

STANDARD FORMS OF CONTRACT AND ITS INFLUENCE ON CONSTRUCTION PROFESSIONALS

Norazam Othman

Department of Quantity Survey, Faculty of Built Environment, Universiti Teknologi Malaysia, 81310 Skudai, Johor Bahru. b-azam@utm.my

ABSTRACT: *The aim of the research is to investigate the influence of standard forms of contract or conditions of contract on construction professionals. Standard forms are constantly being amended, modified and even totally revamped on the basis that these forms are one of the primary sources of conflicts and disputes in the construction industry. Unwittingly the drafting of newer forms to mitigate future disagreement also presents evidence that the stakeholders adhere and subscribe to the philosophy and theoretical idealisations of contract law, which promises compliance, thus resulting in predetermined and predictable act or action. The behaviour of construction professionals are shaped thus influenced by this classical model of contract, as codified in standard forms of contract. However previous research has shown that this premise is flawed and requires investigation and further study. Research questions were directed to elucidate how and why contractual rules and 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. 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. The interviews were recorded, transcribed to written form and text. Due to the massive amount of data, the coding framework was approached by utilising a computer software that permits manipulation and proper categorisation and retrieval. Finally, framing the research within a case study methodology ensures the preservation of the unitary character of the social object being studied. Findings indicate 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 findings could be used to identify more robust drafting policies of newer standard forms or conditions of contract rather than insuinating that present documents are less than ideal due to its clarity or other factors that suggest that the contract is the main source of conflicts and disputes. 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.*

Keywords: *Standard forms of contract, influences, content analysis, case study*

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Introduction

The introduction of new standard forms or conditions of contract in Malaysia's construction industry suggests that present documents are less than ideal. Pertubuhan Arkitek Malaysia (PAM) issuance of the PAM2006 (coming fast at the heels of PAM1998), Construction Industry Development Board (CIDB) of Malaysia's various forms (CIDB2000, model terms for domestic sub-contracts, etc) and Jabatan Kerja Raya (JKR) Malaysia issuance of JKR203A edition 2007 indicate the perceived agreement that the source of conflicts and disputes might be traced to the contract. One of the numerous examples of how contract became the source of disputes and conflicts lies on the clarity of the conditions of contract. Clarity has been defined as "can be simply seen or heard, easily understood, not confusing, clear and precise" (Asmah Omar 2000). Clarity or the lack of it is one of the main reasons why some disputes are submitted to the courts (Broome and Hayes 1997).

Clarity of any construction contracts depends largely on those who drafts or, in many instances, on those who amend standard terms. Factors identified as contributing to the level of clarity are many, such as the original drafter of the contract conditions may not be well versed in the idiosyncrasies of the construction process (Wallace 1986), conditions not in tandem with current and innovative technology (Powell-Smith 1989) and the competency of the contract drafters (Aitken 1995, Barnes 1996, Berry et al. 2003, Henkin 1988, Wallace 1986). Henkin (1988) iterates that the contract drafter is an individual who not only has the experience of drafting but also the knowledge to draft clear and precise contract terms.

However, the need to produce a "better and improved" conditions of contract, as evidenced in the issuance of these forms, either in a modified, amended or revamped format, also indicate that the stakeholders (PAM, CIDB, JKR) unwittingly adhere and subscribe to the philosophy and theoretical idealisations of contract law.

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 renegeing 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 is 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).

Standard forms or conditions of contract seek to specify the key variables concerning construction (Clegg 1992). An example of these variables is the extent of changes to the physical work specified in the contract but which the contractor is required to perform. These changes or variations have been the source of many conflicts and disputes (Othman 1997). Thus most standard forms or conditions of contract do provide and contains detailed arrangements as to how these variations are to be managed. For example, clause 11 of PAM98 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 variations, 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.

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These specific clauses, in tandem with other clauses 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.

