

**PAPER 9:  
DISCOVERING MEANINGS FROM TRANSCRIBED INTERVIEWS:  
DISCUSSIONS ON THE USE OF 'CONTENTS ANALYSIS' (AS THE PRIMARY  
DATA COLLECTION TECHNIQUE)**

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**Abstract**

The aim of the research is to investigate the influence of contractual procedures on construction professionals' working practices. Theoretically the use of contractual procedures, as prescribed in standard forms of contract, is to establish a high degree of rationality on an inherently unpredictable and irrational situation that is the construction project. Thus research questions were directed to elucidate how and why contractual procedures are used whenever construction professionals are doing their task. Data to be collected is the thoughts and actions of the professionals who used procedures in dealing with a specific task. However, there is a possibility that speakers may mean something different from what they say to show that the account of a particular activity is rational or justified. Thus content analysis of the semi-structured interviews were conducted to discover the meanings that a respondent actually alluded to since it is located and indexed within the expressions used to describe, explain or justify a specific task, event or occasion. Finally, framing the research within a case study methodology ensures the preservation of the unitary character of the social object being studied. Findings suggest that although construction professionals are influenced by procedures and/or rules codified in standard forms of contract, other traces of influence are also present. The mode of inquiry adopted means that the research is not concerned with noting the frequency or occurrences of usage of contractual procedures and/or rules but rather to illustrate and identify these influences. The findings may be used for future contract drafting policies as the proliferation of new standard forms or conditions of contract in Malaysia's construction industry suggest that present documents are less than ideal or even treating construction contracts as distinct since classical model of contract does not seem to address the complexities nor subtleties of the construction process.

**Keywords :**

*contractual procedures, rationality, influences, content analysis, case study*

**Introduction**

Although it is best practice if all building and construction projects are fully planned, changes in circumstances demand that flexibility must be maintained. There are compelling reasons to provide for flexibility. The performance of building and construction projects is not instantaneous. Due to the characteristics and nature of the product, performance usually involves a significant amount of time. Within this time frame, there is a possibility that users' needs may have to be redefined due to changed economic, supply, political or technological conditions. A sensible bargain may turn out to be onerous due to changed circumstances (Bell 1989).

Flexibility is also needed because building and construction project does not operate in a vacuum. It is a process which is open and exposed, susceptible to environmental factors which Bennett (1985) suggests interfere with planned progress. Walker (1989) asserted that environmental forces have the potential to shape projects - the project is the response to these forces impinging on the client's environment. The reality of many projects, especially

commercial schemes, is that the client dictates the pace of design by responding to external pressures (Latham 1994). Coupled with the rapidity of changes (Toffler 1970), there are obviously limitations to the extent a project can be fully planned. Unless some earlier requirements are changed, a client may well be saddled with an obsolete building.

Thus, one of the ways in which flexibility is maintained is by permitting changes to be made to the works. This is achieved by incorporating specific clauses in the contract, more specifically in conditions of contract, either standard forms or bespoke. In these forms, the term 'variation' is used to describe changes to the work. It means an alteration, whether by extra or omission, to the physical work content specified in the contract but which the contractor is required to perform (Dorter 1991).

These specific provisions, in tandem with other provisions in the contract, serve many purposes. It confers to the client the unilateral right to vary the work. Without it, a contractor is not obliged to accede to any request for change. Any departure from the work for which the contractor has agreed to do can and will be subjected to a new and separate agreement (Powell-Smith and Sims 1983, Murdoch and Hughes 1992) including payment at a *quantum meruit* or reasonable rate for the work, as held in *McAlpine Humberoak Ltd. v. McDermott International Inc.* [1992] 58 BLR 1 (CA). If the client still persists on having the change, the contractor may treat the insistence as repudiating the contract. Dorter (1991) quotes *Ettridge v. Vermin Board of the District of Murat Bay* [1928] SASR 124 (FC) being such a precedent.

Furthermore, it contains detailed arrangements as to how the changes are to be made (Atiyah 1995). For example, clause 11 of PAM98 standard form of contract issued by Pertubuhan Arkitek Malaysia, sets out the meaning of variation (sub-clause 11.1), who may issue variations (sub-clause 11.2), conditions whereby instructions may be issued (sub-clause 11.3), valuation of variations (sub-clause 11.4), principles or rules of valuation (sub-clause 11.5), right of contractor to be compensated for incurring direct loss and/or expenses including furnishing appropriate details of the claim (sub-clause 11.6 and 11.7). Apart from having a framework that permits and prescribes changes, it is also important to have institutional arrangements built into the contract. An example is to vest powers of decision-making to the architect or engineer in charge, which Atiyah (1995) suggests is to deal with problems arising from complexities of the construction process.

These contractual arrangements, which serves as one of the tools in managing the construction process, is codified in conditions of contract through the application of its rules and procedures, therefore relying on the theoretical and philosophical aspect of the law of contract.

### **Classical model of contract**

Theoretically, law of contract delves into 2 distinct themes – firstly, its concepts and secondly, how it regulates social and commercial transactions. Transactions are regulated through the emphasis of how the law is used to create and induce order. Therefore the fundamental purpose of the law of contract is to enable achievement of the contractual parties' private ends by providing legal effects to their agreements – rely on each other and co-ordinate their actions.

