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Paradigm Blurred: Opera Cake in Management Accounting Information Research

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Abstract

The conventional tradition of management accounting information system (MAIS) assumes that all people stuck unconsciously in cultural dopes. Furthermore, MAIS researchers are quite satisfied with anything but assuring the compliance level. Consequently, it will lead to the saturated research findings. Instead, ethnomethodology is an alternate to uncover how the interactants do his daily activities. Instead, its limitation in describing situated actions allows an activity theory from another paradigm to frame those artefacts into a visible construction. Moreover, those combinations permit the potential synergy that might be analogous with an opera cake, and brings to another new horizon in MAIS research

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1. Introduction

This paper aims to offer the usage of mixed methods between interpretive and positivistic paradigms. Mixed two or more methods from different paradigms may make the position of a Management Accounting Information Research (MAIS) paradigm become blurred. However, mixing itself is not prohibited in a research. Instead, the overlap

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between paradigms like opera cake will bring its own strengths in the MAIS researches. Compliance with one of the paradigms, as done by the most MAIS researchers, will make research repository become saturated and bland.

Compliance with a particular paradigm is actually associated with a partial view of the MAIS researchers. Most researchers argue that MAIS is an information system existing in the rational organization (Button et al., 2012, p. 238). This view leads to a belief that the system will adhere to a path having been outlined previously (Roberts and Scapens, 1985). In fact, the information system includes not only various structures and operational procedures, but also involves human (Vickers, 1999). The involvement of the human element allows for differences in the perception of the raw information system embedded, thus potentially lowering or even negating the information system applications (Roberts and Scapens, 1985). That is why the formal information system at the technical level is often considered a failure. The illusion of the information system failures is due to the use of less appropriate glasses in view of a phenomenon or too narrow definition of MAIS. As a result, a system deviating from the applicable pattern is regarded as a failure that should be immediately addressed. To that end, this article seeks to demonstrate the use of alternative methodologies that can be used by researchers to uncover various phenomena associated with the MAIS paradigm with an opera cake, thereby the research is able to capture a phenomenon wholly (Lee (1991) and Mingers (2001)).

2. MAIS and ASIA Cultures

MAIS is a flexible information system that is intended to meet the information needs of the management for managerial purposes (Hansen and Moven (2007, p. 4). To that end, the format and content of reports prepared by an organization may differ from one company to another. In this case, Choe (2004) uncovered the differences in management accounting information systems (MAIS) in terms of pressure and content of information between companies in Australia and Korea. Therefore, MAIS will always adapt to the culture where the information system resides.

Certain social groups living in a particular culture may have a certain social rules. The social rules are preconditions that underlie a communication, as the way by which people communicate with other people is dependent on social practices and specific way of life based on the social conventions (Becker and Mark, 1999), thus every organization is likely to have culture and social conventions which may differ from one to another. Therefore, each organization has a specific organizational culture (Burke, 2007). Differences in organizational culture can generate the differences in information systems existing in an organization (Ardalan, 2007: Avgerou, 2000). Furthermore, since systems of knowledge, beliefs, and values differ from one organization to another, thus the information system in other countries may not be the same as the design of information systems of the Anglo-American countries (Dent, 1991).

Belief and commitment of a community of users cannot be separated from the cultural elements of the applicable system. Communication culture is often divided into two kinds, among others: low-context cultures and high-context cultures. In this context, both differ in how they perceive the meaning of a message generated from an information system.

An information system rooted in the Western world would be developed by means of Western thought. Western communication systems tend to be low context communication, where there is a belief that all messages can be explicit and codified (Martinsons and Westwood, 1997). Meanwhile, the communication system in most Asian countries tend to be high context in which communication is mostly influenced by the proximity of human relationships, the level of social strata, as well as many interpretations in any forms of communication that cannot be expressed explicitly in writing and speech (Nishimura et al., 2008). Thus, the difference in high-context and low-context communication is supposed to be a cause of a formal information system which is actually closely related to Western culture is not entirely acceptable in some Asian countries, although not all Asian countries have a high-context communication, such as South Korea (Thomas, 1998).

