

*Concept Paper*

## The Domains of Organizational Learning Practices: An Agency-Structure Perspective

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**Abstract:** Background: Organizational learning theory has retained considerable attention in the past decades from a wide array of academic disciplines in social sciences. Yet few integrative efforts have satisfactorily offered a comprehensive and systematic articulation of the concept of organizational learning with regards to: (a) its core constitutive dimensions and associated mechanisms; (b) the analytical levels from such mechanisms operate (e.g., workers, teams, organizations); as well as (c) their interplay. Methods: This article builds on a critical synthesis of predominant approaches in organizational learning theory (*i.e.*, structural functionalist, social constructivist and middle range approaches), highlighting the contributions of each approach on the key analytical elements guiding our inquiry (*i.e.*, core dimensions and associated mechanisms, analytical levels, interplay). Drawing from the work of sociologists Anthony Giddens and Margaret Archer on agency-structure theory, we develop a series of theoretical propositions supporting the Organizational Learning Practices (OLP) concept as a unifying heuristic tool. Results: OLP are defined as a set of collectively shared practices held by members of a given organization embedded in normative, political, and semantic dynamics. At the heart of such dynamics lies organizational knowledge as a power resource pivotal to the sustainable development of organizations, as well as that of their members. Conclusion: OLP offer promising answers to on-going

debates in organizational learning theory, and we conclude by discussing concrete guidelines to advance research and practice on OLP.

**Keywords:** organizational learning; agency-structure theory; organizational identity

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## 1. Introduction

Since its first introduction by Cyert and March [1], the concept of organizational learning has long been portrayed as a key milestone for the sustainability of organizations. The purpose it pursues is one of high relevance to organizational research and practice, that is, the comprehension of the dynamics through which organizations adapt to environmental complexity, uncertainty and change. Despite significant advancements in multidisciplinary research on organizational learning [2], a close examination of past narratives reviews emphasizes the important challenges still currently faced in the achievement of a systematic definition of the core constitutive domains of organizational learning [3–8].

Along with others [4], we believe that resolving such an issue warrants a finer appreciation of organizational learning through the determination of its core constitutive domains, their levels of analysis (*i.e.*, workers, teams, organization) and interconnections. The aim of this paper consists in introducing the heuristic tool of organizational learning practices, which results from such an endeavor. Accordingly, the first part of the paper offers a critical review of the dominant theoretical approaches in organizational learning theory. The second part introduces the sociological work of Anthony Giddens and Margaret Archer laying the analytical foundations of our tool. Finally, we outline implications for future research and practice on organizational learning.

## 2. Organizational Learning Theory: A Critical Overview

Historically, organizational learning theory has mirrored traditional epistemological debates encountered elsewhere in organizational sciences about the place allocated to micro- and macrolevels of analysis from which the organizational reality can be understood [9,10]. Summarily, three main streams of research have characterized organizational learning theory to date: (a) macrolevel approaches focusing on organizational- and societal-level dynamics (e.g., organizational structures, interorganizational networks); (b) microlevel approaches focusing on individual- and group-level dynamics (e.g., individual reflexivity, intersubjective exchanges); and (c) middle range approaches working towards the integration of (a) and (b). For parsimony purposes, we will limit the critical appraisal of the macro and microlevel approaches to those most often associated with structural functionalism and social constructivism.

### 2.1. Structural Functionalist Approach to Organizational Learning

The structural functionalist approach had a major influence on contemporary conceptualizations of organizational learning [6–8,11–13]. Conventionally, proponents of this approach conceive organizational learning as a process of acquisition, diffusion, interpretation and institutionalization of knowledge critical to the achievement of organizational goals [7]. One basic assumption held here resides in the consideration of organizations as multilevel systems whose learning is made possible through the

medium of their subunits (e.g., individuals, groups), although emergent properties of the learning process located at the level of the organization are clearly the main focus [3]. A recent structural functionalist formulation proposed by Casey [14] exemplifies well this stream of research.

