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HOE, Siu Loon and MCSHANE, Steven. Differentiating knowledge processes in organisational learning: A case of "two solitudes". (2010). *International Journal of Organization Theory and Behavior*. 13, (2), 149-168.

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DIFFERENTIATING KNOWLEDGE PROCESSES IN ORGANIZATIONAL LEARNING: A CASE OF "TWO SOLITUDES"

Siu Loon Hoe and Steven McShane*

ABSTRACT. The fields of organizational behavior (OB)/strategy and marketing have taken different paths over the past two decades to understanding organizational learning. OB/strategy has been pre-occupied with theory development and case study illustrations, whereas marketing has taken a highly quantitative path. Although relying on essentially the same foundation theory, the two disciplines have had minimal crossfertilization. Furthermore, both fields tend to blur or usually ignore the distinction between structural and informal knowledge processes. The purpose of the paper is to highlight the distinction between informal and structural knowledge acquisition and dissemination processes and propose new definitions to differentiate them. Future research should bring together cross-disciplinary studies from OB/strategy and marketing to develop an organizational learning framework to test structural knowledge processes alongside informal knowledge processes.

INTRODUCTION

Organizational learning has become a well-entrenched area of research in several business disciplines, including organizational behavior (OB)/strategy (Bogner & Bansal, 2007; Bontis, Crossan & Hulland, 2002; Crossan, Kane, & White, 1999; Grant, 1996), marketing (Jiménez-Jiménez & Cegarra-Navarro, 2007; Kirca, Jayachandran, & Bearden, 2005), human resource management (Lopez, Peon, & Ordas, 2006), and information systems (Bock, Zmud,

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Kim, & Lee, 2005; Chiu, Hsu & Wang, 2006). Although these clusters of scholarship overlap considerably in their subject matter, some have formed their own silos of knowledge. The lack of crossfertilization is most apparent between OB/strategy and marketing. Although both camps have a common organizational learning ancestry (Cyert & March, 1963; Day, 1991, Fiol & Lyles, 1985; Huber, 1991), they have diverged both conceptually and methodologically.

To illustrate these "two solitudes," consider the citations of Narver and Slater (1990), a seminal work on organizational learning in the field of marketing. This journal article was cited in more than 100 ISI-monitored journal articles just within the recent span of January 2006 to September 2007, yet less than a half-dozen of these citing articles were published in OB/strategy journals. On closer inspection, one or two of the OB/strategy articles citing Narver and Slater's work are, in fact, marketing articles (i.e. written by marketing scholars and citing mainly marketing research) that have been published in an OB/strategy journal (e.g., Ellis, 2006). Most other OB/strategy journals citing Narver and Slater almost completely focus on OB/strategy literature rather than any of the marketing research on organizational learning (e.g., Huang & Dastmalchian, 2006; Thornhill & White, 2007). In short, organizational learning scholars rarely integrate both OB/strategy and marketing writing on this subject (for an exception, see Bell, Whitwell & Lukas, 2002).

The purpose of this paper is to highlight two apparent solitudes of OB/strategy and marketing research and propose an area of neglect in both streams viz. informal knowledge processes. The literary allusion of a case of "two solitudes" when differentiating knowledge processes in organizational learning is taken from a novel of the same name written by Hugh MacLennan (1945). The novel's plot evolves around the life and times of fictional character Paul Tallard and his struggles in reconciling the differences between his English and French Canadian identities. Thus, the metaphor, "two solitudes," draws a parallel about differentiating English and French identities vis-à-vis OB/strategy and marketing research on organizational learning processes. This study begins by pointing out how OB/strategy has focused on qualitative research while marketing has adopted a highly empirical approach, which has seemingly advanced in its understanding of organizational learning predictors and outcomes. The study then identifies two flaws in most of that empirical work, both of which may have undermined the value of marketing research findings for the past 15 years. One apparent flaw in past marketing research leads the authors of this paper to present a model that distinguishes organizational learning processes into four quadrants representing knowledge acquisition and dissemination as well as informal and structural knowledge processes. This paper also offers new definitions of informal knowledge acquisition and dissemination and ideas for future organizational learning research in both OB/strategy and marketing that will incorporate both structural and informal knowledge processes.

"TWO SOLITUDES" OF ORGANIZATIONAL LEARNING APPROACH

OB/Strategy scholars have devoted their attention mainly to theory development as well as case studies and other qualitative methods to understand knowledge processes in organizational learning (Bogner & Bansal, 2007; Bontis, Crossan & Hulland, 2002; Crossan, Kane & White, 1999). Very few have ventured into quantitative analysis of organizational learning concepts and relationships (for an exception, see Goh & Richards, 1997). The emphasis on theory development and qualitative investigation has produced several thoughtful models of organizational learning as well as "thick description" of this complex phenomenon. However, the lack of quantitative research may have hindered OB/strategy scholars from developing a more unified and generalizable model of organizational learning. For example, Nonaka, von Krogh, and Voelpel (2006, p. 1197) recently noted that their concept of "ba" (the shared interpersonal space for knowledge sharing) has been empirically under-explored. Lopez Peon, and Ordas (2006, p. 223) reported that there is such a paucity of existing measures for organizational learning constructs that "organizational learning has not yet reached maturity." Jerez-Gómez, Cespedes-Lorentea, and Valle-Cabrerab (2005, p. 719) also observed that most OB/strategy studies take a theoretical view without actually measuring these constructs.