Differences in communication system between users of information systems makes the most of the Asian countries do not necessarily rely on information systems. For that reason, most Chinese culture-based companies more commonly use implicit communication in running their business while still applying formal information system (Cunningham, 1996; Martinsons and Westwood, 1997). Thus, the users of information systems with high-context cultures tend to meet their information needs with the help of non-formal information and communication (Agourram and Robson, 2006). Perhaps for this reason, the non-formal communication has very dominant effect in management

accounting information system than the role of a formal communication among a group of companies in Indonesia (Ramli and Iskandar, 2014). Non-formal information system is a social interaction to perform operational activities among the members within an organization, behavior and relationships that occur among those who bring a variety of ways beyond the standard in their work (Adeoti-Adekeye, 1997). Therefore, non-formal information systems are strongly associated with the presence of social interaction, then it can be said that a form of information system is strongly influenced by the surrounding circumstances. In other words, the difference in the situation allows the emergence of many different messages at different times and in different ways in an organization (Yeomans, 2008, p. 273), for instance, the use of non-formal records that, which are both economical and narratives written on scrap paper or in file format hidden in a computer that is used by the management and staff (Clancy and Collins, 1979).

3. The Rise of Non-formal Information System in MAIS

MAIS represents an information stock that meets the needs of management and other users, which is required by the management at all levels (Frezatti et al., 2014) by collecting, classifying, summarizing and reporting the information to the management in planning, controlling and evaluating a variety of production activities of the relevant companies (Bruggeman and Slagmulder, 1995). Furthermore, the content of the information offered by MAIS may cover financial information, production, personnel and marketing (Riahi-Belkaoui, 2002, p. 9). Thus, the role of management accounting information system is very crucial in the company.

Management accounting information system is an information system is closely related to the organizational structure, thus the system information looks more formal (Gerdin, 2005). A formal information system will determine the way in which members of the community communicate. Meanwhile, human involvement in the execution of an information system is strongly influenced by human capability in the form of information behavior. This communication capability is a gift conferred by God, given to all beings in the form of instinct, but such communication capability is also developing, which is supported by the existence of a culture and environment where human being resides (Spink, 2010). These communication capabilities are increasingly developing in line with their ability to think, feel, behave and act (Suriasumantri, 1990, p. 39-54). Therefore, any thing proffered by humans does not necessarily taken for granted. People will use a variety of congenital and acquired capabilities to take actions they confront with.

Presentation of formal information generated by the MAIS will stimulate people to use their information behavior capabilities. The users are automatically considering between the need and availability of information.

If the information provided is satisfactory to them, then they will use it (DeLone and McLean, 1992). However, if not so, they will attempt to find gratification for their information needs (Dougherty, 1999) by using a source other than that offered previously.

The inability of the formal information system in satisfying the information users will open up opportunities for the emergence of other system information which may fulfill the needs of the information users. Information system deemed capable of satisfying the needs of the information users is non-formal MAIS. This information system is developing locally in companies with any forms triggered by the different needs and circumstances surrounding—the information search activity (Wilcox, 1992, pp. 144-145). Therefore, management accounting information system is holistically said to be very situational dependent on various factors (Riahi-Belkaoui, 2002, pp. 139-140). However, unfortunately, most of the studies are less aware of the existence of non-formal MAIS, so that—the phenomenon is much less explored.

4. MAIS and Epistemology

Epistemology has a very essential role in the research and development of information systems, because it illustrates the belief of the nature and basis of the knowledge, particularly in connection with the limitations and validity (Ratcliff, 2013). However, researchers need to be aware that focusing only on one type of paradigms will cause them to see something from one particular side (Mingers, 2001).

