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The Paradox of Meaning in Audit Judgement

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Abstract

This paper attempts to provide an approach to understand, not just describe, the judgement process in auditing. It will make some general criticisms of currently established judgement methods from the view point that without an adequate understanding of underlying social interactions, efforts oriented towards judgement formulation will continue to be unrewarding. It will present an alternative judgement strategy capable of simplifying the interface between the auditor and the social system on the basis of a richer cognitive approach. One aspect of this approach will be applied to an example and its specific human factors aspect will be discussed. Finally, I shall sum up with some conclusions and some further research suggestions.

I. Audit Judgement - A Major Concern

Studies of audit judgement as Boritz (1986,p.335) notes, “are a major focus of auditing research due to their potential policy implications for enhancements to professional practice in areas such as development and modifications of auditing methods, standards, and procedures, approaches to training and supervision, and creation of computer-assisted decision aids”.

From the technical perspective (Mock et al,1989), there are basically three areas of concern with respect to audit judgement - philosophical, statistical, and methodological. The philosophical issues involves questions about introspection and the nature of the data. The statistical considerations include the difficulties associated with measurement, sampling, experimental design and inference. And, methodological concerns include the effect of methods used on the judgement process and consequently on the value of the results obtained.

I will use my own interdiscipline, Systems Research, as my springboard. But before I take the leap I would like to emphasize that my concern is not with what systems research is, but rather with what we can make of it in the methodological perspective of audit judgement. The central problem of audit judgement methodologies is to establish the relationship between auditing methods and the world of the accounting system in which these methods are used. The accountant is concerned with the syntactic problem of making the accounting system correct and efficient in operation. He is not concerned with the meaning of the accounting system, but the auditor has the semantic problems as his key responsibility. If audit methods

and the accounting system do not relate correctly it will be the auditor's fault.

II. Preoccupation With Partial Understanding

Current behavioral auditing research methodologies are known to provide a partial understanding of audit judgement. The reason for this "partial understanding" is principally the level at which current methodologies tackle the study of audit judgement. Most of the current behavioral auditing research considers the cognitive process of judgement as central to their methods. Methods that are based on the Psychology literature of cognition, emphasizing judgement in isolation from the development of its underlying processes.

Choo (1989), presents us with a social cognition concept called the "Script" claiming that "the recalled decision script is associated with some structured expectations not only about the appropriate decision process, but also about the likely subsequent events resulting from the decision".

While, Shanteau (1989), concludes his investigation of cognitive heuristics and biases in behavioral auditing, arguing that "although the concept of judgemental heuristics seems compelling, the connection between representativeness (or other heuristics) and specific errors has yet to be firmly established. Therefore, the status of judgemental heuristics is problematic". As for biases, Schwartz & Griffin (1986), conclude that it is not clear which factors determine when biases will appear in expert medical judgement. Shanteau (1989), notes that there is a growing debate on the question of whether appropriate normative standards have been used to

define biases. Because if the definition of the normative standard is uncertain, then the identification of a "bias" is equally uncertain. For example, the definition of base rate, depends on the population from which the sample is drawn -a given sample might have come from many populations (Cohen,1981).

Beach et al. (1989), argues that decisions are primarily about: (i) adopting or rejecting goals and the plans to attain accepted goals, and (ii) whether those plans are making enough progress toward goal achievement to warrant their continued implementation. According to Beach et al. (1989), these two types are called "adoption" and "progress" decisions respectively. In presenting (Beach et al., 1989), an Image Theory interpretation of audit decision making based upon analysis by Waller & Felix (1984) and Felix & Kinney (1982), they concluded that "in image theory view, the error decision is a consequence of the inability of the audit process to sufficiently remove doubt about material error rather than a consequence of proving that there is such an error".

It is obvious extremely important for the critical endeavour to specify correctly the assumptions of the above discussed approaches - I shall not pursue it here because it does not strike at the core of the argument. These methodologies deal with audit judgement as though it were a dispersed set of components, e.g., decisions, decision-makers, decision processes, etc. Insofar, as they deal with these components, they are unable to say very much about what their relationships to one another refer to.