In contrast to OB/strategy research, marketing scholars have empirically measured organizational learning constructs for more than 15 years. Marketing's empirical approach to organizational learning is so well entrenched that the field is now at the stage where meta-analyses of predictors and outcomes of organizational learning have been published (Ellis, 2006; Kirca, Jayachandran, & Bearden,

2005). However, perhaps as a result of its early rush into empirical investigation, the marketing literature appears to have overlooked an important part of the organizational learning process and made questionable assumptions about that process.

The different approaches to organizational learning are taken specifically from OB/strategy and marketing rather than all the other fields that address organizational learning because both OB/strategy and marketing share a common ancestry on the topic (Cyert & March, 1963; Day, 1991; Fiol & Lyles, 1985; Huber, 1991). The earliest mention of organizational learning appears to be by Cyert and March (1963) as a process by which organizations interact with their environments. The central tenet of the work is that organizations are adaptive systems that learn by "exhibiting adaptive behavior over time." (p. 117). Fiol and Lyles (1985) clarified the distinction between organizational adaptation and organizational learning and showed that "change does not necessarily imply learning." (p. 808) Other developments to the concept of organizational learning include the proposal that organizations share the collected information and add on to the organization's memory (Argyris & Schon, 1978). Huber's (1991) division of the organizational learning process into four stages: knowledge acquisition, information distribution, information interpretation, and organizational memory is a major advancement to our understanding of organizational learning behaviors.

Up to this point in time, key conceptualizations of organizational learning have surfaced mainly from OB/strategy authors. Around the beginning of the 1990s, marketing scholars (Day, 1991; Sinkula, 1990) started to incorporate organizational learning ideas into the development of the market orientation concept i.e. organization-wide generation of intelligence on current and future customer needs, dissemination of intelligence across departments, and organizationwide responsiveness to that intelligence (Kohli & Jaworski, 1990). Day (1994b) focused on bottom-up redesign of underlying learning processes to enhance capabilities of market-driven organizations while Sinkula (1994) stressed how organizations process market information. Both Day (1994b) and Sinkula (1994) acknowledged that these principles were derived from models of organizational learning. Subsequently, organizational learning concepts were integrated with market information processing, a subset of market orientation. Almost at the same period, several marketing scholars (Jaworski & Kohli, 1993; Narver & Slater, 1990) also refined the market orientation concept and developed operationalization of this concept that is closely linked to organizational learning processes. Both scales have emphasized the structural aspects and almost completely missed the informal aspects of the processes (Hoe & McShane, 2007).

Before discussing these issues, as well as their relationship to the OB/strategy research, there is a need to provide further background on how these two research camps approach the study of organizational learning processes.

OB/Strategy And Organizational Learning Processes

The OB/strategy literature acknowledges several models, most of which view organizational learning as a set of processes (DiBella & Nevis, 1998; Garvin, 1998; Huber, 1991; Nonaka & Takeuchi, 1995). With more than 750 citations to date, Huber's (1991) organizational learning process model is one of the most widely known and respected in both the OB/strategy and marketing literature. Huber divides the organizational learning process into four components: acquisition, information distribution. interpretation, and organizational memory. Knowledge acquisition is the process by which knowledge is received, either through formal acquisition of knowledge sources (e.g. grafting on new staff) or learning and experimentation process. through Information dissemination is the process by which information is shared within the organization. Huber defines information interpretation as the process by which information is given meaning, such as how it is framed or contextualised. Organizational memory is the process by which knowledge is stored for further use.

DiBella and Nevis (1998) further developed Huber's model by streamlining the stages of organizational learning as well as providing a richer discussion of the variety of activities that fall within each stage of the process. They describe the organizational learning process in three stages: knowledge acquisition, knowledge dissemination, and knowledge use. Knowledge acquisition is defined as the development or creation of skills, insights and relationships. It is also how knowledge is collected (Holsapple & Jones, 2004). Some examples of knowledge acquisition activities include having casual conversation with competitors at trade shows, and conducting regular customer visits and in-house market research. Knowledge

dissemination is the process by which knowledge is shared and diffused throughout the organization (Argyris & Schon, 1978). Knowledge dissemination occurs when knowledge is passed around among individuals and groups. Some examples of knowledge dissemination activities include employees informing other colleagues of plans through hallway conversations i.e. informal conversations and marketing personnel scheduling regular meetings to discuss customers' future needs with departments. Knowledge use refers to the way in which knowledge is applied by members of an organization to better understand the area of assigned work so as to be able to make informed managerial decisions, and implement changes (Maltz & Kohli, 1996; Moorman, 1995). Some examples of knowledge use activities include shaping of organizational policies, implementing new products and services, and increasing productivity through application of acquired and disseminated market knowledge.