The phenomenon also occurs in the realm of MAIS research. Conventional MAIS has been placed on the objective and regular area in the realm of the functional paradigm assuming the organization as a stable phenomenon

(Hopper and Powell, 2005). Such a paradigm realm looks at the human just as a responder that is the product of a wide range of environmental pressures; and perceives reality as something concrete, external and real (Morgan and Smircich, 1980), consequently trigger an illusion that a stimuli can be predicted and predetermined (Morgan and Smircich, 1980, p. 495). As a result, the dominance of mainstream research in the accounting research world may produce an isolation that lead to homogeneity in accounting research (Lukka, 2010) and less heed to other issues such as the freedom of the individual, existential meaning and human identity (Hines, 1989). Furthermore, involvement in a paradigm may also cause non-solution of a subject matter because of the inappropriateness of the tools used (Malmi, 2010).

Therefore, awareness of the existence of alternative paradigms will help researchers to see new possibilities or other possibilities to do a study (Lukka, 2010). The use of other paradigms allow for alternatives to answer accounting questions that cannot be answered using a particular paradigm, because the study is based on problem-driven and not method driven (William, 2009), so that the debate that questioned the realm of a research paradigm should not be exaggerated.

5. Ethnomethodology and Non-Formal MAIS

Term "ethnometodology" itself was actually first coined by Harold Garfinkel inspired by the etnoscience existence when he was involved in a project "Chicago jury" in the 1940s. One branch of ethnoscience is ethnobotany which seeks to explore the taxonomy that is practiced by the natives and compare it with modern taxonomy; then if there is a difference, the researchers will study more about the differences in terms of the local customs and ceremonies of local communities (Lynch, 199, pp. 3-10). Although ethnometodology was inspired by ethnoscience which is based on formal analysis which aims to improve the framework and the contour of a job (Szakolczai, 2000, p. 97), and believed that ordinary society live in order and standard values (Garfinkel and Sacks, 2005, p. 14), as well as generate a belief and recognition that a job has been carried out properly (Garfinkel, 1996). However, ethnometodology is not interested in what you want to search by formal analysis, as ethnomethodology is reluctant to find out fault or overhaul practices to fit the general patterns (Garfinkel, 1967, p. 6), nor is interested in a variety of outcomes generated by the investigation of formal analysis such as policies, methods and the degree of compliance with certain standard (Garfinkel, 1996), and not seeking to convince the truth of a theory (Garfinkel, 1967, p. Viii). Such a policy is referred to as "ethnomethodological indifference" by Garfinkel and Sacks (2005). The depiction of such a phenomenon actually cannot be separated from the view of Garfinkel's indifference in finding a solution to the "problem of social order" (Rawls, 2003, p. 29). In fact, Garfinkel and Sacks argue that various formulas of formal analysis are not solution to the problem of social order (2005, p. 176).

More formal analysis sees the emphasis on a certain model of society (social order), which is based on rational choice theory. Based on the model, humans certainly always act in game arena with a variety of alternative rules prepared in advance in the general culture with a stable community features (Garfinkel, 1967, p. 68). Based on these rules, humans are believed to be unaware of the existence of such a set of rules (Dourish, 2004, p. 75). The condition is often known as the cultural dope by Garfinkel (1967, p. 68).

In line with cultural dopes, Garfinkel disagrees that humans will be trapped in cultural dope restraints (Francis and Hester, 2004, p. 206). However, the actors in a community are figures who understand, take into account, and use their reflexivities to produce, settle, recognize or show rational-adequacy-for-all-practical purposes on a variety of procedures and findings they generate (Garfinkel, 1967, p. 8). In addition, Garfinkel explained that the actors, in an institution where they reside, are not silent but play active role in defining the situation on an ongoing basis in their daily lives, so that the relationship between the actors and the situation surrounding them may constantly change and is not an outcome of the content and cultural rules (Coulon, 2008, p. 3-16).