Therefore, standard forms or conditions of contract, through the application of its rules and procedures by the contractual parties and their agents, are the epitome of the classical model of contract. This contention means that the law (contract law) is asserted to be able to shape behaviour (Tyler 1990), thus is propositioned as influencing construction professionals' actions. Nonetheless, previous research has shown that this proposition 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, and the philosophy and theoretical idealisations of the classical model of contract is found wanting. This is especially so in the construction industry's transaction that uses standard forms or conditions 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 standard forms or conditions 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 findings may be used for future contract drafting policies for standard forms or conditions of contract in Malaysia's construction industry since current drafting policies suggest a reliance on the philosophy and theoretical idealisations of classical model of contract. Accordingly, the objective of the research is to investigate the influence of standard forms or conditions of contract on construction professionals 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 standard forms or conditions of contract on construction professionals, the strategy is to direct questions to elucidate how and why contractual rules and procedures are used whenever construction professionals are doing their task. The focus is on construction professionals because although 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, carry out etc the rules and 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 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. Both Bittner (1965) and Garfinkel (1967) argued that it is possible that the meaning

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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.

Variation to the construction work is considered a prime example of a task that necessitates the invoking of rules and procedures found in standard forms or 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 Mulkay (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 commentaries 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 Mulkay 1985).

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' standard forms or conditions of contract, 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.

The first 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 case study were identified and interviewed.

The second case study came about after an introduction by one of the first case study's respondents to another construction professional. After the customary explanation of the research, permission was granted and another three (different) respondents were identified and interviewed. This snowball effect ensures the selection of case studies is bias-free. Eventually six case study were selected and although Yin (1994) suggested that the appropriate number of case study should be when the data is saturated, the ongoing and uncompleted analysis of data means that the question of saturation have not cropped up yet.

Interview techniques

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 respondent 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.

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

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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, i.e., by listening over the taped conversations and transcribing verbatim by hand onto paper. The transcribing was done as faithfully as possible to what the respondents uttered during the interviews.

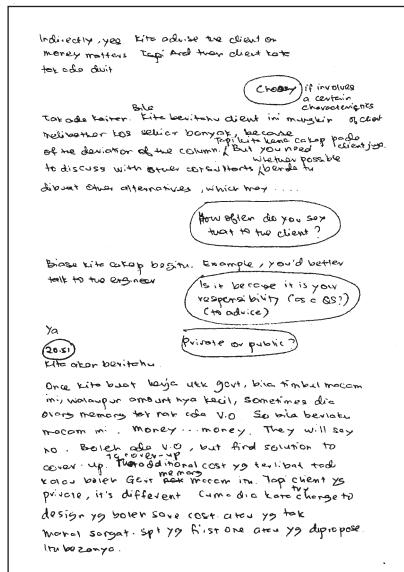


Figure 1: A sample of the transcribed recorded interview data in written form

It was necessary to edit the transcript (as shown in Figure 1) because even though the interviews were conducted mainly in English, some of the responses were in Malay and appropriate translations were applied to the specific words, sentences and responses. A 'cut and paste' approach was initially applied whereby copies of the transcript were made, select and cut specific sections, paste each section onto a fresh piece of paper and do the editing. By turning the transcript or 'raw' data into a 'hard' copy, the tasks of interpreting and manipulating data can be done in various ways according to the system that suits it best (Swift 1996).

Computer assisted data analysis

Invariably, the most pressing and time-consuming task, especially for the lone researcher, is to sort and analyse a large amount of data. Qualitative or 'soft' data

is uniquely ‘messy’ and needs to be systematically sorted if any analysis is to prove useful. Although this can be done manually, a large amount of time and energy could be saved if, for example, resources are doubled (increasing the number of researchers involved in analysis) or using data processing softwares. It is the second option which was chosen in this research.

A software called MindManager® was utilised to assists the researcher by ensuring that the data is stored efficiently including easy retrieval. Activities such as collecting all documents to be analysed, coding text at various index categories, searching for phrases, words, etc. in documents and making notes and memos of the ideas or theories are supported by these softwares (Sun User Guide 1998). The choice was based primarily on its working environment - it must be compatible with Windows2000™/XP™ and the word processor software which was used to transcribe the interviews into text format. The most significant aspect of this particular software is the capability to show the different levels of the interviewee’s text either together or separately. This permits the researcher to work at various sections of the text independently.

