Organizational Learning: Trends in the Social Construction of a Field

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Organizational learning literature offers considerable choices to prospective researchers. Some of the choices are as fundamental as the 'what', 'how' and 'why' of learning. As there are little theories to anchor, it is left to the researchers to socially construct and reconstruct the fragmented field. This paper studies the empirical research published in the top 10 journals during 2000-2010 and identifies the areas of convergence. Researchers considerably agree on using agentic perspective on learning and organization as the level of analysis. Much agreement exists on the use of exploration-exploitation framework of learning, quantitative methodologies, and longitudinal designs. Strategy has emerged as the most prolific contributor to the organizational learning research.

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Introduction

Organizational learning (OL) is much researched, yet less understood of organizational topics (Crossan, Maurer & White, 2011; Dodgson, 1993; Easterby-Smith, Crossan & Nicolini, 2000; Friedman, Lipshitz & Popper, 2005; Miller, 1996). The central questions regarding 'what', 'how' and 'why' of learning are hardly settled. Such state of affairs can be significantly attributed to the presence of paradigms but lack of any theory of OL (Crossan et al., 2011). Absence of theories may prompt researchers to choose among the available OL frameworks as per their inclinations. In the process, certain OL frameworks may gain prominence and serve to anchor the fragmented field. It would be better possible to appreciate this social construction of OL field by looking at the dominant OL models that have anchored research over the years.

OL research gained momentum during 1990s (Easterby-Smith et al., 2000). Excellent reviews are available for the work done during these early years (Dodgson, 1993; Easterby-Smith et al., 2000; Miller, 1996). A look at the work

done during 2000-2010 can help identify the latest social construction trends in OL research. Research published in the top journals significantly impacts the field and serves as the evidence of scholarship (Podsakoff, Mackenzie, Bachrach & Podsakoff, 2005; Tahai & Meyer, 1999). Therefore, the work published in the top 10 management journals during 2000-2010 can serve as the proxy for the trend of scholarship in the field.

'What', 'how' & 'why' of Learning: The current emphasis on learning can be largely attributed to the salience of adaptability in the face of rapid environmental and technological changes that have come to be the order of the day (Dodgson, 1993). Incorporation of learning into various organizational constructs introduces much needed analytical dynamism in them (Dodgson, 1993). The field of OL as it exists today offers researchers considerable choice. The choices pertain to what learning is, and how and why it occurs. Agreement is rare in these matters and researchers often have fairly arbitrary choices to make. Given below is a brief review of the literature to highlight the nature and extent of choices in these matters. The review is merely indicative and by no means exhaustive.

The 'what' of learning: In order to answer what learning is, choices need to be made regarding the level of analysis (Easterby-Smith et al., 2000) and the assumption of determinism or agency (Miller, 1996). Determinism in this context refers to the assumption that environment drives learning, whereas, agency refers to the assumption that individuals/groups/organizations drive learning, to whatever extent (Miller, 1996). Learning for individuals, under the assumption of determinism, means overt change in behavior (Skinner, 2002), whereas, under the assumption of agency, it may mean relatively stable change in cognitive structures (Bandura, 2001; 2007). Due to radically different assumptions, it may not be possible to reach a final settlement on cognition-behavior debate (Easterby-Smithet al., 2000).

At team level, under the assumption of determinism, learning means adaptation, whereas, under the assumption of agency, it may mean development of team capability to achieve collective goals (Senge, 1994). While the former is merely reactive, the latter can be proactive as well. Under extreme form of agency assumption, learning is often viewed as an emergent dialogue where it becomes a 'between persons' rather than a 'within person' affair (Easterby-Smith et al., 2000; Senge, 1994). Learning, from this perspective, is a social construct (Alok, 2011).

At the organizational level, learning for a determinist may mean environment-induced modification of organizational routines (Cyert & March, 1963). From agency perspective, it may mean acquisition of new knowledge or capability of organizational consequence (Miller, 1996). Economists take experience and efficiency for learning; however, it is important to recognize that these are outcomes of learning and not learning *per se* (Dodgson, 1993).