Regarding these statements, ethnometodology always adapts to the surrounding situation. Therefore, Garfinkel revealed that in addition to the attempt to flick the existence of technical reason, ethnometodology also has a duty to uncover the existence of situated practical action and practical reasoning (Garfinkel and Sack, 2005, pp. 159-170). Practical actions are required to get an explanation from practitioners on the speech of the actors about what they have done (Garfinkel, 1967, p. 7), whereas practical reasoning is required to interpret and rationalize the practical action (Freebody and Freiberg, 2011). Therefore, practical action is inseparable from practical reasoning, because all the practical actions should involve reasoning, while reasoning may include action (Hester and Francis, 2007, pp. 3-4).

Thus, the use of ethnometodology to uncover how the actors play their roles should be considered in the selection of methods in the MAIS research.

6. Activity Theory

Ethnometodology is a way used to uncover hidden rules and structures of daily behavior (Corbetta, 2003, p. 259). In addition, ethnometodology also believes that social meaning is constantly changing which is acquired from continuous process (Newman, 2007, p. 278). Therefore, ethnometodology is actually a method to uncover how human's daily activities are carried out.

Daily activities carried out by actors are actually situational (Hinds, 2008). Therefore, ethnometodology is actually expected capable to uncover various components that surround the event. However, ethnometodology is more focused on the analysis of conversations, making it insensitive to the broader context underlying an activity (Sharrock and Button, 2011, p. 221). Regarding such inability, the activity theory is needed as an additional analytical tool which is expected to overcome the weakness of ethnometodology (Sharrock and Button, 2011, p. 221), because the analysis using Activity Theory will extend the range of analysis rather than just an individual worker (Nurminen, 1997). In addition, the Activity Theory also highlights the relationship among various components forming activity as well as the motivation underlying the ongoing MAIS (Sharritt, 2010, p. 185). The use of Activity Theory as an additional lens will enable researchers to understand the situational background over the course of daily activities.

An understanding of actual activity does not just stop at how a group of people do something, but researchers also need to know about the background of the ongoing process of the activity (Lektorsky, 2009, p. 77). Therefore, the use of Activity Theory allows researchers to map out some questionable aspects related to the activities done (Suchman, 2000). At that position, Activity Theory serves more as a tool to describe an activity (Morf and Weber, 2000). Further, the activity theory is also considered appropriate to capture an understanding of human activity from the perspective of the organization (Bardram and Doryab, 2011).

Activity is not only done individually, but in theory activity, the activity constitutes a collective process, so that the activity is deemed not to belong to an individual (Bardram and Doryab, 2011) and may include a purpose, tasks, methods, procedures, materials, and outcome (Lektorsky, 2009, p. 78). Therefore, an activity system will integrate the subject, object, and a variety of instruments (various material equipment such as signs and symbols) into a unified whole (Engeström, 2003, p. 67).

7. Conclusion

MAIS is an information system highly influenced by the variety of communication, that is further heavily affected by the culture of the users of information systems. High/Low Context Communication Cultures will determine how they communicate. Western culture tends to have a variety of direct and straightforward communication, while Asian culture tends to be not directly in conveying information. Therefore, the Asian culture society often use various forms of communication devices other than raw information systems existing in the company in the form of non-formal MAIS.

The phenomenon of non-formal MAIS is an undeniable, especially in Asian culture society. However, this phenomenon is not much explored yet, because the MAIS researchers much more explore formal MAIS in a company. Non-formal MAIS is not revealed thoroughly because of the too strong belief in the positivistic paradigm, consequently MAIS studies are not able to see the phenomenon in addition to regularity itself. Thus, the need for an alternative methodology is urgent to see the other side of the MAIS.