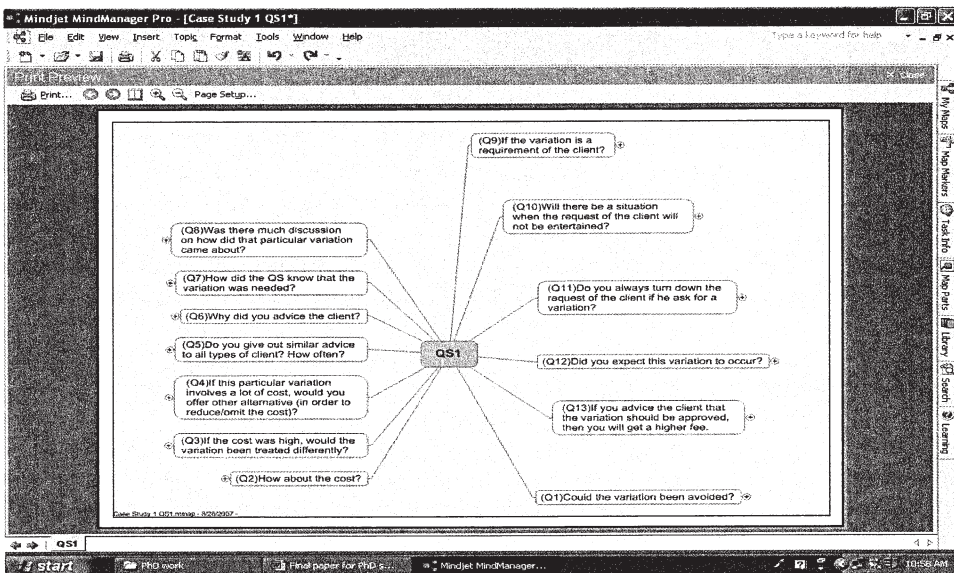


Figure 2: Screenshot of MindManager® for Case Study 2: respondent QS: level 1

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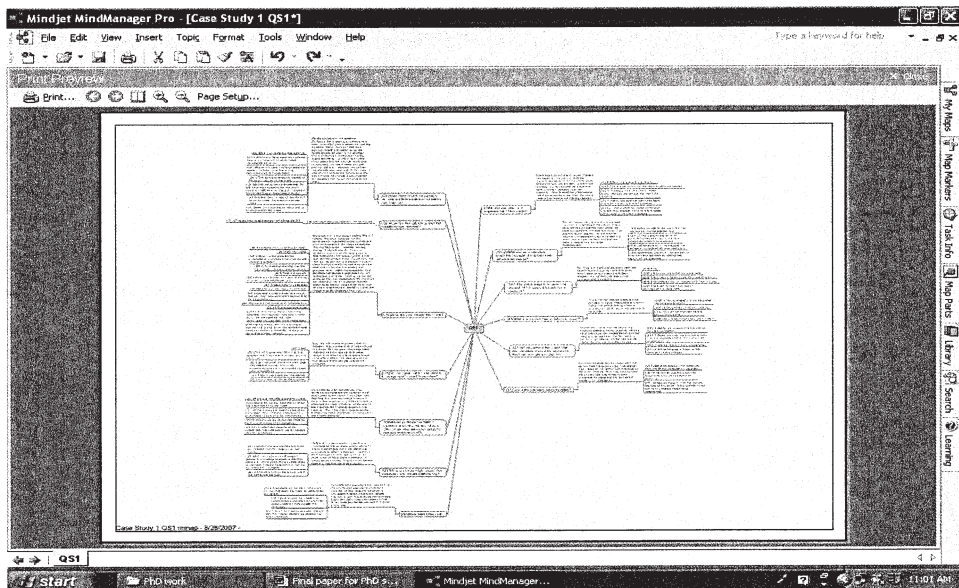


Figure 3:

Screenshot of MindManager® for Case Study 2: respondent QS: level 1, 2 & 3

It is possible to generate more than 3 levels and add memos and additional information to each section of the text. Since the transcript of the interviews for each respondent have now been properly stored with each responses separated and assigned at level 3 of the software (see Figure 2 & Figure 3), the analysis may now start based on a method called 'content analysis'. Holsti (1969) defined 'content analysis' as "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" and the analysis was approached based on suggestions made by Krippendorff (1980).