For Casey [14], the organizational learning process parallels the four functions of social systems described in the sociological work of Talcott Parsons [10]. Parsons' theory of action posits that social systems are composed of multiple interdependent subsystems working towards the preservation of the systemic stability when exposed to environmental sources of variations. Four specific functions are required to insure the systemic stability: adaptation (*i.e.*, adjustment of systemic needs to environmental sources of variations), goal attainment (*i.e.*, definition and attainment of systemic goals), integration (*i.e.*, coordination of the subsystems in alignment with the adaptation and goal attainment functions of the global social system) and pattern maintenance or latency (*i.e.*, dissemination of values to societal members in order to develop their motivation to participate to the sustainability of the global social system in time).

Following this, Casey [14] reorganized influential contributions on key mechanisms of the organizational learning process along Parsons' work: (a) the adaptation subsystem captures the interface between the internal and external environment of organizations as a source of information input (e.g., [13]); (b) the goal attainment subsystem, the action-reflection mechanisms required to strategically plan organizational goals (e.g., [15]); (c) the integration subsystem, the sharing of information across different parts of the organization (e.g., [16]); and (d) the pattern maintenance or latency subsystem, the institutionalization mechanisms which confer collective meaning, control and guidance for coherent organizational members' practices to unfold (e.g., [8]). In terms of analytical levels from which the organizational learning process is postulated to operate, the structural functionalist approach acknowledges both individual and organizational components to the process. To illustrate, the goal attainment subsystem is suggested to be operationalized at the organizational level with strategic planning resources and policies, while at the individual level "(...) a corresponding individual learning need may be to understand the changes in the mission and goals of the organization and how they will affect roles and performance in a department" [14].

In our view, an important strength stemming from Casey's reformulation highlights the consistency in the structural functionalist approach in circumscribing key mechanisms of the organizational learning process. Yet, we contend that the dominant macrolevel view put forth yields a limited account of the organizational learning process for two reasons. First, the reliance on systemic order and coherence—that is, on the necessity to achieve a common adhesion by individual agents to organizational goals, values and roles upheld to explain the transition from an individual to an organizational form of learning—undervalues the complexity of the organizational dynamics at play. This is so because the capacity to determine which organizational goals, values and roles should be put forth in the preservation of the systemic coherence of the organizational system is not uniformly granted across individual agents [17]. By failing to acknowledge such power dynamics and their corresponding legitimacy basis [18], the structural functionalist premise that all organizational members are mechanically and equally interested to act on behalf of their organization as individual learning agents appears flawed. Second, knowledge is recurrently considered a reified commodity that is only meaningfully related to the sustainability of the organizational system as a whole. The conceptualization of individual learning agents, of their personal competencies, motivations, and reasons to reproduce

the organizational learning process in their day-to-day professional activities remains largely underspecified here [19,20]. Consequently, explanations for such microlevel sources of variations and their relative contribution to the ecology of the organizational learning process need to be found elsewhere than with the structural functionalist approach.

## *2.2. Social Constructivist Approach to Organizational Learning*

Recovering a plurality of theoretical propositions from activity theory [21], communities of practices [22,23], and a culture-oriented view [20,24], the social constructivist approach precisely seeks to reinstate subjectivity into the organizational learning process. In comparison to the precedent approach, micro- and mesolevel lenses are predominantly adopted as individual agency and intersubjective exchanges become the central focus here. Agency is recognized as the capacity vested in individual learning agents to skillfully exchange with their organizational environment [25]. Such skill acquisition rests on the reflexive monitoring by the individual learning agents of the social frames characterizing a given organizational environment (e.g., norms, values, resources), which guide the course of their actions. The social constructivist approach also integrates the notion of social identity to organizational learning thereby linking individual learning agents' needs to purposively connect and anchor their daily activities within their organizational contexts of emergence [20].