Ethnomethodologi is one of the methods of the interpretive realm capable of revealing the other side of MAIS. Ethnometodology will uncover a series of phenomena associated with ordinary knowledge and various reasoning procedures by ordinary members of a community (Heritage, 1984, p. 4) by describing and analyzing how people decide what they do, without questioning the truth of practices carried out by MAIS actors (Cuff et al., 2005, p. 160).

Furthermore, ethnometodology is believed to be a method to uncover practical action and practical reasoning. However, does the ethnometodology have full strength to answer every question about it? Instead of a social framework (Coulon, 2008, p. 43) underlying theory of practical action, ethnometodology is not competent enough to

answer questions about how the actors carry out practical action (Powell and DiMaggio, 1991, pp. 15-22). This is probably as meant by Ritzer (2014, pp. 326-328) on weakness of ethnometodology in doing reflectivity, thus there should be marriage with other ideas to further strengthen ethnometodology reflectivity in the situated social context. This indicates the need for synergy and integration (Rirzer, 2008, p. 413) to strengthen the reflectivity on practical action.

One of the tools that can be used here is the activity theory in positivistic paradigm. Activity theory is used as framework by researchers to analyze daily activities carried out by actors. The use of the framework will facilitate the explanation on how the use of various influences of Non-Formal MAIS (tool), hidden rules existing within the organization, the division of labor between a group of people in an activity of the object and outcome (Ditsa, 2003, p. 219). Synergy of ethnometodology and Activity Theory having its own advantages would produce stronger cross results (Ludigdo, 2005, p. 71). Ethnometodology strength to uncover how the actors carry out their roles without trying to question whether it is wrong or right in non-formal MAIS will give its own nuances in information systems research. Meanwhile, the ability of activity theory in making a framework of practical action will describe how the situation while the Non-Formal MAIS takes place. Thus, a presence of both will show another side of MAIS never imagined before.

References

Adeoti-Adekeye, W. B. (1997). The importance of management information systems. Library Review 46(5), 318-327.

Agourram, H., dan Robson, B. (2006). Defining information systems success in Canada. Information & Management & Computer Security, 14(4), 300 - 311.

Ardalan, K. (2007). Corporate governance: a paradigmatic look. International Journal of Social Economics 34(8), 506-524.

Avgerou, C. (2000). IT and organizational change: an institutionalist perspective. Information Technology dan People 13(4), 234-262.

Bardram, J., dan Doryab, A. (2011). Activity analysis: applying activity theory to analyze complex work in hospitals. Paper presented at the Proceedings of the ACM 2011 conference on Computer supported cooperative work, New York.

Becker, B., dan Mark, G. (1999). Constructing Social Systems through Computer-Mediated Communication. Virtual Reality 4, 60-73.

Bruggeman, W., dan Slagmulder, R. (1995). The impact of technological change on management accounting. Management Accounting Research 6, 241–252.

Button, G., Martin, D., O'Neill, J., dan Colombino, T. (2012). Lifting the Mantle of Protection from Weber's Presuppositions in His Theory of Bureaucracy. Human Studies 35, 235–262.

Clancy, D. K., dan Collins, F. (1979). Informal Accounting information systems: some tentative finding. Accounting, Organizations and Society 4(1), 21-30.

Choe, Jong-min. (2004). The relationships among management accounting information, organizational learning and production performance. Journal of Strategic Information Systems 13, 61–85.

Corbetta, P. (2003). Social Research: Theory, Methods and Techniques. Bernard Patrick (Translator). London: Sage Publications.

Coulon, A. (2008). Ethnometodologi (J. Ph., Trans.). Yogyakarta: Genta Press.

Cuff, E. C., Sharrock, W. W., dan Francis, D. W. (2005). Perspectives in Sociology. New York: Taylor & Francis e-Library.

Cunningham, J. B. (1996). Designing flexible logistics systems: a review of some Singaporean examples. Logistics Information Management 9(2), 40-48.

DeLone, W. H., dan McLean, E. R. (1992). Information Systems Success: The Quest for the Dependent Variable. Information Systems Research 3(1), 60-95.