In the example based upon the payroll system problem, the flowchart solution (see the appendices), reveals a concern solely with the

procedural level of the system. The processes of recording, collecting, checking, approving and initialling the time cards are all concerned with the bureaucracy overlaid upon it. This reflects the method's concern with procedures processing rather than business requirements. The method fails to address the business aspect of the problem and concentrates the analysis at the procedural level of the bureaucratic system. Such an approach does not permit the substantive business problem -of how to let the employee fill in their worked hours- to be expressed and tackled, except in terms of the procedural detail of the chosen solution.

Perceiving every information system as a message system (Backhouse,1988) overlooks another vital component in human interaction: the use of communication 'speech' acts. In the exchange between an employee of the company and the company itself (through the agency of a foreman), there are a number of these communication acts by which the changing state of mutual social obligations and expectations is achieved:

* Request (Employee to fill in his own time card)

* Identify (Foreman collects his own departmental time cards)

* Approve (Foreman initials complete and accurate time cards)

These social constructs form the backbone of a purposeful social behavior upon which we may develop message systems (Backhouse,1988). The forms of the messages may differ, their mode of delivery (manual, automated, etc.) may change, but the meaning of them must remain fixed (Backhouse,1988), or else uncertainty and confusion will prevail. Whilst individual auditors might be aware of this problem (meaning) and tries to

resolve it, current methods of analysis do not handle this fundamental aspect of information systems.

The MEASUR method (Stamper et al.,1988) provides an insight to this problem and has as one of its tools Conversation Analysis, which emphasizes the communication of intentions, while other tools include, Collateral Analysis, Evaluation Framing, and Functional Subsystems Analysis. The use of this methodology with its various tools aims initially at relating the formal systems (Accounting and Auditing) we intend to tackle to the informal world of social behavior. The deployment of which will lay down the foundations to understanding their relationship to one another.

III. Audit Judgement - A Systems Perspective

III.A. Audit Judgement As A System

The term ‘System’ (Ackoff,1960), is used to cover a wide range of phenomena. It may include, for example, number systems, accounting systems, auditing systems, philosophical systems, control systems, educational systems, information systems, and communication systems. Some of these are conceptual and others are physical entities. Ackoff (1960), defines a system as “any entity, conceptual or physical, which consists of interdependent parts”. In systems research our sole interest is in the ones that displays behavior. This leads to conclude (Ackoff,1960) that, systems research is only concerned with behavioral systems which are subject to control by human beings. These systems consists of parts each of which displays behavior too. Ackoff (1960), takes it further and defines behavioral systems as “a conceptual construct as well as a physical entity, since such a system may or may not be treated as a system, depending on the way it is conceptualised by the person treating it.”

I would like to consider the following proposition so as to explain audit judgement:

“It is to establish a understanding of the relationship between the Auditing system and the world of the Accounting system in which it is used.”

By adopting the above proposition with reference to systems research as was earlier outlined, I would like to treat audit judgement as a

behavioral system, where the outcome of its behavior is conceptualised as the product of the interactions of its parts.

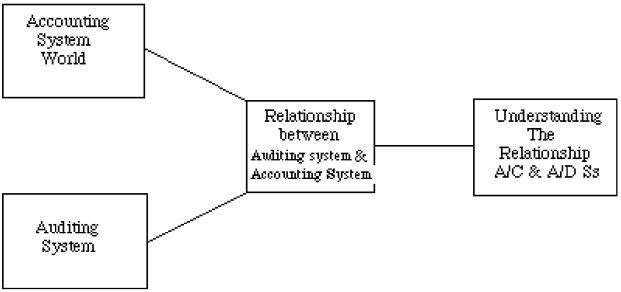


Fig. 1 - Audit Judgement System

The audit judgement system as outlined in figure (1), is composed of the following parts: (a) the world of the accounting system being examined; (b) the auditing system; (c) the relationship between the auditing system and the world of the accounting in which it is used; and (d) the understanding of the relationship between the auditing system and the world of the accounting system in which it is used. The outcome of this system's behavior which is "Audit Judgement", is a product of the interactions of its parts (a-d).