Market Orientation And Organizational Learning Processes

In the field of marketing, organizational learning processes are incorporated into the concept of market orientation (Matsuno, Mentzer & Rentz, 2005). Market orientation refers to the organization-wide generation of knowledge (called "intelligence") on current and future customer needs, dissemination of knowledge (intelligence) across departments. and organization-wide responsiveness to that knowledge (Kohli & Jaworski, 1990). It deals with the way market knowledge is managed through knowledge acquisition and dissemination activities such as conducting market surveys and discussion of market trends among departments. The organization-wide responsiveness to such knowledge activities includes periodically reviewing products and services to ensure they meet customers' needs. This responsiveness includes co-ordination among functions. Inter-functional coordination is the coordinated utilization of organizational resources to create superior value for target customers (Narver & Slater, 1990). In essence, market orientation establishes the principles in which an organization should focus on its customers and competitors, and internal functional activities, which have an effect on organizational performance (Han, Kim & Srivastava, 1998; Santos-Vijande, Sanzo-Perez1, Alvarez-Gonzalez, & Vazquez-Casielles, 2005).

Two basic approaches appear with some consistency in the extant literature on organizational learning. The OB/strategy stream

has to do with adopting a more basic and fundamental approach emphasizing theory. The marketing stream, on the other hand, adopts a more hands-on and practical approach. Table 1 compares early writings on organizational learning leading to the development of market orientation.

The starting point of quantitative marketing research in the operationalization of the market orientation construct falls mainly into two main categories based on the works of Narver and Slater (1990) and Jaworski and Kohli (1993). Jaworski and Kohli propose that a firm with a market orientation will exhibit three organizational behaviors: an organization-wide generation of market intelligence pertaining to current and future customer needs, the dissemination of such intelligence across departments and lastly, an organization-wide responsiveness to that intelligence. The emphasis of this definition centers on information processing. Narver and Slater also suggest three aspects of market orientation that are slightly different from those defined by Jaworski and Kohli, namely, a customer orientation, a competitor orientation and inter-functional coordination. A customer orientation is defined as "the sufficient understanding of one's target buyers to be able to create superior value for them continuously." (p. 21) . A competitor orientation implies that "a seller understands the short-term strengths and weaknesses and long term capabilities and strategies of both current and potential competitors" (pp. 21-22). Lastly, inter-functional coordination means "the coordinated utilization of company resources in creating superior value for target customers" (p. 22). It is this final aspect, inter-functional coordination, of the definition that reinforces the organizational behaviors that might facilitate a market orientation.

TABLE 1
A Comparison of Early Organizational Learning Writings Leading to the Development of Market Orientation

	OB/Strategy Stream	Marketing Stream
Literature		- Narver & Slater (1990)
	- Argyris & Schon (1978)	- Jaworski & Kohli (1993)
	- Fiol & Lyles (1985)	- Day (1994a, 1994b)
	- Huber (1991)	- Sinkula (1994)
Emphasis	- Theoretical view	- Measurement and practice view
	- Theory development	- Empircal development

Although there are several interpretations of market orientation (Kohli & Jaworski, 1990; Narver & Slater, 1990), all have an operational focus on market knowledge-processing activities regarding customers and competitors, particularly knowledge acquisition, knowledge dissemination and the ability to behaviorally respond to what is received. Both the Kohli, Jaworski and Kumar (1993) MARKOR scale, and the Naver and Slater (1990) operationalization of market orientation have gained widespread acceptance as a valid and useful measure of market orientation. The key differences between the two operationalization of market orientation relate to the type of information the organization collects about the market and the inclusion or omission of inter-functional coordination (Darroch, Miles, Jardine, & Cooke, 2004). On the former point, the argument focuses on the implicit inclusion of both customers and competitors in a "market". For the purpose of discussion, the MARKOR scale is chosen for further analysis. The reason is because the MARKOR scale emphasizes behaviors or practices that more closely relate to processes of organizational learning, e.g. knowledge acquisition and knowledge dissemination.

Developed in the early 1990s, the MARKOR scale is a measure of market orientation that most closely operationalizes the three organizational learning processes (Kohli, Jaworski & Kumar, 1993; Conduit & Mavondo, 2001; Stone, 2000). Specifically, the 20-item instrument has three dimensions measuring knowledge acquisition, knowledge dissemination and response to knowledge (i.e. knowledge use). MARKOR is a widely adopted measure of market orientation. There is also evidence that MARKOR predicts firm performance better than do other market orientation scales (Ellis, 2006; Oczkowski & Farrell, 1998).