Dent, J. F. (1991). Accounting and organizational cultures: a field study of the emergence of a new organizational reality. Accounting, Organizations and Society 16(8), 705-732.

Ditsa, G. (2003). Activity Theory as a Theoretical Foundation for Information Systems Research. In G. Ditsa (Ed.), Information Management: Support Systems & Multimedia Technology (pp. 192-231). Hershey: IRM Press.

Dougherty, V. (1999). Knowledge is about people, not databases. Industrial and Commercial Training 31(7), 262-266.

Dourish, P. (2004). What we talk about when we talk about context. Pers Ubiquit Comput. 8, 19-30.

Engeström, Y. (2003). Developmental studies of work as a testbench of activity theory: The case of primary care medical practice. In S. Chaiklin dan J. Lave (Eds.), Understanding practice (pp. 64-103). Cambridge.: Cambridge University Press.

Francis, D., dan Hester, S. (2004). An Invitation to Ethnomethodology: Language, Society and Social Interaction. California: Sage Publications Ltd.

Freebody, P., & Freiberg, J. (2011). Ethnomethodological Research in Education and the Social Sciences: Studying 'the Business, Identities and Cultures' of Classrooms. In L. Markauskaite, P. Freebody & J. Irwin (Eds.), Methodological Choice and Design: Scholarship, Policy and Practice in Social and Educational Research (pp. 79-92). London: Springer.

Garfinkel, H. (1967). Studies in ethnomethodology. New Jersey: Prentice-Hall.

Garfinkel, H. (1996). "Ethnomethodology's Program." Social Psychology Quarterly, 59(1), 5-21.

Garfinkel, H., & Sacks, H. (2005). On formal structures of practical actions. In H. Garfinkel (Ed.), Ethnomethodological studies of work (pp. 157-190). New York: Routledge.

Gerdin, J. (2005). Management accounting system design in manufacturing departments: an empirical investigation using a multiple contingencies approach. Accounting, Organizations and Society 30, 99-126.

Hansen, Don R., and Mowen, Maryanne M. (2007). Managerial Accounting (pp. 4-5). 8th. Mason: Thomson South-Western

Heritage, J. (1984). Garfinkel and Ethnomethodology. Oxford: Blackwell Publishers.

Hester, S., & Francis, D. (2007). Analysing Orders of Ordinary Action. In S. Hester & D. Francis (Eds.), Orders of Ordinary Action: Respecifying Sociological Knowledge (pp. 3-12). Burlington: Ashgate Publishing Company.

Hinds, C. (2008). The case against a positivist philosophy of requirements engineering. Requirements Eng 13, 315–328.

Hines, R. D. (1989). The Sociopolitical Paradigm in Financial Accounting Research. Accounting, Auditing and Accountability Journal 2(1), 52-76

Hopper, T., dan Powell, A. (1985). Making sense of research into organizational and social aspects of management accounting: a review of its underlying assumptions (1). Journal of management studies 22(5), 429-465.

Lektorsky, V. A. (2009). Mediation as a Means of Collective Activity. In A. Sannino, H. Daniels dan K. D. Gutiérrez (Eds.), Learning and Expanding with Activity Theory (pp. 75-87). Cambridge: Cambridge University Press.

Expanding with Activity Theory (pp. 73-67). Cambridge: Cambridge University Press.

Lynch, M. (1997). Scientific practice and ordinary action: ethnomethodology and social studies of science. Cambridge: Cambridge University Press.

Ludigdo, U. (2005). Pemahaman Strukturasi atas etika di sebuah kantor akuntan publik. (Doctoral's thesis, Universitas Brawijaya, Malang. Lukka, K. (2010). The roles and effects of paradigms in accounting research. Management Accounting Research 21, 110-115.

Malmi, T. (2010). Reflections on paradigms in action in accounting research. Management Accounting Research 21, 121–123.