Coding data and content analysis

Data must be coded and the objective of coding is to distinguish the different types of information that exists, especially so for the less unstructured part of the interviews requiring open-ended responses. Rules and approaches governing the coding procedures have been suggested by Swift (1996) and Lazarsfeld and Barton (1951). The coding approach adopted in this research is hypothesis guided whereby the researcher attaches meanings to the data according to a theoretical perspective. This perspective

is usually defined prior to data gathering and acts as guides to the researcher in formulating meanings from the disparate information. Thus, the coding frame is based on the researcher's views and hypotheses rather than on the surface meanings of the set of written-in answers. This may be formed by addressing the research questions that was formulated earlier on, which is to determine whether standard forms or conditions of contract have any influence on construction professionals by focusing on an event that requires these construction professionals to act according to the prescribed behaviour. Therefore the coding frame was derived from the proposition that, according to the philosophy and theoretical idealisations of contract law, standard forms or conditions of contracts do influence these construction professionals. Any particular section of text that exhibits these meanings will be assigned the code "influence: standard forms or conditions of contracts".

Coffey and Atkinson (1996) proposed that the segmenting of data using codes be achieved through the application of a variety of analytical strategies. They believe that the segmenting and coding of data according to specific themes or perspectives would at least allow the researcher to characterise each stretch of the interview and greatly facilitate the retrieval of different segments of data and linking it back to the research questions.

The literature has also shown other sources of influence are evident in explaining the reasons why an individual may exhibit certain acts or decisions. Some examples of these influencing factors are experience, knowledge, personal choice, tradition, education, training, procurement system, client, contractor, other construction professionals, position and status. These may also be assigned their own respective codes and it may be possible that the number of codes may be high and depended entirely on the researcher to have done an exhaustive review of existing literature on the subject matter.

As an illustration, the following screenshot was taken from an extract of the interview with the Quantity Surveyor (QS) from case study 2. Sixty five minutes of recorded interview was transcribed into written form whereby in this particular text, the question (Q9) and responses (Q9.1-5) took up about less than two minutes. As can be seen from Figure 4, the QS was asked as to what will he do if the client ask or request for a variation. Level 1 was the question/prompt, Level 2 was the explanation/response given by the QS, which was then broken down into different sections (Level 3). It is at

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this level that a detailed analysis may be done and the use of the computer software enables the researcher to sort out and manage the various inferences and meanings from the text systematically.

The text was as follows:

“Client rarely asks for a variation. There is no reason for the client to shift the column. Normally, when the client needs some changes, we will ask the client the reasons. We do ask and the client may have a reason, bigger space, for example. If that is what the client wants and it is not troublesome, then the whole team will accede to the client’s request.”

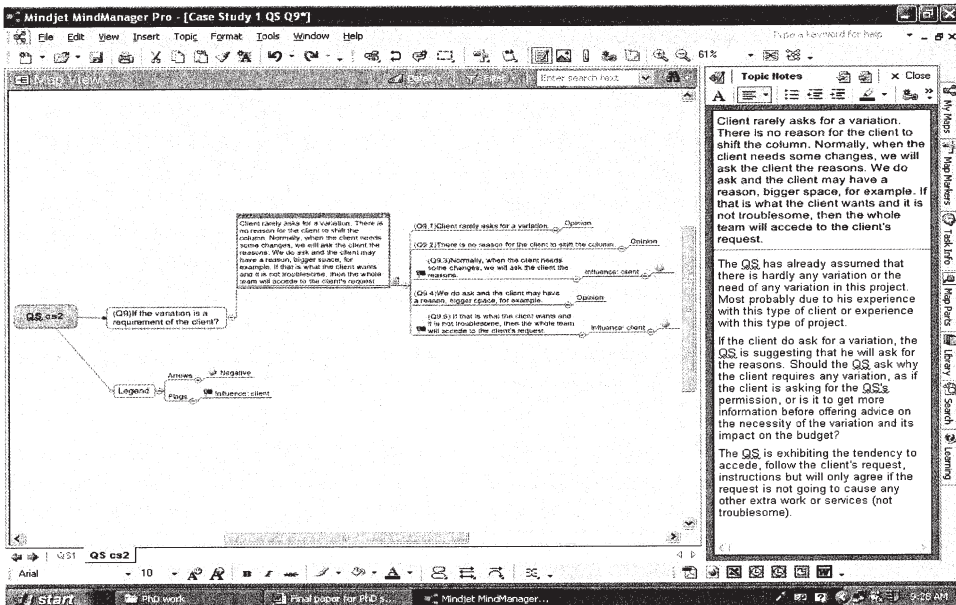


Figure 4: Screenshot of MindManager® for Case Study 2: respondent QS: detailed analysis Q9/Q9.1-5