The 'how' of learning is directly linked to the 'what' of learning. Operant

conditioning produces behavioral change through consequence generalization resulting from first-hand experiences, whereas, social cognitive approaches work through observational learning. Team learning of the adaptive kind may be a result of single-loop learning that involves detection and correction of errors *without* working on the underlying causes (Argyris, 1976). Learning for building capacity may involve double-loop learning where errors are detected and corrected with their underlying causes (Argyris, 1976). From a social constructionist perspective, people construct learning in the process of social interactions and contextual conversations (Easterby-Smith et al., 2000). At the level of organization, institutional forces shaping the organization can induce changes in organizational routines (Scott & Davis, 2007). Organizations may acquire new knowledge through actively putting in place supporting structures, processes, strategies and building their absorptive or learning capacities (Dodgson, 1993).

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The 'why' of learning involves basic assumptions as well as the causal processes. Operant conditioning assumes that people favor consequences that they like. The social cognitive approaches assume that people model others in order to feel more in control of their environments. Team learning assumes that people want to reduce conflict between intended and actual outcomes. Learning at the level of organization assumes that organizations strive to achieve their goals or at least survival. While the causal mechanisms behind learning processes are considerably worked out at individual and to some extent, at team levels, they are hazy at the organizational level.

The idea that organizations have goals is severely contested (Scott & Davis, 2007). Behavioral theories of firm contend that organizational goals are political and members may have their own competing goals (Cyert & March, 1963; Scott & Davis, 2007). Natural systems perspective, on the other hand, holds that organizations exist to exist rather than pursue any goal, simple or complex (Scott & Davis, 2007). Open systems perspective contends that organizations may have shifting goals due to the changing environment (Scott & Davis, 2007). Therefore, it is difficult to ascertain what goal achievement means. In the absence of such clarity, it is difficult to articulate why organizations should learn.

The Learning Debates

The precise meaning of organizational learning is still debated (Dodgson, 1993; Easterby-Smith et al., 2000; Friedman, et al., 2005; Miller, 1996). The relationship between learning and knowledge is a matter of debate and so is the interaction of different levels of learning (Easterby-Smith et al., 2000; Friedman et al., 2005). It is generally agreed that individuals, teams and organizations learn

and learning at one level need not translate into learning at any other level (Easterby-Smith et al., 2000). However, what causal mechanisms link learning at one level to the other levels is far from clear. Much of the organizational learning literature is dominated by western perspectives and epistemologies (Cowan, 1995). Eastern perspectives are making their presence felt in niche areas, most notably in the mindfulness research (Kernochan, McCormick & White, 2007; Levinthal & Rerup, 2006; Weick & Putnam, 2006). Emotion and learning relationship is yet another debate that is yet to settle (Simpson & Marshall, 2010).

Most debates in organizational learning literature tend to merely subside rather than resolve (Easterby-Smith et al., 2000). It can be largely attributed to absence of a theory of organizational learning (Crossan et al., 2011). Till a theory defines the key constructs and explains the causal mechanisms, researchers have only prescriptive or descriptive frameworks and models to draw from.

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The exploration-exploitation is one such framework that assumes a trade-off between "exploration of new possibilities and exploitation of old certainties" (March, 1991:71). The proximate and certain nature of exploitation may prompt organizations to prefer it over the more distal, uncertain, and costly exploration; however, that may compromise their competitive position (March, 1991). Organizations socialize individuals while storing the knowledge produced by them. Individuals tend to get socialized much faster than they can introduce new knowledge to the organization. Thus exploitation-based adaptation can be self-destructive in the long term. This framework is extended into a multilevel 4I (Intuiting, Interpreting, Integrating, and Institutionalizing) framework that has considerably influenced the literature (Crossan et al., 2011). Intuiting refers to subconscious recognition of patterns that, when articulated, become interpretation for self and others (Crossan, Lane & White, 1999). Integrating involves ad hoc coordinated actions through mutual adjustment. These actions become institutionalized when they recur after gaining significance. In this framework, learning resides in cognition and behaviors at each level while moving back and forth among levels.

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These frameworks are useful for conceptualizing OL; however, they do not offer causal explanations. Therefore researchers are more or less free to take sides in the learning debate on the basis of their inclinations. It would be useful to look at how they have exercised their choices in the last decade. It cannot help resolve any of the learning debates though it can certainly inform how the research community is inclined to look at it.