Issues Relating to Marketing Research Flaws on Organizational Learning

Although the MARKOR scale seems to put the field of marketing on a firm footing for modeling the causes and effects of the organizational learning process, a closer inspection reveals two flaws in its approach. One apparent flaw is that although MARKOR distinguishes the three stages of organizational learning, it is considered "a one-dimensional construct with three behavioral components" (Farrell, 2002, p. 4). In other words, most marketing studies have routinely investigated a composite of the three

organizational learning processes rather than each of the three components separately. This practice has likely undermined the predictive value of most marketing research studies on this subject because there is both theoretical logic and empirical evidence that knowledge acquisition, knowledge dissemination, and knowledge use are influenced by different predictors (Hoe & McShane, 2007). OB/strategy studies on organizational learning anecdotally seem to separate these three activities to some extent (Jerez-Gomeza, Cespedes-Lorentea & Valle-Cabrerab, 2005).

The other apparent flaw in empirical marketing studies, at least those relying on the popular MARKOR scale, is that MARKOR measures only systematically planned and organized knowledge acquisition and dissemination activities, whereas more informal organizational learning processes are excluded. With little empirical research in OB/strategy, it is difficult to directly assess the extent to which this oversight exists in these fields as well. A perusal of qualitative OB/strategy research suggests all aspects of the organizational learning process are studied. At the same time, no explicit discussion in either OB/strategy or marketing where these two forms of knowledge acquisition and dissemination are clearly differentiated could be found.

STRUCTURAL VERSUS INFORMAL ORGANIZATIONAL LEARNING

The observations that marketing research has mostly overlooked informal organizational learning processes, and that OB/strategy literature has not explicitly addressed these distinctions, lead to the offer of the following as a guide for future research. Specifically, the authors suggest that knowledge acquisition and dissemination processes should be further divided into structural and informal subtypes on the basis that they are distinct processes and are likely associated with different predictors. Table 2 depicts these four categories along with representative examples.

Structural Knowledge Acquisition And Dissemination

Structural knowledge acquisition and dissemination processes are a planned, organized and systematic way of collecting and sharing knowledge. This means that they are pre-arranged activities to collect and share market knowledge from the customers and

TABLE 2
Structural and Informal Knowledge Acquisition and Dissemination
Practices

	Informal	Structural
Acquisition	 Coincidental conversations with customers Unexpected observation of a competitor's new service 	Focus group sessions with customersSystematic environmental scanning
Dissemination	 Sharing information with coworkers through hallway conversations Assisting a coworker on a problem 	Scheduled staff meetings to discuss market trends Distribution of market research reports to staff

competitors. Structural knowledge acquisition activities include all the various market research methods available to organizations, such as experiments, surveys and qualitative research. Some structural knowledge acquisition activities include meeting customers on a periodic basis to find out the products and services to meet their future needs, and performing significant amounts of in-house market research (Haas, 2006; Kohli, Jaworski & Kumar, 1993). These organizational activities help to improve the pool of market knowledge by systematically collecting key customer and competitor knowledge on a planned schedule and in an organized manner. Some examples of structural knowledge dissemination activities include scheduled inter-departmental meetings to discuss market trends and development, regular market updates by sales and marketing staff and regular distribution of customer satisfaction feedback at all levels of the organization (Fedor et al., 2003). These structural knowledge dissemination processes serve to increase the flow and circulation of knowledge within the organization, which provides greater visibility of market knowledge to more people. Structural knowledge processes have received much more attention, particularly in the marketing literature (Conduit & Mavondo, 2001; Day, 1994a; Kohli & Jaworski, 1990; Li & Calantone, 1998).

Informal Knowledge Acquisition And Dissemination

Several scholars have suggested that, parallel to the concepts of structural knowledge processes, there also exist informal knowledge processes (Anderson & Narus, 1990; Argote, McEvily & Reagans,

2003; Holsapple & Jones, 2004; Johnson, Donohue, Atkin, & Johnson, 1994; Maltz & Kohli, 1996; McDermott, 1999; Ribbens; 1997). However, discussion of these informal organizational learning activities has been cursory at best (Jaworski, Macinnis & Kohli, 2002; Johnson, 1990; Maltz & Kohli, 1996).