III.B. Audit Judgement As A Business System

We can view a Business system (fig.2), according to Backhouse (1988) conception of an information system, as a series of steps leading from the physical level towards the business level. At the business level,

commitments are made and obligations entered into by the contracting parties. While at the physical level, transactions are made and devices are used to account for them. We find that in between those two levels (Stamper,1973), a distinction is being made between the codes; their structure and usage; their meaning; and their perception that influence human behavior. If we adopt this view to account for the dynamics of the audit judgement system, we will find that: (a) the accounting and auditing systems tend to focus on the lower end of the staircase, representing the codes of the business system; (b) the relationship between the auditing system and the world of the accounting system in which it is used, represents the syntax and grammar that makes use of the system codes; (c) the understanding of the previous relationship, provides the meaning for the use of these codes; and finally, (d) the pragmatical level in the staircase which is concerned with the relationship between the perception of the meaning being established in the previous level and the human behavior, that is, audit judgement.

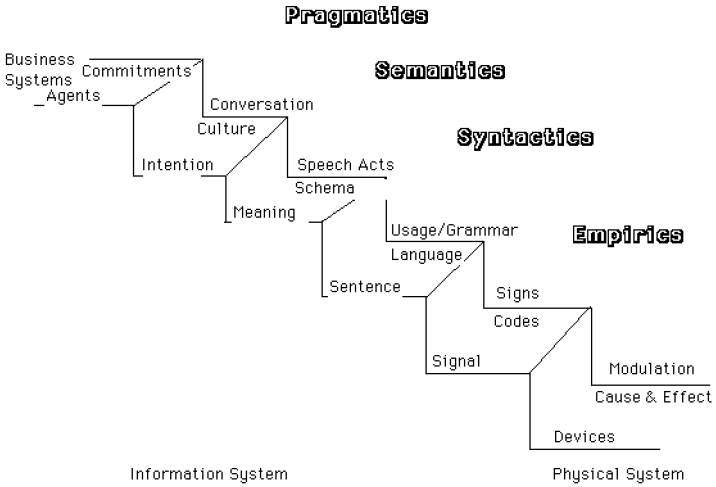


Fig. 2 – Steps From The Physical To The Business System

It is clear from the above, that in order for the auditor to establish an understanding of the relationship between the auditing system and the world of the accounting system in which it is used, he needs to treat the semantical level within the business system perspective as central to his methods.

IV. Meaning - A Central Concern To The Auditor

Anything in this world can be regarded as a sign that holds a message of some meaning to someone. The understanding (Mickhail,1989) of this message may invoke a certain pattern of behavior. People behaves differently, where they may act or may not act at all. The semantic paradigm of understanding the relationship between the auditing system and the world

of the accounting system in which it is used is central to my proposed approach to formulating audit judgement.

Harman (1968), distinguishes between three levels in the theory of meaning. Firstly, the meaning of thoughts, which attempts to explain what it is for a thought to be the thought of so-and-so, etc. As we have seen earlier on, most of the current approaches treats the meaning of thought as central to their methods. Secondly, the meaning of communication, which attempts to explain what it takes to communicate certain information.In other words, the meaning of a message. Finally, the meaning of speech acts, which explains how the existence of social institutions, rituals, or practices of a group of speakers can make certain acts possible, e.g., how the existence of an institution of banking can make possible writing a cheque. In that example, the institution confers meaning on an act like writing one's name on a piece of paper. My concern is based on Harman's three levels of meaning though the implementation of some of the methodology's tools demonstrates the second and third levels. As for the first level of meaning, the meaning of thoughts, it is beyond the scope of my discussion.

Following Backhouse's analogy (1988) of a business system, I am concerned in my discussion with the first three levels in the staircase (fig.2), especially the meaning of the message(s). The message being, the relationship between the auditing system and the world of the accounting system in which it is used, and the meaning is merely Understanding it. And as the meaning of the message corresponds to Harman's (1968) second level of meaning then, I shall focus in my implementation on that level only. Backhouse (1988), claims that their semantic theory is central to their

methods and it assumes that there is no knowledge without a knower and no knowledge without action. If we relate this proposition to our problem of judgement, we will find that ‘understanding the relationship...’ doesn’t exist without an ‘auditor’ and no ’understanding the relationship...’ without ‘judgement’. In other words (Backhouse,1988), “there is no business activity without an agent And the shape of the world he believes he inhibits is reflection of the way he wants to act, and different agents may view the world quite differently from one another..”.