Methodology

We use here the list of Top 10 most influential journals identified by Tahai and Meyer (1999) through a revealed preference study. The revealed preference survey involves citation analysis as a measure of journal impact. Tahai and Meyer (1999:279) analyzed "23,637 academic journal references cited in the 1275 articles published in 17 key management journals during 1993 and 1994." 65 journals accounted for over 70% of the total references used for the analysis. The final analysis established *Strategic Management Journal (SMJ)*, *Academy of Management Journal (AMJ)*, *Journal of Applied Psychology (JAP)*, *Organizational Behavior and Human Decision Processes (OBHDP)*, *Academy of Management Review (AMR)*, *Administrative Science Quarterly (ASQ)*, *Journal of Management (JOM)*, *Organization Science (OrgSci)*, *Industrial and Labor Relations Review (I & LRR)*, and *Personnel Psychology (PerPsych)* as the Top 10 most influential journals in that order. *SMJ*, *AMJ*, *JAP*, *OBHDP*, *AMR*, and *ASQ* have remained as top tier in terms of average citations during 1981 and 1999 (Podsakoff et al., 2005). Thus the list can be considered as fairly robust.

Using EBSCOhost database, a search was conducted for 'organizational learning' in article abstracts for each of the 10 journals. The search was restricted to the 2000-2010 period. *OBHDP*, *I & LRR* and *PerPsych* didn't have any article with 'organization learning' in the abstract. The rest of the journals published 82 such articles during this period, 16 conceptual and 66 empirical. Table 1 presents the number of articles in the journals and the key areas of research.

Table 1 Research on Organizational Learning in Top Journals (2000-2010)

		No. of Articles
Journals	Strategic Management Journal	19
	Academy of Management Journal	14
	Journal of Applied Psychology	1
	Academy of Management Review	6
	Administrative Science Quarterly	10
	Journal of Management	8
	Organization Science	24
Key Areas	Strategy	47 (4)*
	Organizational learning	11 (3)
	Human resource management	7 (2)
	Organizational theory	6 (4)
	Knowledge management	5 (0)
	Organizational change	3 (1)
	Entrepreneurship	2 (1)
	Leadership	1 (1)

* Figures in bracket denote the number of conceptual/review articles

Findings

OL has attracted the attention of diverse management researchers. Out of 66 empirical studies published in the Top 10 management journals during 2000-2010, 21 explore OL *per se* and 45 apply OL to explore other areas of management research. Table 2 presents the distribution of OL process and application articles across the key areas.

Table 2 Distribution of OL Process and Application Articles across Key Areas

Key Areas	Total Empirical Articles	OL Processes Articles	OL Application Articles
Strategy	43	10 (7)*	33 (15)
Organizational learning	8	7 (3)	1
Human resource management	5	2	3
Organizational theory	2	0	2
Knowledge management	5	2	3 (1)
Organizational change	2	0	2
Entrepreneurship	1	0	1

*Figures in brackets denote the use of the Exploration-Exploitation OL framework

It is interesting to find that strategy researchers have most actively engaged with OL. They have contributed over 65% of the OL related articles in the top journals. This includes research to understand the inner workings of OL as well as its application to investigate other variables of strategic consequence. Innovation, alliances and acquisitions dominate strategic discourse in this regard.

Research into OL Processes

Innovation and OL research traditions primarily anchor the studies published on OL processes. Innovation research is with a focus on organization as the level of analysis. How a firm engages with innovation depends on its age (Sørensen & Stuart, 2000), technical and customer related competence (Danneels, 2002), prior engagement with exploitative innovations (Benner & Tushman, 2002), and whether they started to search prior to or after their competitors did (Katila & Chen, 2008). With age, organizations become better at routine innovations but worse at innovating for adapting to the environment (Sørensen & Stuart, 2000). Such a learning disability, to an extent, may arise out of the tendency of exploitative innovations to crowd out explorative innovations (Benner & Tushman, 2002). As a result, organizations may be busy leveraging what they have when they should be looking for what they ought to have to succeed in the changing environment. The impetus for engaging in explorative innovations often comes if firms search ahead of their competitors (Katila & Chen, 2008). How firms balance exploration-exploitation forms of learning depends on their

With age, organizations become better at routine innovations but worse at innovating for adapting to the environment.

technical and customer related competence (Danneels, 2002). It is interesting to note that the exploitative-explorative framework of OL anchors over 47% of the studies on learning processes.

