when...we’re still waiting for a program to be written that we asked for about three years ago which is really an essential part of our job.*

#### 4.2.3 Professional Relationships

The client, although he was well disposed to the analyst, had this to say about the role of analysts in general in his organization:

*I think the role of people like X, their job is to provide support to people like me that I need to help me do my job, not tell me I can’t do it! So it’s disappointing when that happens, and you’re told “no its too hard and we don’t want to do it because there’s some other bloody survey going on somewhere or other that might impact on this,” you never get anything done because there is always some sort of other situation happening in the background....The initial request for information can be a bit of a downer, they say “ooh that looks a bit hard, ooh there’s a lot of work in that” or whatever, without them even taking the next step and seeing if its worth doing.*

He clearly felt at a disadvantage when dealing with an IT section that seemed to use their expertise as a defense:

*[T]here is always this big mystery about what goes on in Information Services and you’re really, in a lot of cases, in a take it or leave sort of situation because you don’t have the expertise or the knowledge to argue the position and say “it’s not that hard, why don’t you just do this, this, and this?” You’ve really got to take it at face value what you’re told, and that might be because they simply don’t want to do it.*

As in Case 1, he did not extend this assessment to the analyst as an individual:

*[T]he only problem I’ve ever had with X, is when he gets... snowed under and I’m asking him for something, which in the scheme of things is not a very high priority, but I’ve always found him easy to deal with, he’s helpful, and he’s always courteous...he doesn’t dictate from a position of technical superiority as some people do.*

The analyst, when asked about how he saw his role, gave this answer:

*[M]y professional role I think would be...trying to understand their exact requirements so I can develop the system to meet their wants. In terms of being a, systems analyst, I’m ...slowly getting into that role, mostly my role’s been as [a] programmer, but I’m just starting to develop skills in to trying to understand what people want. Overall, professional wise, what I wanted out of today was to just to get a full understanding of what they required and to come up with a few ideas to satisfy.*



So, from the analyst's point of view, getting a full understanding of the clients needs was clearly important to him.

#### 4.2.4 Reflections on Case 2

As in the previous case, the client essentially saw the issues to be discussed as a negotiation. He generally felt at a disadvantage when dealing with the organization's IS professionals, as he saw them as hiding behind a veil of expertise and giving refusals, which he was unable to deconstruct through his own lack of expertise in the area. He is raising an important question here about the neutrality of professional knowledge: as systems development represents an expensive resource in an organization, it is possible that technical feasibility becomes an expert issue that is essentially embedded within organizational politics.

### 4.3 Case 3: City Council Z—Subdivision Register

The client is interested in tracking the subdivision applications more efficiently. At the moment she refers to a notice board and paper files. There are also organizational imperatives that dictate that the clear-up rate on applications should be provided in management reporting. The analyst also states in an individual interview that she sees management reporting as an important issue in the upcoming discussion. Both have worked with each other many times before, and seem to enjoy a close, participative working relationship. There is a very focused interaction concentrating primarily on how subdivision applications are processed, how they will be accessed in the new system, information that needs to be held in the new system, and reporting needs. The client effectively works as a business analyst in addition to her role as Customer Service Officer: she conveys information needs from her section as a whole.

#### 4.3.1 Issues to Be Discussed

In this case, both analyst and client frame the issues to be discussed in a similar way. The analyst says:

*What we'll be doing is discussing a process that we have to put in place, to meet...management reporting that they're going to require, and also to set up a register so that can be linked to our Property system that can identify subdivisions, and the history they go through, the subdivisions, and also file tracking of actual subdivision files. And my idea would be to set the system up based on the requirements...and keeping in mind the management reports that are going to have to come out. So I think we'll have to keep a track on how long it takes for a subdivision to be processed, an application to be processed, and that type of thing. I don't so much know whether its an application as such, but we have to keep a fair bit of history on it.*

She poses the issues in terms of information that will need to be kept, a not unnatural concern for an analyst, but she also embeds her description in terms of the processes that need to be carried out. She also mentions management reporting needs, which subsequently emerged as an organizational imperative.