Within this approach, contemporary work on communities of practices has certainly retained the most attention in the organizational learning literature. Initially introduced by Lave and Wenger [22], communities of practices are generally understood as configurations of agents, activities and conditions of life bounded by networks of individuals sharing common activities, resources and accounts of the social reality [22]. A central tenet to the communities of practices literature revolves around the necessity to reconcile the active role played by learning agents in the construction of organizational knowledge: "knowing is an act of participation in complex 'social learning systems'" [26]. For Wenger [26], three mechanisms characterize participation to a given community of practice. A first mechanism pertains to the joint enterprise defining membership to a given community by the means of a shared understanding among members of their community and its boundaries. Mutual engagement is a second mechanism of importance, which provides the normative orientations for and the competency to sustain participation to the community. The last mechanism refers to the shared repertoire of communal resources such as language, routines, artefacts and long-lasting social practices enacted through social exchanges among members of a given community of practice. Specific to the organizational learning literature, communities of practices have been associated notably to occupations [27], team projects [28], and the participation trajectory of newcomers [29]. Given the structural proximity of the roles, responsibilities and resources defining their members, communities of practices have been depicted as key mesolevel structures around which collective action can naturalistically unfold in the facilitation of the organizational learning process [23].

Given the above, the social constructivist approach as exemplified by earlier work on communities of practices adds an important contribution to the understanding of the ecology of the organizational learning process by positing specific analytical ramifications between micro and mesolevel conditions under which organizational learning takes place. As a result, communities of practices provide salient contextual features under which individual learning agents' reflexivity, competency and capability can

be understood. Yet, the larger, macrolevel organizational circumstances allowing for communities of practices to take place are far less understood [30]. This latter point is notably reminiscent of the fundamental difficulty faced by social constructivism to integrate structural elements beyond an intersubjective (meso) level of analysis. To illustrate, Gherardhi and Nicolini [31] in a case study reported on differences observed in the meaning conveyed to occupational health and safety practices among workers from a construction firm. The authors' analysis centered on variations in safety practices among communities of practices associated with specific occupational groups (e.g., engineers, site managers, workers). Only few details about organizational features of the construction firm (e.g., organizational policies and resources dedicated to occupational health and safety within the firm) were provided and considered for analysis, even though such features could have also distinctively and concomitantly shaped occupational health and safety practices [32]. This brings us to the reverse and yet as limitative situation described earlier with the structural functionalist approach. By focusing on mesolevel structures such as communities of practices, the social constructivist approach fails to adequately deal with macrolevel sources of variations in the distribution of facilitating or constraining resources to the organizational learning process. From a systemic standpoint, this is an important limitation as larger, macrolevel organizational circumstances are likely to modulate the nature and extent to which such constraints or resources to the organizational learning process are made available to communities of practices and their members in the first place.

### 2.3. Integrative Approaches to Organizational Learning: Meeting the Expectancies?

In the past years, there has been a growing recognition for the need to better reflect the multidimensional and multilevel nature of mechanisms underlying the organizational learning process. While not limited to these (e.g., [33]), we will retain two models that have distinguished themselves based on their integrative efforts to reconcile both insights from the precedent approaches (*i.e.*, structural functionalist and social constructivist) at the conceptual and empirical levels.

The first model considered is the Dimensions of the Learning Organization (DLO) developed by Watkins and Marsick [34]. The DLO model is interested in the sociotechnical and cultural features of the organizational learning process deemed to operate through individual-level (*i.e.*, availability of opportunity structures for individual development, critical inquiry, and dialogue among organizational members), group-level (*i.e.*, team collaboration and learning) and organizational-level mechanisms (*i.e.*, strategic leadership provided by organizational leader, infrastructures for knowledge acquisition, dissemination and monitoring of the internal and external organizational environment). According to the model and its instrumentation (Dimensions of the Learning Organization Questionnaire: DLOQ), the primary analytical units for organizational learning process are the collectively shared practices of acquisition, dissemination, interpretation and integration of knowledge defining social exchanges within a given organizational setting (e.g., "In my organization, people spend time to build trust with each other").