Stohl and Redding (1987) offer two criteria to distinguish between structural and informal knowledge processes: spontaneity and voluntariness. Spontaneity refers to whether the knowledge activities are planned ahead of time. For example, sharing knowledge during an unexpected meeting in the hall is spontaneous, whereas disseminating knowledge during a monthly review meeting is nonspontaneous (Maltz & Kohli, 1996). Voluntariness refers to whether the acquisition or dissemination of knowledge was mandated by the organization. For example, voluntary knowledge sharing occurs when an employee shares the necessary market knowledge on his or her own without being told by the managers. Using the two criteria set by Stohl and Redding (1987), informal knowledge process can be defined as spontaneous and voluntary activities. Informal knowledge processes usually do not follow the reporting structure of the organizational chart and tend to be more personal in nature (Jaworski, Macinnis, & Kohli, 2002; Johnson et al., 1994; Thompson, 2005). Such informal knowledge processes do not follow the hierarchical structure and are not affected by formal authority. Activities in an informal knowledge process are generally more ad hoc and casual in nature (Storck & Hill, 2000).

Similar to structural knowledge processes, informal knowledge processes may exist as acquisition or dissemination activities. Informal knowledge acquisition is characterized by the spontaneous and voluntary way of collecting market knowledge from customers and competitors. Such informal knowledge acquisition activities could include calling a friend who is working with the customer to find out more about their organization should the need arise (Soekijad & Andriessen, 2003), and informally speaking with the competitors at trade shows to better understand the market. The first example – calling a friend who is working in the customer's organization – can only be achieved spontaneously instead of relying on planned, organized activity. This is because this knowledge collection method can only be done on an ad hoc and casual basis. Any effort to systematically perform such a collection task will be difficult to

enforce and co-ordinate since it depends on the relationship between the employee and friend concerned, and the employee volunteering to perform the task. In the second example in which the competitors' knowledge is "sought" at a trade show, the knowledge collection will also depend on the spontaneity of the situation between the employee and competitor at the trade show, and whether the employee is willing to oblige in such an endeavour.

Informal knowledge dissemination is defined as the spontaneous and voluntary way in which market knowledge is distributed within an organization. Some examples of informal knowledge dissemination are informing colleagues through hallway conversations of plans and issues, and working on a casual, one-to-one basis with another colleague rather than jointly as a formal group (Akgun, Lynn & Byrne, 2003). Generally, such corridor conversations happen by chance and the employees need to voluntarily initiate the talk to exchange knowledge. Also, in an informal personal interaction situation, the probability of happenstance knowledge sharing would be higher given the more casual and relaxed environment (Storck & Hill, 2000). Thus, informal knowledge processes facilitate knowledge acquisition and dissemination, and maintain a sense of organizational cohesion and autonomy (Smelser, 1963). This viewpoint recognizes that informal knowledge processes are not solely based on the positions individuals occupy within formal organizations or accepted norms or procedures.

FUTURE RESEARCH AND CONCLUSION

Structural knowledge acquisition and dissemination are overt aspects of how an organization processes information (Day, 1991; Haas, 2006; Kohli & Jaworski, 1990). The systematic, organized and structured acquisition and dissemination of market knowledge is usually a result of an organization's formal reporting structure. As an organization learns to make sense of its markets, it develops rules for harnessing knowledge about markets that manifest themselves in internal organizational norms and policies, and organizational actions like product, promotion, distribution, and pricing strategies and tactics (Menon, Thompson & Choi, 2006). Goh (1998) suggests that knowledge acquisition is useless unless the knowledge can be disseminated across the organization. Over time, the acquired and disseminated knowledge would result in the

organization's developing a large stock of knowledge. A greater stock of acquired knowledge would lead to employees having more choices in tapping such knowledge and using them in their daily work. Similarly, the greater the extent that knowledge is disseminated in an organization, the higher the tendency for employees to use the knowledge. Supporting this view, many previous research studies suggest that structural knowledge acquisition and dissemination promote knowledge use (Conduit & Mavondo, 2001; Kohli, Jaworski, & Kumar, 1993; Stone, 2000). This argument leads to the propositions:

P1: Structural knowledge acquisition is positively associated with market knowledge use.

P2: Structural knowledge dissemination is positively associated with market knowledge use.

The distinction between structural and informal activities is important because it captures the differences in outlook and fundamental assumptions about the nature of employee interactions within an organization. This is because the actual informal knowledge acquisition and dissemination relationships of an organization may be less rational than the structural processes (Johnson, 1990). Since there are numerous informal exchanges at work as a result of human interactions, there is also plentiful of informal knowledge acquired and disseminated which lead to an improved knowledge advantage. In an informal setting, employees are more likely to seek clarifications given the more spontaneous and relaxed environment. Informal knowledge processes generally help employees cope breakdowns in the organizational structure's structural knowledge processes (Deetz, 1995). Since informal knowledge processes are more spontaneous and voluntary, they may serve to compensate for the structural knowledge processes' "shortcomings." The informal sources of learning take into account trial-and-error experiences with past decisions directed toward customers, feedback from seller contacts with individual customers, and managers' personal observations of customers. Hedlund (1994) and Walsh (1995) found that such social processes play an important role in the transition of knowledge across individuals or group.