Studies in OL tradition have used primarily the group and organizational levels of analysis. At the group level of analysis, OL depends on how the members view at the world (Miller & Lin, 2010), demographic sub-groups (Gibson & Vermeulen, 2003), level of cross-group linking (Fang, Lee & Schilling, 2010), and team members' perception of power and interpersonal risk (Edmondson, 2002). A stable environment helps pragmatists (those who adopt learning beliefs from better performers) learn better, whereas, a controllable environment helps coherentists (those who seek learning beliefs that fit together) and conformists (those who adopt popular beliefs) learn better (Miller & Lin, 2010). Groups tend to develop sub-groups on the basis of demographic criteria such as age and gender (Gibson & Vermeulen, 2003). Moderately strong such groupings are known to enhance team learning. Groups that moderately cross-link tend to have better diffusion of superior ideas without a quick loss of diversity (Fang et al., 2010). Quality of team reflection depends on how the members perceive power and risk dynamics in the team (Edmondson, 2002).

Information technology also affects the firm s tendency to engage in exploitative or explorative learning.

At the organizational level of analysis, OL depends on the aspiration-performance gap (Baum & Dahlin, 2007), information technology (Kane & Alavi, 2007), success and recovery experiences (Kim, Kim & Miner, 2009), improvisations (Baum & Dahlin, 2007; Miner, Bassoff, & Moorman, 2001), and firm's own large failures in the past (Madsen & Desai, 2010). Low aspiration-performance gap fosters exploitative learning, whereas, a high gap fosters explorative learning (Baum & Dahlin, 2007). Information technology also affects the firm's tendency to engage in exploitative or explorative learning (Kane & Alavi, 2007). A firm's survival learning out of extreme performance experiences get enhanced by both success and recovery performance (Kim, et al., 2009); however, generally firms tend to learn better from their

Table 3 Summary of Empirical Research into OL Processes

Key Areas	Topics
Strategy	Innovation, capacity expansion, franchising, cross-group linking, interaction between exploration and exploitation strategies, acquisitions
Organizational learning	Organizational improvisation, team learning, interpersonal learning, aspira tion-performance gap, information technology, extreme performance experi ence
Human resource management	Gainsharing, alternative work arrangements
Knowledge management	Organizational knowledge, knowledge creation

own large failures (Madsen & Desai, 2010). An organization's long term trial and error learning depends on how well a firm improvises in the short-term (Miner et al., 2001). The hold of exploration-exploitation framework is considerably strong on the organizational level of analysis. Most of the studies into the OL processes have used robust longitudinal designs. Therefore, the findings can be considered as strong. Table 3 presents the summary of empirical research into OL processes published in top journals during 2000-2010.

Research in OL Applications

Application of OL is much diverse and pertains to different levels of analysis; however, it is overwhelmingly organizational in its emphasis. Over 90% of all application research published in the top journals during 2000-2010 pertains to organizational level of analysis. Of this, over 35% of the research pertains to the exploration-exploitation framework. Nearly all of the OL research displays preference for agentic perspective over environmental determinism. Table 4 presents the summary of empirical research in OL applications published in top journals during 2000-2010.

Table 4 Summary of Empirical Research in OL Applications

Key Areas	Topics
Strategy	Innovation, alliances, restructuring, strategic renewal, firm survival, positional advantage, strategic supply chain management, boundary choice, IT competency, decoupling, co-evolutionary lock-in, absorptive capacity, ownership strategy, imitation, risk taking, inter-firm transac tions, market-level turnover events, chain naming strategies
Organizational learning	Problem solving
Human resource management	Succession plans, mentoring
Organizational theory	Corporate culture, behavioral theory of firm
Knowledge management	Organizational knowledge, information withholding, information rela tionships
Organizational change	Individual level organizational changes, organizational routines
Entrepreneurship	Cultural competitiveness

OL is increasingly becoming integral to the conceptualizations of what organization is and what it does.