Additional topic notes were used to clarify the section of text and it was apparent that responses Q9.1, Q9.2 and Q9.4 were the opinions of the QS and not directly attributed to the question posed. However, there is a clear suggestion from response Q9.3 that the QS is influenced by the client. This is because the text clearly showed evidence that the QS will take some form of action if and when the client request for a variation. This response has been coded “influence: client”.

It is also possible to identify the object structure in Q9.3 (“Normally, when the client needs some changes, we will ask the client the reasons.”). This part refers to what does the QS responds to or what action did the QS took when the client asks or request a variation. The object structure identifies the main objective of the response which is to give an answer and meaning to the purpose of the text. Therefore the object structure of the text is what does the QS do and associated with this object structure is the qualifying structure. The qualifying structure provides evidence and support to the object – it “qualifies” the existence of the object structure. Thus the qualifying structures are “when the client needs some changes” and “we will ask the client the reasons”.

It is apparent that another level of analysis may be possible. Although the text clearly showed evidence that the QS was influenced by the client, one of the qualifying structure (“we will ask the client the reasons”) was noted in the analysis (refer to Figure 4, topic notes) as if the QS’s permission is necessary before any variation is approved, although the client have the right to request any variation and does not need the permission of any consultants in his employment. Therefore the QS has been influenced by the client but has dealt with it negatively. Thus this particular influence has been sub-coded “negative” and appropriately marked and identified as such in the analysis.

Each section of the text attributed to the QS’s responses will be analysed in this manner. The same procedure will also be applied to the other two respondents in this case study and the findings will then be tabulated, compared and linked to the specific variation that became the focus of the interviews.

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. A computer software was then used as a tool in manipulating, storing and retrieval of the data into its proper coding framework.

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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.

References

- Aitken, JK** (1995) *Piesse : the elements of drafting (9th edition)*. Sydney, The Law Book Co.
- Asmah Omar (editor)** (2000) *Oxford Fajar advanced learner's English-Malay dictionary*. Selangor, Fajar Bakti.
- Atiyah, P.S.** (1979) *The Rise and Fall of Freedom of Contract*. Oxford, Oxford University Press.
- Atiyah, P.S.** (1995) *An Introduction to the Law of Contract (5th edition)*. Oxford, Clarendon Press.
- Barnes, M.** (1989) The role of contracts in management. In *J. Uff and P. Capper (eds.) Construction Contract Policy – Improved Procedures and Practice*. London, Centre for Construction Law and Management, King's College, 119-138.
- Beale, H. and Dugdale, T.** (1975) Contracts between businessmen : planning and the use of contractual remedies. *British Journal of Law and Society*, 2(1), 45-60.
- Berry, D.M., Kamsties, E. and Krieger, M.M.** (2003) *From contract drafting to software specification : linguistic sources of ambiguity*. Online at URL <http://se.uwaterloo.ca/~dberry/handbook/ambiguityHandbook.pdf>
- Bittner, E.** (1965) The concept of organization. *Social Research*, 32(3), 239-258.
- Broome, J.C. and Hayes, R.W.** (1997) A comparison of the clarity of traditional construction contracts and of the New Engineering Contract. *International Journal of Project Management*, 15(4), 255-261.
- Clegg, R.S.** (1992) Contracts cause conflicts. In *P. Fenn and R. Gameson (eds.) Construction Conflict Management and Resolution*, 25-27 September, UMIST, 128-144.
- Coffey, A. and Atkinson, P.** (1996) *Making Sense of Qualitative Data*. Thousand Oaks, CA, Sage Publications.