The law of contract achieved this fundamental purpose through a variety of ways and idealisations (Macneil 1974), which include facilitating the process of exchange and minimise breakdown, provide sanction(s) for reneging on an agreement, work out remedies against a party who breach, include standard set of risk-allocation terms for use by contracting parties and above all regulate transactions according to ideals of social justice. It is a picture of the classical model of contract which Atiyah (1979) suggests promises compliance by those that follow the rules or procedures, thus resulting in predetermined or predictable act or action as prescribed or proscribed by the rules and procedures. The behaviour of individuals are guaranteed by the threat of litigation. Predetermined or predictable act or action is deemed to be rational and rational

social action exist under legal authority and bound by rules that have rational-induced properties on organisations (Weber 1949) or rules produce or induce rational actions (Parsons 1968). Thus rules or procedures as codified in conditions of contract are propositioned as influencing construction professionals' actions.

Nonetheless, previous research has shown that this premise is flawed.

### **Problem**

Beale and Dugdale (1975), Lewis (1982) and Yates (1982) discovered that business practices often will be influenced by the desire to prolong the relationship and to see the contract out to the extent that the threat of legal coercion is dismissed. Macaulay (1963) concluded that some business exchanges reflect no planning or minimal amount of it, often preferring to rely on "a man's word", "a handshake" – even when the transaction involves serious risk. Zimmerman (1971) discovered that telephone receptionists' use of rules is to provide reasonableness for their actions and to satisfy the provisions of the rule, rather than complying or deviate from a set of prescribed procedure.

Thus, the application of general principles of contract law is inappropriate, especially in construction transaction that uses standard forms of contract which provides a framework for regulating long-term agreement by planning and designing contractual procedures in order to maintain and preserve the performance required. Likewise, there exists appropriate rules and procedures on variations, a regular feature of the construction process. However, the extent of the influence of contractual procedures is currently unknown and merits investigation. Such a study was recommended for future research by Loosemore (1996) and although he was emphasising on the influence of contractual conditions on problem saving abilities, this could include variations. This study is also prompted by suggestion made by Hancock and Root (1996) that at most, standard forms of contract may be able to set down detailed rules but are undermined by the resultant need to make unprogrammed decisions on the basis of what is reasonable.

The focus is on construction professionals. Although most construction contracts are between a client and a contractor, construction professionals (architects, engineers, quantity surveyors, etc.), designated as agents of the clients, are also responsible in regulating the transaction – interpreting, defining, etc the procedures laid out for many events – their decisions are required in most events. It is thus crucial to determine what are the factors that influence these decisions and whether the philosophy and theoretical idealisations of the classical model of contract law plays any part in them. The findings may be used for future contract drafting policies as the proliferation of new standard forms or conditions of contract in Malaysia's construction industry (PAM2007, CIDB2000, model terms for sub-contract, etc.) suggest that present documents are less than ideal or even treating construction contracts as distinct since classical model of contract does not seem to address the complexities nor subtleties of the construction process.

Accordingly, the objective of the study is to investigate the influence of contractual procedures on decision-making construction professional specifically in dealing and coping with variations to construction work.

### **Research methodology**

Since the objective of the research has been specifically outlined i.e. to determine the influence of contractual procedures on construction professionals, the strategy is to direct questions to elucidate how and why contractual procedures are used whenever construction professionals are doing their task. The epistemological basis of the chosen methodology relies on the argument that an understanding of the social action may be gained through the respondent's point of view. Variation to the construction work is considered a prime example of a task that necessitates the invoking of rules and procedures found in conditions of contract. Thus in order to formulate the

nature of action (or inaction), and how it is to be interpreted, the perspectives of construction professionals must be sought.

The primary method to collect data is through interviews. Potter and Mulkey (1985) described interviews as “a technique for obtaining information that will enable the analyst to describe, explain, and/or predict social actions that occur outside the interview” although it may be possible to obtain an ongoing commentary or verbal report from the interviewee during an actual activity. Interviews may take on many forms and structure - open-ended, focused and structured. Verbal responses are then analysed to extract an accurate formalised version of the interviewee’s actions, motives and interests. These actions, motives and interests are then used to describe and explain a natural occurring area of social life (Potter and Mulkey 1985).

Both Bittner (1965) Garfinkel (1967) argued that it is possible that the meaning of a person’s thoughts and actions may be discovered through discourse or talk. It is possible since the “activities whereby members produce and manage settings of organised everyday affairs are identical with the procedures for making those settings accountable” (Garfinkel 1967) which is through spoken interaction. Garfinkel (1967) insisted that these descriptions are possible because a person is usually reflective on the actions (or inactions) taken, especially if the description is attached to a particular task or event.