Such wide-ranging applications indicate that researchers, despite hazy construct definitions, are intuitively comfortable with the idea of learning. Over 52% of application articles look at learning-performance relationships in one way or the other. About 36% of such articles pertain to strategy and the rest to OL, organization theory, human resource management, and organizational change. Beyond performance considerations, OL is employed to study a number of other phenomena such as boundary choice (Villalonga & McGahan, 2005), spatial

expansion of chains and the location of next acquisition (Baum, Xiao Li & John, 2000), the direction of knowledge flow (Schulz, 2001), information withholding behaviors (Haas & Park, 2010), and individual adoption of organizational change (Bercovitz & Feldman, 2008). OL is increasingly becoming integral to the conceptualizations of what organization is and what it does.

Discussion & Conclusion

OL is an established, yet fragmented field of study (Easterby-Smith et al., 2000; Friedman et al., 2005). It has several debates that keep rising or falling with time though any resolution is not yet in sight. Some of the key OL debates pertain to the level of analysis and assumption of environmental determinism/agency of the learner. Research published in the top 10 journals during 2000-2010 indicates that researchers have an overwhelming preference for agentic perspective to OL and organization as the level of analysis. Such preference can be partly influenced by the fact that strategy researchers have published majority of OL articles. OL research has grown beyond learning-performance relationship though it continues to be the mainstay of OL research. Exploration-exploitation framework of OL promises to anchor OL research till a formal theory is proposed.

Easterby-Smith (2000) identified a number of subsided OL debates such as level of analysis, cognition-behavior debate and single-loop-double loop learning. These debates show no signs of resurgence during 2000-2010. The level of analysis debate has almost settled in favor of organization; however, that doesn't preclude OL research at other levels. As far as cognition-behavior and single loop-double loop learning debates are concerned, the preference is for a more inclusive rather than polar approach.

Over 92% of the empirical studies are quantitative in nature, whereas, the rest is either qualitative or mixed. Most studies are framed for a particular level of analysis. Absence of multilevel research is a matter of concern as there is little insight into how learning at one level links with that at other levels. Moreover a multilevel research can generate useful insights about precisely where and how learning resides in the organization. Is it primarily an individual phenomena that manifests at collective levels in cultural terms? Does it primarily reside in organizational structures and procedures and percolate to individuals through socialization? How 'organizational' is OL? Such and many more questions need multilevel research for insightful answers.

Learning is embodied in the social practices and embedded in the socio-historical contexts.

A performance-focused study of OL has obscured other important dynamics, especially those related to power and legitimacy. Situated learning theory applies a social constructionist lens on learning and considers it integral to its context (Lave & Wenger, 1991). In this sense the question

of location of learning becomes meaningless. Learning is embodied in the social practices and embedded in the socio-historical contexts (Contu & Willmott, 2003). New members need a degree of legitimacy to participate in learning communities and that makes power considerations integral to learning (Contu & Willmott, 2003; Lave & Wenger, 1991). Learning practices are "enabled and constrained by their embeddedness in relations of power; and, more specifically, by the unstable institutionalization of power relations within capitalist work organizations" (Contu & Willmott, 2003:283). The current research has not used much of what the social constructionist paradigm has to offer. It is still obsessed with cognitive-behavioral conceptualizations of learning. Much research is required to study how and at what level of analysis power and legitimacy relate to OL.

Like all research, this study also has its own set of limitations. First, the work published in Top 10 journals represents a tiny fraction of the work done elsewhere. Therefore, the trends identified may only be indicative rather than definitive. Second, the present trends are identified on the basis of the works retrieved using 'organizational learning' as the search word for article abstracts. It is possible to miss some other works published in top tier that do not mention organizational learning in their abstracts. Levinthal and Rerup's (2006) work is a case in point where the word 'organizational learning' comes in article title and keywords, but not in abstract. However, this limitation may not alter the trends significantly. Third, no attempt has been made to identify the factors behind the trends. It is outside the purview of this article though an investigation into these matters can be useful. For example, it is possible that a preference for agentic perspectives may result from a growing concern for practice, which itself may be a result of growing calls to bridge theory-practice divide.

While the OL literature remains fragmented about most issues, OL researchers appear to have considerable agreement on organizational level of analysis, agentic perspectives, cognitive-behavioral conceptualizations of learning, quantitative methodologies, and longitudinal designs. If the research published in the top 10 journals during 2000-2010 is any indication to go by, much insight into OL processes and application will come from strategy research. Much research is likely to come within the exploration-exploitation framework of OL. In the next decade, it is likely that we will know almost as much about 'organizational' learning as we do about individual and team learning.

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