- Dorter, J.** (1991) Variations. *Construction Law Journal*, 7, 281-302.
- Garfinkel, H.** (1967) (1984 printing). *Studies in Ethnomethodology*. Cambridge, Polity Press.
- Goode, W.J. and Hart, P.K.** (1952) *Methods in Social Research*. London, McGraw-Hill.
- Hancock, M. and Root, D.** (1996) Standard forms and conditions of contract – the imposition of roles, relationships and rationality. In *A. Thorpe (ed.) Proceedings of the 12th Annual Association of Researchers in Construction Management (ARCOM)*, 11-13 September, Sheffield Hallam University, 160-169.
- Henkin, H.** (1988) *Drafting engineering contracts*. London, Elsevier.
- Holsti, O.R.** (1969) *Content Analysis for the Social Sciences and Humanities*. Reading, MA., Addison-Wesley.
- Krippendorff, K.** (1980) *Content Analysis – An Introduction to its Methodology*. London, Sage Publications.
- Lazarsfeld, P.F. and Barton, A.H.** (1951) Qualitative measurement in the social sciences : classification, typologies and indices. In *D. Lerner and H.D. Lasswell. (eds.) The Policy Sciences : Recent Developments in Scope and Method*. Stanford, CA., Stanford University Press.
- Lewis, R.** (1982) Contracts between businessmen : reform on the law of firm offers and an empirical study of tendering practices in the building industry. *Journal of Law and Society*, 9(2), 153-175.
- Loosemore, M.** (1996) *Crisis Management in Building Projects – A Longitudinal Investigation of Communication and Behaviour Patterns Within a Grounded Theory Framework*. Unpublished PhD dissertation, Department of Construction Management & Engineering, University of Reading.
- Macaulay, S.** (1963). Non-contractual relations in business : a preliminary study. *American Sociological Review*, 28, 55-69.
- Macneil, I.R.** (1974) The many futures of contract. *Southern California Law Review*, 47(3), 691-816.
- McCracken, G.** (1988) *The Long Interview*. Newbury Park, CA., Sage Publications.
- Murdoch, J. and Hughes, W.** (1992) *Construction Contracts - Law and Management*. London, E. & F.N. Spon.
- Othman, N.** (1997) Management of variations in construction contracts. In *A. Thorpe (ed.) Proceedings of the 13th Annual Association of Researchers in Construction Management (ARCOM)*, 15-17 September, King's College, Cambridge.
- Parsons, T.** (1968) *The Structure of Social Action : Volume 1*. New York, Free Press.

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- Potter, J.** (1997) Discourse analysis as a way of analyzing naturally occurring talk. In *Silverman, D. (ed.) Qualitative Research – Theory, Method and Practice*. London, Sage Publications, 144-160.
- Potter, J. and Mulkay, M.** (1985) Scientists' interview talk : interviews as a technique for revealing participants' interpretative practices. In *M. Brenner., J. Brown. and D. Canter. (eds.) The Research Interview - Uses and Approaches*. London, Academic Press, 247-271.
- Powell-Smith, V** (1990) *The Malaysian standard form of contract : PAM/ISM 69*. Kuala Lumpur, Malayan Law Journal.
- Powell-Smith, V. and Sims, J.** (1983) *Building Contract Claims*. St. Albans, Herts., Granada.
- Sun User Guide** (1998) *Nud*ist*. Online at URL <http://mort.itd.uts.edu.au/assist/unix/guide/nudist.html>
- Swift, B.** (1996) Preparing numerical data. In *R. Sapsford. and V. Jupp (eds.) Data Collection and Analysis*. London, Sage Publications, 153-183.
- Wallace, IND** (1986) *Construction contracts : principles and policies in tort and contract*. London, Sweet & Maxwell.
- Weber, M.** (1949) *The Methodology of the Social Sciences (translated by E. Shils and H. Finch)*. New York, Free Press.
- Yates, D.** (1982) *Exclusion clauses in contracts (2nd edition)*. London, Sweet & Maxwell.
- Yin, R.K.** (1994) *Case Study Research - Design and Methods (2nd edition)*. Thousand Oaks, CA., Sage Publications.
- Zimmerman, D.H.** (1971) The practicalities of rule use. In *J.D. Douglas (ed.) Understanding Everyday Life – Towards the Reconstruction of Sociological Knowledge*. London, Routledge & Kegan Paul, 221-238.