The client's view of the issues is similar:

*What the project is about is that we've got some registers for certain things, and we haven't got registers for other things...the problem with that is that we can't track anything, we don't know where files are, and we can't ask any questions about applications that have been tabled. In other words, information retrieval is very, very difficult ...if somebody comes or rings up and says, "I've put in a subdivision application, have there been any objections," I have to physically go around and find the file to find out. We put up a manual system on the board, but the manual system is usually three or four days behind...we just waste a lot of time running around, you know, trying to find things.*

So the client description is in terms of processes, but she mentions information retrieval as a key issue in resolving problems with processes.

#### 4.3.2 Organizational Context

Management reporting was seen to be a driving force in computerization of previously manual processes. The client said:

*We have requirements with regard to management, having to...justify their jobs now, and our jobs...so we have to be able to, for them to get data out of here, saying "well this how many applications we do...this is how long they take, this is how much time was taken by the person doing the job," and all that sort of thing.*

#### 4.3.3 Professional Relationships

It also became clear that the client played an informal business analyst role. She described this as:

*I'm a client. No, I'm not actually...a client. I'm asking X to perform a specific service for me...how do I say... I'm employing her, but then I am employed by my department, so I'm a messenger that analyses what is happening in the department, and then employs someone to put it on to the computer....She is servicing me, and I am servicing my department.*

The analyst sees her role in this way:

*I'm not a techo, I don't consider myself as a techo, I don't consider myself as somebody who has all the answers. I'm somebody who provides tools, and if I can help implement those tools, start them off and develop them, and nurture the way a system or process is going to happen, then I feel really good about that. So I'm more of an end user support of hardware or software... I'm trying to break barriers down here. Once upon a time, the IT section was considered sacrilegious, scary, you never approached an IT person [laughs].*

She seems to be commenting on a past era in the organization where system developers were seen as unapproachable, and is making clear that her approach is far more one of a "facilitator" as outlined by Hirschheim and Klein (1989). Her use of the word "sacrilegious" is interesting in the context of the image of the system developer as "high priest" (Hirschheim and Newman 1991).

#### 4.3.4 Reflections on Case 3

The very equal and participative working relationship observed between analyst and client may have been a product of the individual philosophies of those individuals involved who, by serendipity, found themselves in an enjoyable working relationship and in an organizational context that demanded computerization. This analyst was the only analyst in the cases studied who had an IT background rather than the more traditional computer science or business computing background, and this may contribute to her non-traditional view of professional relationships. The client had a background in architecture, a design profession that has been suggested as a model for the IS profession (Lee 1991). It may be that this background contributed to closer frames of reference than otherwise might have been the case. In the review of the interaction, both analyst and client made it clear that they saw themselves as advocates for the benefits of computerization in their organization, indicating not only a shared task but shared values about that task.

## 5. DISCUSSION

### 5.1 Issues to Be Discussed

In any professional discourse, one would expect a focus on the task to be executed through conversation. This equates to a global topic of the conversation in discourse analysis terms. More importantly, *how* the issues are framed are of crucial importance at the outset and give insight into how the early requirements are being perceived by both the analyst and the client. Subsequent discussion of that global topic very often consists of a bringing together of two perceptions to a joint conception of early requirements. So, how the early requirements are framed in the beginning of the conversation, in the form of a global topic or issues to be discussed, has a profound impact from two perspectives.

First, whoever sets the parameters or agenda for the discussion has power over the outcome as it manifests as a new system. Very often there are resource issues in organizations attached to the implementation of system requirements. The IT section involved may have limited resources for subsequent amendments, for instance.

Second, how the issues are framed determines how they are perceived. If they are perceived from a certain perspective, then the problem solving applied to them will also be from that perspective. For example, if the analyst sees the problem that the client presents as a purely technical problem to do with the printing out of reports, he or she may work on solving the problem without locating this particular problem within a larger context. That larger context might include the process that the report is associated with, the reasons why the client prints this report out at a particular time within that process, how that process relates to other processes carried out by the client, and so on.