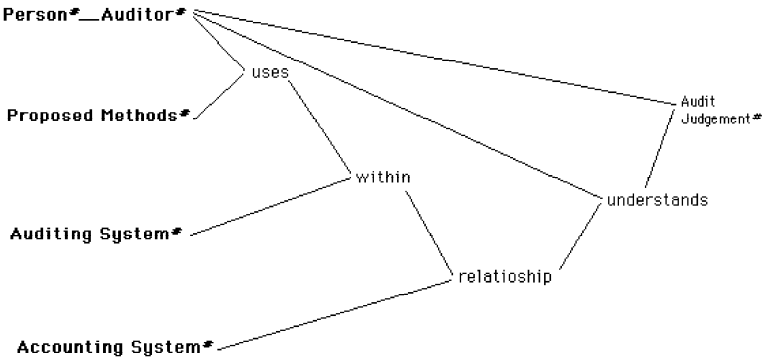


Fig. 3 – Ontology Chart For The Audit Judgement System

In applying this view to our context (fig.3), we shall find that, there is no business (audit judgement system) without an agent (auditor) and the shape of the world (relationship between....) he believes (understanding the relationship...) he inhibits (forms an audit judgement) is reflection of the way (my proposed method) he wants to act, and different agents (auditors) may view (understand....) the world quite differently from one another.

V. Proposed Methodology (MEASUR) And Its Tools

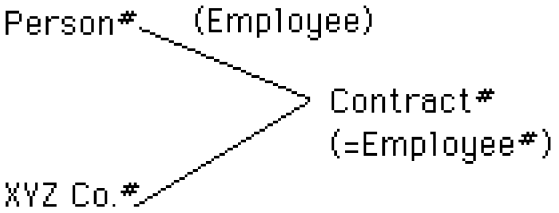
Present methods of analysis assume that, there is a single objective reality (Backhouse,1988) that our analysis will reveal, and all agents will be dealing with that one reality. In order to reflect the needs of different users, we need to enrich the analysis of the business system by taking into account the existence of different views for the same problem. Current methods of analysis focuses on the procedural aspects of the system deflecting attention from the substantive. Indeed the vocabulary available to auditors using current analytic tools makes it extremely difficult to deal directly with the substantive system. This is done in the MEASUR (Stamper et al.,1988) methodology using one of its tools called: Semantic Analysis.

Semantic Analysis, by way of discussion extracts the users terminology used to explain their business problems. We exclude from the terminology list, the ones concerned with the activity procedures and controls. This is to narrow our focus upon the substantive problem enabling us to isolate the core of the business and construct a semantic network or ontology chart which shows how one entity or behavior pattern is existent dependent upon others. Applying Semantic Analysis in this way (Backhouse,1988), forces the auditor to consider carefully the terms employed in the discourse and strive to reveal the required substantive behavior. This process forces the auditor to search for the real meaning of the business problem, hence, performing business analysis rather than merely procedures analysis.

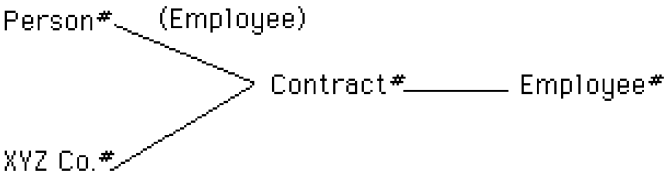
In the Ontology chart (fig.4), every entity (in MEASUR these are called ‘affordances’) can only exist during the co-existence of its

anticedent(s) to their left. Each existence has a start and finish time and a beginning and ending process. Some of the problems encountered in the resolution of the Ontology chart which resulted from semantic analysis, may be highlighted:

- **Contract**: is there in fact a separate contract between the company and its employees for each employee number :



or is there one contract upon which the various employee numbers depend (ontologically) ?:



this question might be just a legal nicety or could be an important business matter.

Fig. 4 – Ontology Chart for The Payroll Problem

* **Fills**: the person filling in his hours worked is unlikely to be interested in particular identifiable hours worked but in filling in a given number of hours worked. If the system were to require tracking particular hours worked then we would write “hours worked#” instead of just “hours worked” to denote that we are interested in the identity of particular hours. It is possible that such a requirement could be introduced as a control on the

worked hours especially the payroll expense is a major expense for the company.