Case study approach was used in the research as recommended by Goode and Hart (1952) since it preserves the unitary character of the social object being studied. The case study was designed based on Yin (1994) in accordance with 5 components – the study’s questions, propositions (if any), unit(s) of analysis, logic linking the data to the propositions and criteria for interpreting the study. The study’s questions is ‘how’ contractual procedures, which acts as rules in guiding behaviour, are used and ‘why’ is it used or in ‘what’ situation is it used. Propositions, as gleaned from the literature, are as follows : rules and procedures are adhered to when circumstances are stable and rational; rules and procedures are not adhered to and deviances occur when circumstances are not stable or irrational. The unit of analysis will be on construction professional, framed within a case study. Logic linking data to the propositions is indexed to the unit(s) of analysis’ frame of mind by which interviews are conducted to elicit recalls of past event while the criteria for interpreting the findings will be based on content analysis of interviewees’ transcripts.

Initially the case study was identified by the researcher’s personal friendship with one of the construction professional, who, after discussing at length, agreed to have a particular project suitable for analysis. Introduction was made to other construction professionals involved with particular regard to a specific variation task that became the ‘focus’ of the interviews consequently linking all the respondents in the case study. Apart from asking the respondents how do they deal and cope with the task (variation) and why did that particular task dealt with in the manner as recorded, the interviews were also used as the secondary source of data whereby supporting information, obtained from project’s documentations such as instructions, minutes of meeting, bills of quantities and drawings was confirmed. Altogether three respondents from this initial case study were identified and interviewed.

### **Interview techniques**

The variation that was the focus of the interviews was concerned with the change to the design of the roof of an ancillary building within the site owned by a private client that included the construction of the main building. The ancillary building was actually designed as a storage facility but six months after construction started, the client requested the ancillary building be utilised as a guest bedroom. The architect believed that no major change is required in the original plans, however to accommodate the design features of the main building, it was necessary to add a ‘link’ between these buildings in the form of a 3.00m x 8.00m walkway. Change to the roof structure of the ancillary building was in the form of adding trusses and

rafters at one end eventually integrating with the main building, creating an unbreakable roof line. The architect ordered the change effected during the site meeting. The extra cost was incorporated in the penultimate interim payments to the contractor and it was assumed that the quantum was not disputed.

The format of questions asked in the interviews to each respondents linked to the variation concerned was based on McCracken (1988). The interview technique adopted in this research is semi-structured whereby each respondents will be asked about their involvement in the case study; their roles and responsibilities and general day-to-day tasks. Respondents will then be questioned on the variation work by which the responses are open. Data from this category of questions are usually messy but provides a rich source of information as to what the respondents felt as important or specific to the case study. The interviews were also used to direct specific questions that the researcher considered important but has not been discussed by the respondents.

### **Analysis of interviews**

Data sourced from the interviews is used to derive the influence(s) on the respondents when they are doing the specific task in the case study. These influence(s) was/were ascertained by means of how the respondents indexed them to a particular context or in this research to the case study, focusing on the variation work. Data was transcribed manually into text and although the interviews were conducted mainly in English, some of the responses were in Malay and appropriate translations were applied to the specific words or sentences. The text was analysed based on a method called “content analysis” (Krippendorf 1980).

Content analysis provides a framework to derive influence(s) by extracting inferences from the text, categorising sections of text with similar meaning into discrete sections of abstract element. However Krippendorf (1980) warned that these inferences can only be deduced if the relationship is maintained between the content of the text and their institutional, societal or cultural context or in this research, the case study and the variation work that became the focus of the interviews.

As an illustration, the following is an extract from the interview with the architect on the request by the client:

“..... There’s nothing to it (variation) [1] ..... That is his right [2] ..... he can ask for anything [3] ... .. we can only suggest on an alternative since the work had already started [4].”

The abstract element to this section of the text is how the architect view variation work which is a common feature in his roles and duties as an architect. Four responses were noted and these responses may or may not be “qualifying structures” that support the abstract element. The response [1] to the question is “..... there’s nothing to it (variation).....” and response [2] “..... that is his right .....” suggest that the architect knew that any variation by the client is permissible under the forms of contract for that particular project. Thus the architect was influenced by the rules and procedures on variation which exist in conditions of contract. However, although response [3] is a “qualifying structure”, it does not support the suggestion that the architect was influenced by rules and procedure. Rather, response [3] “..... he can ask for anything .....” suggest that the architect was influenced by the client to the extent that any changes is permissible, although there are rules to the extent and limit of any variations in the forms of contract. Response [4] show evidence and support of the client’s influence on the architect but there was a hint of resignation and reluctance to accept the request since it would presumably involve extra work and amendments to the design and drawings.

## Discussions and conclusions

The above analysis exemplifies the application of content analysis and demonstrated that inferences of the actual meaning that respondents actually alluded to can be discovered through transcribed interviews. However, the analysis also demonstrated the intricate and time consuming nature of content analysis due to the massive amount of raw data that needs to be processed manually.

One of the many problems faced in detailing and analysing text is in identifying the correct or appropriate meanings to the responses especially to text which is ambiguous. This is especially so when some of the interviews need to be translated and converted to proper sentences. The example also demonstrated that other traces of influence are also present. These influences have been noted in the literature, however the lack of some of these influences exhibited in the interviews either suggest that there are in other forms which the researcher is not aware of or the inability of the researcher to recognise them.

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