To summarize, how issues are framed, and the process for discussing them, will impact on how those issues evolve throughout the conversation. Whoever introduces the issues and frames them effectively controls that evolution unless the other participant challenges how they are framed. Given the nature of conventional analyst-client relations, it may well be that the analyst has more influence than they realize when they introduce an issue. Certainly, in Cases 1 and 2 the clients saw the interaction as an important negotiation affecting their sections. In the first case, the client was worried about what might be imposed on his section, and in the second the client was concerned that his information needs might not adequately be met. These can be seen as organizational issues that are superimposed on what is seen to be, at first glance, a professional task of determining information needs. Jones and Walsham (1992) note that it may be impossible for the developer to grasp the complete significance of what they are told without prolonged engagement with the organization, and this could also hold true for professionals operating in different parts of an organization.

### 5.2 Organizational Context

It was noticeable in all of the cases that largely implicit organizational context had a profound influence in a number of areas. What was interesting was that the organizational context was rarely referred to while discussing the actual requirements; in some cases, the organizational context emerged to aid greater understanding during the review of the interaction. In individual interviews, however, participants were clearly very influenced by their particular organizational context. In Case 1, a previous unfortunate project history influenced the client's approach to the analyst; in Case 2, a backdrop of resource constraints also influenced the client's approach. In Case 3, the need for the organization to justify staffing levels was driving computerization and particular reporting needs. It is obvious that systems development does not occur in a vacuum—and yet an overtly technical focus in some IS undergraduate training may lead to the analyst not fully appreciating the organizational contexts in which their tasks are situated, with varying consequences. Certainly the analyst in Case 1 fell into this category, and this could perhaps be attributed to this analyst's computer science background.

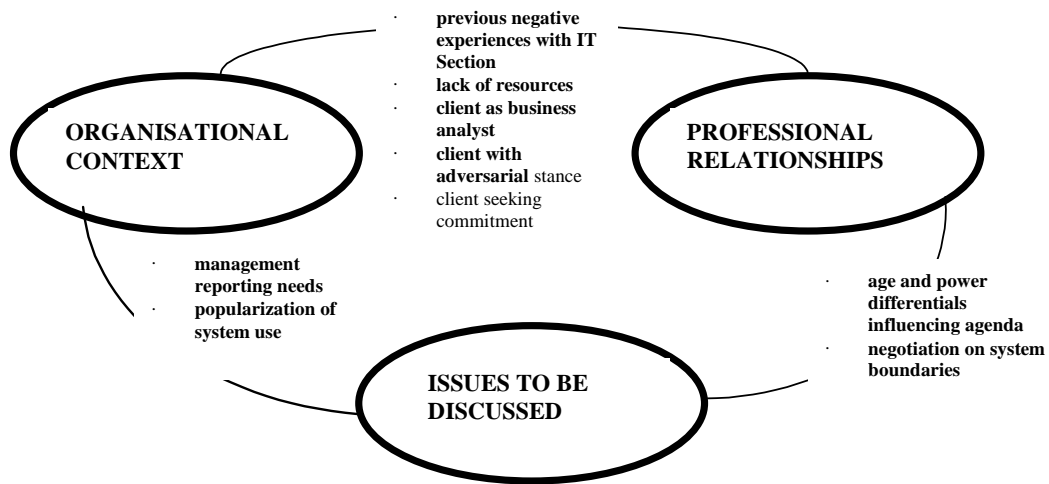


Figure 2. Situational Links Between Themes

### 5.3 Professional Relationships

A number of tacit assumptions, similar to those identified by Hirschheim and Newman (1991) seemed to be operating at either the individual or sectional level in these cases. These included the notion of the systems developer as high priest, the systems developer as the best person to make decisions about the system, and the idea that politics should not be the concern of the systems developer. In Case 3, the analyst overturned these assumptions with a more equitable view of analyst-client relationships. It was interesting that, in Cases 1 and 2, the clients distinguished between relationships at an individual and sectional level, and held the individual analyst in high esteem, contrasting with their opinions of IS professionals in general. In Case 3, there was clearly a great deal of mutual admiration and respect between analyst and client, and many shared values and aims. All this would seem to indicate that an *individual* emphasis on positive working relationships can do a great deal to mitigate what might seem, at face value, negative social contexts surrounding system development in organizations.