If we have a closer look at these problems, from Harman's (1968) third level of meaning: Speech Acts, we will find that in the first problem "Contract", the company confers a certain meaning on the act of employment. The meaning conferred in "contract" might be the legal 'obligatory' dimension of employment. Another meaning might be a 'promise' to perform the job as outlined in the "contract". As for the second problem "Fills", the intentionality of both the employer and employee towards this act are quite different. The employee's propositional attitude (Bechtel, 1988) behind the act of "Fill" in his hours worked range from filling in the correct number of hours worked to filing in an incorrect number. The company may have an intention of controlling the act "fill" by introducing a new way of doing the act "fill" such as filling in the specific hours of the day being worked.

There is a human-factors problem in using Semantic Analysis to reveal potential instabilities in a system. This problem is that a shift of mental models has to be made from working in terms the procedural system to working in terms of the substantive business system where much more complex semantic problems arise.

In sketching the way in which subjective uncertainty resolution occurs - that is, by resort to sources of belief strength independent of evidence from the empirical world - the principles of the theory of meaning explains how problem situations are set up within which judgement methods and tools can operate.

VI. Conclusions

I have presented an information systems interpretation of audit judgement based upon analysis by Backhouse (1988) of information systems methods. The interpretation is quite different from that provided by current methods and it is offered as an alternative to the usual way of thinking about audit judgement.

The audit judgement system as seen as a message system having four major components. The first of which is the codes that are present in the message. These codes are the auditing system and the world of the accounting system. The second component, is the syntax or grammar or the way these codes are to be used. The way of usage is the formulation of the relationship between the auditing system and the world of the accounting system in which it is used. The third component, is the meaning behind the usage of these codes. The meaning of the formulated relationship,, which is the understanding of the relationship... Finally, the fourth component, is the pragmatic behavior as related to the meaning established earlier on. This behavior is the audit judgement that is based on the understanding perceived in the third component.

My concern throughout the discussion was focused on the third level of analysis “Meaning” of the message system. In doing so, I have considered methodologies other than the current ones to be able to provide a richer cognitive approach to understanding the audit judgement system. Drawing upon these conclusions, it is now possible to be more specific about the aims being demonstrated. This might be seen to have three interrelated intentions (Jackson,1990), that can be regarded as future

research directions: (i) to develop behavioral auditing research beyond its current limitations and, in particular to facilitate the emergence of new methodologies to tackle problem-situations in auditing judgement; (ii) to reflect upon the relationship between different organisational and societal interests and the dominance of particular behavioral (Psychological) methods and techniques; (iii) to provide practically useful, theoretically sound approaches to problematic ‘audit judgement’ situations, which will assist in the larger process of progressive social change.

However, I would like to note that the scope of this exercise was limited in nature and further detailed examination is required, though it is a step forward to see things in their right context.

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Appendix

This section describes an illustrative payroll system (taken from the EDP Audit Workshop 1990 exercise). The payroll system represents the accounting system as in fig. (1). As for the auditing system, I shall be concerned with one of the stages (Fig.5) of the systems based audit approach (Cooper et al.,1989), namely: Ascertain and record Accounting and internal Control System.

There are a number of ways to record a system. I shall use a Flowcharting technique that is commonly used in practice. The resulting flowchart (Fig.6) represents the relationship between the audit system (recording the payroll system) and the world of the accounting system (payroll system problem) in which it is used.

The Payroll System

XYZ Company is a large manufacturing company in which payroll expense represents a very high proportion of the operating expenses. XYZ company allows hourly employees to complete their own time cards by filling in a box on a card daily. The cards are collected by the foremen of the various departments and checked for completeness and accuracy. Once approved and initialled, the cards are read by a scanner device that reads the employee number, department, and hours worked. This information is written onto a magnetic tape that is processed weekly by the company's mainframe computer.