Alternatively, the 4I framework proposed by Crossan and associates [35,36] views organizational learning as a dynamic process guided by strategic renewal at the basis of which resides a tension between the exploitation of past acquired organizational knowledge and the exploration of new organizational knowledge. Its primary focus consists in explaining the flow of learning stocks through

individual-level (*i.e.*, individual competencies, capability and motivation to undertake their tasks), group-level (*i.e.*, group dynamics and shared understanding) and organizational-level mechanisms (*i.e.*, alignment of non-human repertoires to maintain organizational efficiency). Recursive feedback and feed-forward mechanisms insure a dynamic flow of the learning stocks across all levels (*i.e.*, individual, group, organizational) of the organizational learning process. Empirically, the Strategic Learning Assessment Map (SLAM) builds on individual subjective evaluation of typical learning stocks and flows mechanisms characterizing organizational settings (e.g., “Within your organization, individuals are able to break out of traditional mind-sets to see things in new and different ways”).

In spite of their independent development, both models share remarkable similarities in their conceptualization of the constitutive components of the ecology of the organizational learning process. At the microlevel in both instances, individual learning agents are depicted as highly competent (e.g., reflexive, rational, motivated) and capable (e.g., influence over their environment), therefore giving credentials to the social constructivist approach. Yet, the agents’ ability to influence their organizational environment is not unlimited, and remains contingent upon environmental opportunities for learning, and their own competencies to leverage them. As remarked by Watkins and Marsick [34]: “The actions the individuals take are constrained by their capacity (e.g., skills, authority, resources and power). When individuals act, they may or not perceive the results of their interactions”. At the macrolevel, organizational structures considered by these middle range models integrate key mechanisms pointed by structural functionalist approach [8,13,16], while providing room for conceptual expansion by acknowledging to varying degrees the influence of political inequalities in resources, ideology and power, a point nearly absent in the structural functionalist approach.

Nevertheless, we contend that both models fall short in their explanatory power to adequately integrate and articulate the links between the multiple levels of analysis of the ecology of the organizational learning process on two accounts. First, the integration of the mesolevel structures (e.g., occupational groups, work teams) as an integral part of the organizational learning process translates important problems in the recognition of the main collective analytical level from which the organizational learning process operates. For instance, in Watkins and Marsick’s model, inclusion of learning behaviors displayed by organizational leaders as a core mechanism of the organizational learning process overlooks alternative sources of power detained by other groups of agents that may as well be determining to the organizational learning process (e.g., unions, technical experts). Past case studies have convincingly shown that knowledge is a power resource, paramount to the amount of influence agents have over the organizational learning process, and that the balance of such power is likely to shift among agents depending on the nature of the organizational knowledge at stake [31]. Although we acknowledge the presence of mesolevel sources of variations in the organizational learning process as described above, we would like to propose that the main analytical level where such process may most influentially shape organizational members’ exchanges resides upstream, at the macrolevel of the organization.

Secondly, both integrative models fall under the same caveats by overlooking the legitimacy basis of the organizational learning process, that is, the social conditions explaining why individual learning agents act on behalf of the organization in the reproduction of the organizational learning process. While admitting some deviations, these models ultimately rely on a consensual, non-problematic adhesion by individual learning agents to the organizational learning process in that matter. As illustrated

by the following citations, one cannot distinguish whether being an individual learning agent in such context expresses an active or a passive participation towards activities supporting the organizational learning process.

The challenge for organizations is to manage the tension between the embedded institutionalized learning from the past, which enables it to exploit learning, and the new learning that *must be* (emphasis added) allowed to feed forward through the processes of intuiting, interpreting and integrating. [36]

Our model (...) is built on the idea that change *must occur* (emphasis added) at every level of learning—from individual to group to organizational to environmental—and that these changes must become new practices and routines that enable and support the ability to use learning to improve performance. [34]