### 5.4 Interrelationships Between Themes

The above discussion of the themes of issues to be discussed, organizational context, and professional relationships demonstrates them to be a complex web of factors in the social context of early requirements gathering, rather than autonomous themes which have no relationship. Figure 2 shows how the situational influences in each case linked the themes. We can see how there are many situational influences on issues to be discussed—those issues are thoroughly embedded in organizational context, and also that those issues are enacted in the social framework of professional relationships.

## 6. CONCLUSIONS

This paper has attempted to give a view of the social context of early requirements gathering by presenting client and analyst perspectives on three case studies. By drawing out the social contexts in these cases, it is possible to see how a myriad of situational influences contribute to what is discussed and in turn shape initial requirements. Moreover, the analysts and clients in these cases brought strong individual influences to bear on what was discussed, by virtue of their attitudes, educational background, and mode of interacting with others. Therefore it is possible to pose the question as to how much an individual can act within various organizational contexts to positively or negatively shape those early requirements.

As these case studies also contain reflection by the participants, they represent to some extent a developing repertoire of expectations, images, and techniques (Schön 1983) as analysts in particular encounter and reflect on different situations in interactions. Most professionals are aware of how organizational issues affect their work, but perhaps are not aware of how they actively define what is to be discussed through meanings attributed in situations (Denzin 1983). This observation also applies to some IS undergraduate education, where technical issues are very often concentrated on in a crowded curriculum, at the expense of organizational issues. This paper can be seen as a jumping off point for “repertoire-building research” (Schön 1983), where familiar situations can be accumulated as exemplars for useful reflection, with the aim of engaging IS professionals to reflect on not only in the area of problem solving, but also how the problem is framed, and the social contexts in which this framing takes place.

### Acknowledgments

The author would like to thank the three anonymous reviewers whose helpful and constructive comments aided the revision of this manuscript.

### References

- Bashein, B. and Markus, M. L. “A Credibility Equation for IT Specialists,” *Sloan Management Review*, Summer 1997, pp. 35-44.
- Beath, C. M., and Orlikowski, W. J. “The Contradictory Structure of Systems Development Methodologies: Deconstructing the IS-User Relationship,” *Information Engineering, Information Systems Research* (5:4), 1994, pp. 350-376.
- Benbasat, I.; Dexter, A. S.; and Mantha, R. W. “Impact of Organizational Maturity on Information System Skill Needs,” *MIS Quarterly* (4:1), 1980, pp. 21-34.
- Candlin, C. N. “Preface,” in M. Coulthard (ed.), *An Introduction to Discourse Analysis*, 2<sup>nd</sup> ed., Longman, London, 1980, p. ix.
- Cronan, T. P., and Means, T. L. “System Development: An Empirical Study of User Communication,” *Data Base*, Spring 1984.
- Davidson, E. *Framing Information Systems Requirements: An Investigation of Social Cognitive Processes in Information Systems Delivery*, unpublished Ph.D. Thesis, Massachusetts Institute of Technology, 1996.
- Dengate, G.; Cougar, J. D.; and Weber, R. “Motivational Characteristics of Australian Information Systems Personnel,” *The Australian Computer Journal* (22:3), August 1990.
- Denzin, N. K. “Interpretive Interactionism,” in G. Morgan (ed.), *Beyond Method*, Sage, Thousand Oaks, CA, 1983.
- Edstrom, A. “User Influence and the Success of MIS Projects: A Contingency Approach,” *Human Relations* (30:7), 1977, pp. 580-607.
- Ferratt, T. W., and Short, L. E. “Are Information Systems People Different: An Investigation of Motivational Differences,” *MIS Quarterly* (10:4), 1986, pp. 377-387.
- Glaser, B. G. *Theoretical Sensitivity: Advances in the Methodology of Grounded Theory*, Sociology Press, Mill Valley, CA, 1978.
- Glaser, B. G. *Basics of Grounded Theory Analysis: Emergence vs. Forcing*, Sociology Press, Mill Valley, CA, 1992.
- Glaser, B. G., and Strauss, A. *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Aldine Publishing Co., Chicago, 1967.
- Gingras, L., and McLean, E. R. “Designers and Users of Information Systems: A Study of Differing Profiles,” in M. Ginzberg and C. A. Ross (eds.), *Proceedings of the Third International Conference on Information Systems*, Ann Arbor, MI, December 1982.
- Guba, E. G., and Lincoln, Y. “Competing Paradigms in Qualitative Research,” in N. K. Denzin and Y. S. Lincoln (eds.), *Handbook of Qualitative Research*, Sage Publications, Thousand Oaks, CA, 1994, pp. 105-116.
- Hirschheim, R., and Klein, H. K. “Four Paradigms of Information Systems Development,” *Communications of the ACM* (32:10), 1989, pp. 1199-1215.
- Hirschheim, R., and Klein, H. K. “Realizing Emancipatory Principles in Information Systems Development: The Case for ETHICS,” *MIS Quarterly*, March 1994, pp. 83-99.