Given the pervasiveness of informal knowledge acquisition and dissemination activities, it is argued that informal knowledge

processes mirror structural knowledge processes in contributing to knowledge use. Furthermore, not only do informal acquisition and dissemination have an effect on knowledge use but the effect may even be greater than those of structural knowledge acquisition and dissemination. Thus, this argument leads to the propositions

P3: Informal knowledge acquisition is positively associated with market knowledge use.

P4: Informal knowledge dissemination is positively associated with market knowledge use.

To date, very few empirical studies have been conducted in either OB/strategy or marketing to better understand the predictors and dynamics of informal knowledge acquisition and dissemination (Argote, McEvily & Reagans, 2003; Jaworski, Macinnis & Kohli, 2002; Johnson, 1990). These propositions arose as a result of the marketing research flaw of focusing mainly on structural knowledge processes and neglecting informal knowledge processes. Through earlier discussions on the need to differentiate between structural and informal knowledge processes, these propositions serve as a foundation for future research on organizational learning. Thus, an area for future empirical research is a test of a combined model of informal and structural knowledge processes. OB/strategy scholars should now move toward a testable model of knowledge acquisition and dissemination, possibly with other antecedents. Such an integrated framework could be tested using structural equation modeling. It is recommended that more cross-disciplinary research and recognition between OB/strategy areas and marketing be conducted to leverage knowledge discoveries from all areas. It is suggested that OB/strategy scholars should pay more attention to the market orientation literature in marketing. On the other hand, marketing researchers may need to step back from their existing models which have a strong emphasis on construct measurement and reconfigure their measures to better capture and distinguish informal and structural knowledge processes. One way to develop appropriate measures of informal knowledge acquisition and dissemination activities is to revisit qualitative studies of knowledge processes.

This paper contributes to the organizational learning literature in a number of ways. The paper has identified the importance of informal knowledge acquisition and dissemination in organizational learning by noting and comparing the "two solitudes" of OB/strategy and marketing. It suggests that informal knowledge processes exist alongside structural knowledge processes in organizations. Secondly, the paper proposed new definitions to differentiate structural and informal knowledge acquisition and dissemination. Finally, ideas for future organizational learning research in both OB/strategy and marketing that will incorporate both structural and informal knowledge processes were developed.

REFERENCES

- Akgun, A.E., Lynn, G.S., & Byrne, J.C. (2003). "Organizational Learning: A Socio-Cognitive Framework." *Human Relations*, 56 (7): 839-868.
- Anderson, J.C., & Narus, J.A. (1990). "A Model of Distributor Firm and Manufacturer Firm Working Partnerships." *Journal of Marketing*, 54 (1): 42-58.
- Argote, L., McEvily, B., & Reagans, R. (2003). "Managing Kknowledge in Organizations: An Integrative Framework and Review of Emerging Themes." *Management Science*, 49 (4): 571-582.
- Argyris, C., & Schon, D.A. (1978). Organizational Learning: A Theory of Action Perspective. Reading, MA: Addison-Wesley.
- Bell, S.J., Whitwell, G.J., & Lukas, B.A. (2002). "Schools of Thought in Organizational Learning." *Academy of Marketing Science Journal*, 30 (1): 70-86.
- Bock, G.W., Zmud, R.W., Kim, Y.G., & Lee, J.M. (2005). "Behavioral Intention Formation in Knowledge Sharing: Examining the Roles of Extrinsic Motivators, Social-Psychological Forces, and Organizational Climate." MIS Quarterly, 29 (1): 87-111.
- Bogner, W.C., & Bansal, P. (2007). "Knowledge Management as the Basis of Sustained High Performance." *Journal of Management Studies*, 44 (1): 165-188.
- Bontis, N., Crossan, M.M., & Hulland, J. (2002). "Managing an Organizational Learning System by Aligning Stocks and Flows." Journal of Management Studies, 39 (4): 437–469.
- Chiu, C.M., Hsu, M.H., & Wang, E.T.G. (2006). "Understanding Knowledge Sharing in Virtual Communities: An Integration of

Social Capital and Social Cognitive Theories." *Decision Support Systems*, 42 (3): 1872-1888.