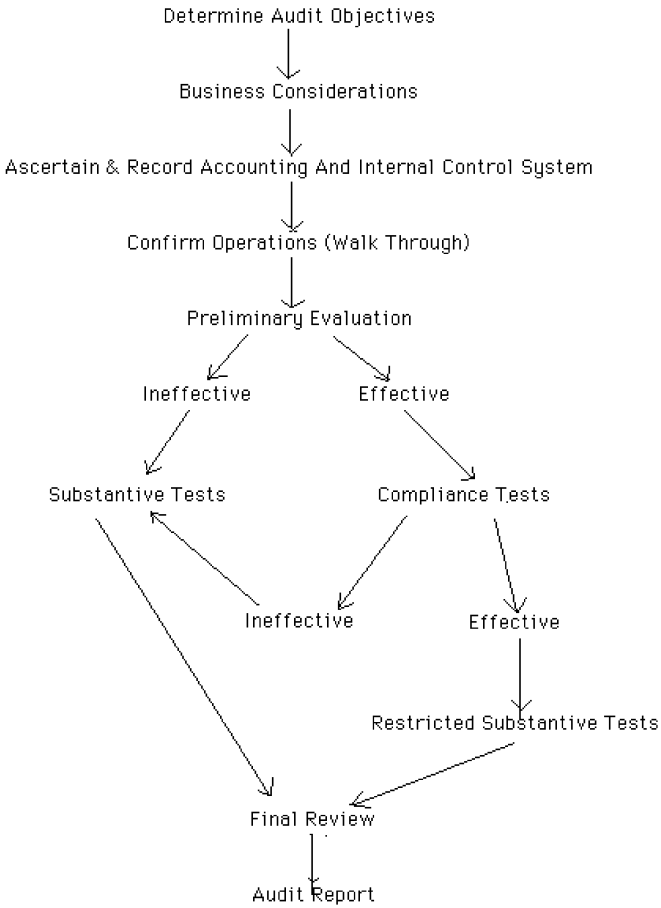

Fig. 5 – Systems Based Audit Approach

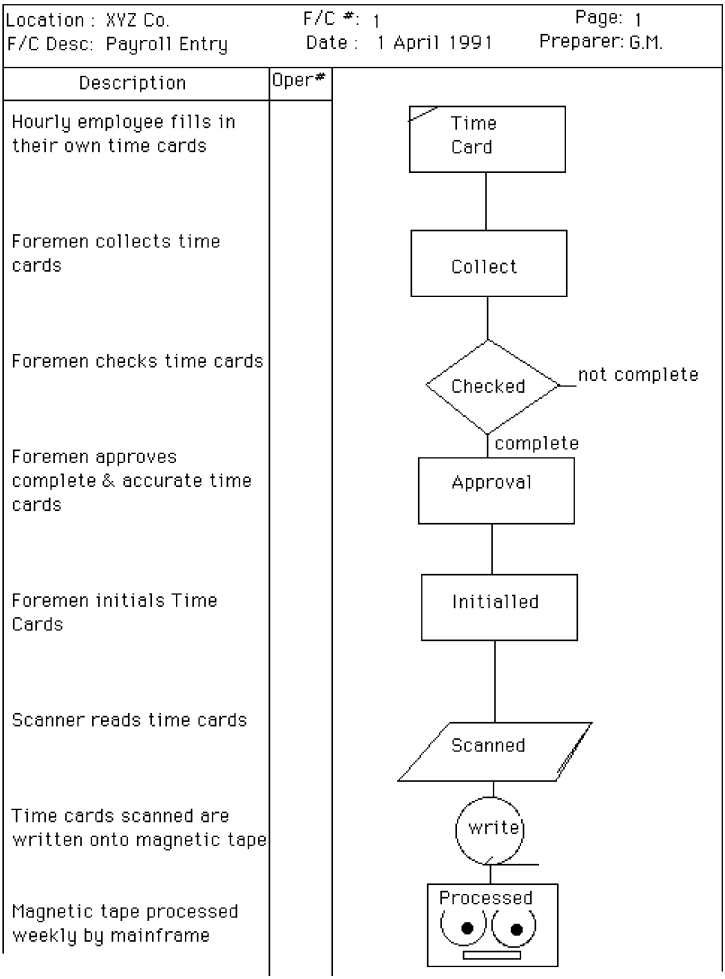

Fig. 6 – Payroll System Flowchart