Martinsons, M. G., dan Westwood, R. I. (1997). Management information systems in the Chinese business culture: An explanatory theory. Information & Management 32, 215-228.

Mingers. (2004). Real-izing information systems: critical realism as an underpinning philosophy for information systems. Information and Organization 14, 87–103.

Morf, M. E., dan Weber, W. G. (2000). I/O psychology and the bridging potential of A.N. Leont'ev's activity theory. Canadian Psychology, 41(2), 81-93

Morgan, G., dan Smircich, L. (1980). The case for qualitative research. The Academy of Management Review 5(4), 491-500.

Neuman, W. L. (2011). Social Research Methods: qualitative and quantitative approach. 7th ed. Boston: Pearson.

Nishimura, S., Nevgi, A., dan Tella, S. (2008). Communication Style and Cultural Features in High/Low Context Communication Cultures: A Case Study of Finland, Japan and India. Paper presented at the Renovating and developing subject didactics., University of Hensinki.

Nonaka, I. (2007). The Knowledge-Creating Company. Harvard Business Review July-August 2007, 162-171.

Nurminen, Markku I. (1997). Paradigms for Sale: Information systems in the process of radical change. Scandinavian Journal of Information Systems 9(1), 25–42.

Powell, W. W., & DiMaggio, P. J. (1991). Introduction. In W. W. Powell & P. J. DiMaggio (Eds.), The New instituonalism in organizational analysis (pp. 1-40). Ltd. London: The University of Chicago Press.

Ratcliff, R. (2013). Applying epistemology to system engineering: an illustration. Procedia Computer Science 16, 393-402.

Ramli, I., & Iskandar, D. (2014). Control authority, business strategy, and the characteristics of management accounting information systems. Procedia - Social and Behavioral Sciences 164, 384 – 390.

Riahi-Belkaoui, A. (2002). Behavioral management accounting. Westport: Quorum Books.

Ritzer, G. (2008). Sociological Theory (Eighth Edition ed.). New York: McGraw-Hill.

Roberts, J., dan Scapens, R. (1985). Accounting systems and system of accountability-understanding accounting practices in their organizational contexts. Accounting, Organizations and Society 10(4), 443-456.

Sharrock, Wes dan Button, Graham. (2011). Conclusion: ethnomethodology and constructionist studies of technology'. In Mark Rouncefield dan Peter Tolmie, eds. Ethnomethodology at Work. Surrey: Ashgate.

Sharritt, M. J. (2010). Evaluating Video Game Design and Interactivity. In R. V. Eck (Ed.), Interdisciplinary Models and Tools for Serious Games: Emerging Concepts and Future Directions (pp.177-205). New York: Information science reference.

Spink, A. (2010). Information Behavior: An Evolutionary Instinct. Heidelberg: Springer-Verlag.

Suchman, L. (2000). Embodied practices of engineering work. Mind, Culture, and activity 7(1 & 2), 4-18.

Suriasumantri, J. S. (1990). Filsafat ilmu: sebuah pengantar populer. Jakarta: PT Gelora Aksara Pratama.

Szakolczai, A. (2000). Reflexive Historical Sociology. New York: Routledge.

Thomas, J. (1998). Contexting Koreans: Does the High/Low Model Work? Business communication quarterly 61(4), 9-22.

Vickers, M. H. (1999). Information technology development methodologies: Towards a non-positivist, developmental paradigm. The Journal of Management Development 18(3), 255-272.

Williams, P. F. (2009). Reshaping accounting research: Living in the world in which we live. Accounting Forum 33, 274–279.

Wilcox, B. (1992). Time-Constrained Evaluation: A practical approach for LEAs and schools. London: Routledge.

Yeomans, L. (2008). "...it's a general meeting, it's not for us?...?": Internal communication and organizational learning – an interpretive approach. Corporate Communications: An International Journal 13(3), 271-286.