- Conduit, J., & Mavondo, F.T. (2001). "How Critical Is Internal Customer to Market Orientation?" *Journal of Business Research*, 51 (1): 11-24.
- Crossan, M.M., Kane, H.W., & White, R.E. (1999). "An Organizational Learning Framework: From Intuition to Institution." *Academy of Management Review*, 24 (3): 522–537.
- Cyert, R.M., & March, J.G. (1963). *A Behavioral Theory of The Firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Darroch, J., Miles, M.P., Jardine, A., & Cooke, E.F. (2004). "The 2004 AMA Definition of Marketing and Its Relationship to a Market Orientation: An Extension of Cooke, Rayburn & Abercrombie (1992)." Journal of Marketing Theory and Practice, 12 (4): 29-38.
- Day, G.S. (1991). Learning about Markets. (Marketing Science Institute Report No. 91-117). Cambridge, MA: Marketing Science Institute.
- Day, G.S. (1994a). "Continuous Learning about Markets." *California Management Review*, 36 (4): 9-31.
- Day, G.S. (1994b). "The Capabilities of Market-Driven Organizations." *Journal of Marketing*, 58 (4): 37-52.
- Deetz, S. (1995). Transforming Communication, Transforming Business: Building Responsive and Responsible Workplaces. Cresskill, NJ: Hampton.
- DiBella, A.J., & Nevis, E.C. (1998). How Organizations Learn: An Integrated Strategy for Building Learning Capability. San Francisco, CA: Jossey-Bass.
- Ellis, P.D. (2006). "Market Orientation and Performance: A Meta-Analysis and Cross-National Comparisons." *Journal of Management Studies*, 43 (5): 1089-1107.
- Farrell, M. (2002). "A Critique of the Development of Alternative Measures of Market Orientation." *Marketing Bulletin, 13* (4): 1-13.
- Fedor, D.B., Ghosh, S., Caldwell, S.D., Maurer, T.J., & Singhal, V.R. (2003). "The Effects of Knowledge Management on Team

- Members' Ratings of Project Success and Impact." *Decision Sciences*, 34 (3): 513-539
- Fiol, C.M., & Lyles, M.A. (1985). "Organizational Learning." Academy of Management Review, 10: 803-813.
- Garvin, D.A. (1998). "The Processes of Organization and Management." Sloan Management Review, 39 (4): 33-50.
- Goh, S.C. (1998). "Toward a Learning Organization: The Strategic Building Blocks." S.A.M. Advanced Management Journal, 63 (2): 15-22.
- Goh, S. C., & Richards, G. (1997). "Benchmarking the Learning Capability of Organizations." *European Management Journal*, 15 (5): 575-583.
- Grant, R. (1996). "Toward a Knowledge-Based Theory of the Firm. Strategic Management Journal, Special Issue, 17: 109-122.
- Haas, M. R. (2006). "Knowledge Gathering, Team Capabilities, and Project Performance in Challenging Work Environments." *Management Science*, 52 (8): 1170–1184.
- Han, J. K., Kim, N., & Srivastava, R. K. (1998). "Market Orientation and Organizational Performance: Is Innovation a Missing Link?" *Journal of Marketing*, 62 (4): 30-45.
- Hedlund, G. (1994). "A Model of Knowledge Management and the N-Form Corporation." Strategic Management Journal, 15 (Special Issue): 73-90.
- Hoe, S.L., & McShane, S.L. (2007). "Toward a Model of Structural and Informal Knowledge Acquisition and Dissemination." 2007 Proceedings of the Annual Conference of the Administrative Sciences Association of Canada, Organizational Theory Division, 28 (22): 53-67.
- Holsapple, C.W., & Jones, K. (2004). "Exploring Activities of the Knowledge Chain." *Knowledge and Process Management*, 11 (3): 155-174.
- Huang, H.J., & Dastmalchian, A. (2006). "Implications of Trust and Distrust for Organizations: Role of Customer Orientation in a Four-Nation Study." *Personnel Review, 35* (4): 361-377.

Huber, G.P. (1991). "Organizational Learning: The Contributing Processes and the Literature." *Organization Science*, 2 (1): 88-115.

- Jaworski, B., & Kohli, A. (1993). "Market Orientation: Antecedents and Consequences." *Journal of Marketing*, 57 (3): 53-70.
- Jaworski, B., Macinnis, D.J. & Kohli, A. (2002). "Generating Competitive Intelligence in Organization." *Journal of Market-Focused Management*, 5 (4): 279-307.
- Jerez-Gomez, P., Cespedes-Lorentea, J., & Valle-Cabrerab, R. (2005). "Organizational Learning Capability: a Proposal of Measurement." *Journal of Business Research*, 58: 715–725.
- Jiménez-Jiménez, D., & Cegarra-Navarro, J.G. (2007). "The Performance Effect of Organizational Learning and Market Orientation." *Industrial Marketing Management*, 36 (6): 694-08.
- Johnson, J.D. (1990). "Effects of Communicative Factors on Participation in Innovations." *Journal of Business Communication*, 27 (1): 7-24.
- Johnson, J.D., Donohue, W.A., Atkin, C.K., & Johnson, S. (1994). "Differences between Formal and Informal Communication Channels." *Journal of Business Communication*, 31 (2): 111-121.
- Kirca, A.H., Jayachandran, S., & Bearden, W.O. (2005, April). "Market Orientation: A Meta-Analytic Review and Assessment of its Antecedents and Impact on Performance." *Journal of Marketing*, 69: 24-41.
- Kohli, A., & Jaworski, B.J. (1990). "Market Orientation: The Construct, Research Propositions, and Managerial Implications." *Journal of Marketing*, 54 (2): 1-18.
- Kohli, A., Jaworski, B.J., & Kumar, A. (1993). "MARKOR: A Measure of Market Orientation." *Journal of Marketing Research*, 30: 467-77.
- Li, T., & Calantone, R.J. (1998). "The Impact of Market Knowledge Competence on New Product Advantage: Conceptualization and Empirical Examination." *Journal of Marketing*, 62 (4): 13-29.
- Lopez, S.P., Peon, J.M.M., & Ordas, C.J.V. (2006). "Human Resource Management as a Determining Factor in Organizational Learning." *Management Learning*, 37 (2): 215-239.