- Hirschheim, R., and Newman, M. "Symbolism and Information Systems Development: Myth, Metaphor and Magic," *Information Systems Research* (2:1), 1991, pp 29-62.
- Kaiser, K. M., and Bostrom, R. P. "Personality Characteristics of MIS Project Teams: an Empirical Study and Action Research Design," *MIS Quarterly* (6:4), December 1982, pp. 43-60.
- Kennedy, S. "Why Users Hate Your Attitude," *Informatics*, February 1994
- Lee, A. S. "Architecture as a Reference Discipline for MIS," in H. E. Nissen, H. K Klein, and R. Hirschheim (eds.), *Information Research: Contemporary Approaches and Emergent Traditions*, North-Holland, Amsterdam, 1991, pp. 573-592.
- Jones, M., and Walsham, G. "The Limits of the Knowable: Organizational and Design Knowledge in Systems Development," in K. E. Kendall, K. Lyytinen, and J. I. DeGross (eds.), *The Impact of Computer Supported Technologies on Information Systems Development*, North-Holland, Amsterdam, 1992, pp. 195-213.
- Miles, M. B., and Huberman, A. M. *Qualitative Data Analysis: An Expanded Sourcebook*, 2<sup>nd</sup> ed., Sage Publications, Thousand Oaks, CA, 1994.
- Newman, M., and Robey, D. "A Social Process Model of User-Analyst Relationships," *MIS Quarterly*, June 1992, pp. 250-266.
- Orlikowski, W. J., and Gash, D. "Technological Frames: Making Sense of Information Technology in Organizations," *ACM Transactions on Information Systems* (2), April 1994, pp. 174-207.
- Pettigrew, A. M. "Contextualist Research and the Study of Organizational Change," in E. Mumford, R. Hirschheim, G. Fitzgerald, and A. T. Wood-Harper (eds.), *Research Methods in Information Systems*, North-Holland, Amsterdam, 1985.
- Pettigrew, A. M. "The Influence Process Between Specialists and Executives," *Personnel Review* (3:1), Winter 1974, pp. 24-30.
- Schön, D. A. *The Reflective Practitioner: How Professionals Think in Action*, Basic Books, New York, 1983.
- Strauss, A. *Qualitative Research for Social Scientists*, Cambridge University Press, Cambridge, England, 1987.
- Strauss, A., and Corbin, J. *Basics of Qualitative Research*, Sage, Thousand Oaks, CA, 1990.
- Walsham, G. "Interpretive Case Studies in Information Systems Research: Nature and Method," *European Journal of Information Systems* (4), 1995, pp. 74-81.
- Westrup, C. "Constituting Users in Requirements Techniques," in A. S. Lee, J. Liebeneau, and J. I. DeGross (eds.), *Information Systems and Qualitative Research*, Chapman Hall, London, 1997, pp. 182-204.
- Yin, R. *Case Study Research*, Sage Publications, Thousand Oaks, CA, 1984.