- Maclennan, H. (1945). Two Solitudes. London, UK: Collins.
- Maltz, E., & Kohli, A. (1996). "Market Intelligence Dissemination across Functional Boundaries." *Journal of Marketing Research*, 33 (1): 47-56.
- Matsuno, K, Mentzer, J.T., & Rentz. J.O. (2005). "A Conceptual and Empirical Comparison of Three Market Orientation Scales." *Journal of Business Research*, 58: 1-8.
- Menon, T., Thompson, L., & Choi, H.S. (2006). "Tainted Knowledge vs. tempting Knowledge: People Avoid Knowledge from Internal Rivals and Seek Knowledge from External Rivals." *Management Science*, 52 (8): 1129–1144.
- McDermott, R. (1999). "Why Information Technology Inspired But Cannot Deliver Knowledge Management." California Management Review, 41 (4): 103-117.
- Moorman, C. (1995). "Organizational Market Information Processes: Culture Antecedents and New Product Outcomes." *Journal of Marketing Research*, 32 (3): 318-335.
- Narver, J.C., & Slater, S.F. (1990). "The Effect of a Market Orientation on Business Profitability." *Journal of Marketing*, *54* (4): 22-35.
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company*. New York: Oxford University Press.
- Nonaka, I., von Krogh, G., & Voelpel, S. (2006). "Organizational Knowledge Creation Theory: Evolutionary Paths and Future Advances." Organization Studies, 27 (8): 1179–1208
- Oczkowski, E., & Farrell, M.A. (1998). "Discriminating between Measurement Scales Using Non-Nested Tests and Two-Stage Least Squares Estimators: The Case of Market Orientation." International Journal of Research in Marketing, 15: 349-366.
- Ribbens, B.A. (1997). "Organizational Learning Styles: Categorizing Strategic Predispositions from Learning. *International Journal of Organizational Analysis*, 5 (1): 59-73.
- Santos-Vijande, M.L., Sanzo-Perez1, M.J., Alvarez-Gonzalez, L.I., & Vazquez-Casielles, R. (2005). "Organizational Learning and Market Orientation: Interface and Effects on Performance." *Industrial Marketing Management*, 34: 187 202.

Sinkula, J.M. (1990, August). "Perceived Characteristics, Organizational Factors, and the Utilization of External Market Research Suppliers." *Journal of Business Research*, 16: 1-17.

- Sinkula, J.M. (1994). "Market Information Processing and Organizational Learning." *Journal of Marketing*, 58 (1): 35-54.
- Slater, S.F., & Narver, J.C. (1995). "Market Orientation and the Learning Organization." *Journal of Marketing*, 59 (3): 63-74.
- Smelser, N.J. (1963). *The Sociology of Economic Life*. Englewood Cliffs, NJ: Prentice-Hall.
- Soekijad, M., & Andriessen, E. (2003). "Conditions for Knowledge Sharing in Competitive Alliances." *European Journal of Management*, 21 (5): 578-587.
- Stohl, C., & Redding, W.C. (1987). "Messages and Message Exchange Pprocesses." In F.M. Jablin, L.L. Putnam, K.H. Roberts, L.W. Porter (Eds.), Handbook of Organizational Communication: An Interdisciplinary Perspective (pp. 451-502). Beverly Hills, CA: Sage.
- Stone, G.W. (2000). "Eco-Orientation: An Extension of Market Orientation in an Environmental Context." *Journal of Marketing Theory and Practice*, 8 (3): 11-32.
- Storck, J., & Hill, P.A. (2000). "Knowledge Diffusion through 'Strategic Communities.'" *Sloan Management Review*, *41* (2): 63-74.
- Thompson, M. (2005). "Structural and Epistemic Parameters in Communities of Practice." Organization Science, 16 (2): 151-166.
- Thornhill, S., & White, R.E. (2007). "Strategic Purity: A Multi-Industry Evaluation of Pure vs. Hybrid Business Strategies." *Strategic Management Journal*, 28 (5): 553-561.
- Walsh, J.P. (1995). "Managerial and Organizational Cognition: Notes from a Trip Down Memory Lane." *Organization Science*, 6 (3): 280-321.

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