Investigating the legitimacy basis of the organizational learning process invites us to think about the qualitative nature of the participation of individual learning agents to the organizational learning process. Accordingly, individual learning agents may not be equally impacted on or benefit from the new practices and routines introduced by the organizational learning process in the first place. Resistance may also be encountered by groups of individual learning agents whose interests may be challenged by learning new ways of being, thinking and doing in organizations. To illustrate, Thomas and Hardy [37] examined, in a multiple case study of two US hospitals undergoing mandatory work redesigns programs among surgical residents, the implementation process of reducing work hours from 100 h to 80 h per week in order to increase occupational health and safety performance (e.g., patient safety, quality of work life). The authors demonstrated that multiple groups of individual learning agents (e.g., hierarchical levels of doctors above residents, such as chiefs and staff surgeons) expressed differential forms of resistance or adherence to new ways of learning work performance under more efficient and safer parameters. The varying stances observed across groups of learning agents translated power relations, and incidentally, the capacity of such groups to act upon and negotiate new work practices. Only one of the two hospitals where a space for renegotiation and resolution of pockets of resistance was allowed successfully adapted to the new work practices. We could therefore hypothesize that a facilitated organizational learning process does not occur without strong legitimacy basis provided by individual learning agents, and that such legitimacy basis cannot be presumed. Yet, none of these two models can satisfyingly hint how to consolidate the legitimacy basis of the organizational learning process.

#### *2.4. Organizational Learning Theory: Strengths, Limits and Challenges*

Our critical review highlighted significant epistemological and methodological elements of dissension across the three dominant approaches of organizational learning theory. We further proposed that this dissension pertained to analytical differences relative to the place allocated to the micro- or macrolevel components of the ecology of the organizational learning process, or as we would like to suggest here, to the place allocated to agency and structure. While the structural functionalist and the social constructivist approaches have been traditionally conceived as two opposite ends of a continuum with regards to agency-structure integration [10], preliminary integrative efforts from middle range theories

tend to support the relevance of adopting a balanced view of the organizational learning process. It is our contention that this last option offers promising opportunities for knowledge advancement, provided that strong theoretically driven parameters in the definition of agency and structure are adopted in the reconceptualization of the organizational learning process.

Nevertheless, one important challenge that remains to be systematically addressed involves the specification of the social conditions under which organizational learning is produced and reproduced by individual learning agents. What we have seen so far is a more or less explicit description of the underlying mechanisms of the organizational learning process encompassing some form of acquisition, dissemination, interpretation, and institutionalization of knowledge in time at the individual, group or organizational level. The conceptualization of such mechanisms however has been mostly isolated from a comprehensive appreciation of the origins of their intra- and inter-organizational sources of variation. Unveiling such dynamics may shed some additional light as to why some organizations and their members appear to do better of in terms experiencing a facilitated organizational learning process than others.

### **3. Moving Towards an Agency-Structure Approach to Organizational Learning**

We now turn to the sociological work of Anthony Giddens and Margaret Archer on agency-structure theory with the specific objective of delineating clear analytical elements upon which the constitutive domains of organizational learning process can be systematically anchored. Although Giddens and Archer's contributions are best known for their distinctive views on agency-structure integration [10] and have substantively informed organizational research and practice [38,39], recent work has highlighted the relevancy of their complementary use for theory development [40].

#### *3.1. The Modalities of Organizational Practices: Anthony Giddens*

In substance, the work of Anthony Giddens [41–43] revolves around the comprehension of the social production and reproduction of modern life under conditions of unprecedented spatial and temporal distanciation, that is “conditions under which time and space are organised so as to connect presence and absence” [42]. To achieve this, Giddens focuses on the pivotal issue of explaining both continuity and change by considering individuals and social structures as dynamic, dual forces: “social structures are constituted by human agency and yet at the same time they are the very medium of this constitution” [43]. Three core components support his theory: agency, structure, and their interplay, structuration.

Agency to Giddens is a matter of knowledgeability, rationality and capability of the individuals. Knowledgeability refers to the stock of knowledge mobilized by agents throughout their daily practices. This stock of knowledge is either tacit or explicit, agents constantly drawing on either which to reflexively monitor their social environment. The rationality of the agents is vested in the discursive consciousness they have about their activity, or in other words, the justifications they can provide for their course of actions. For Giddens, most human activity remains at a practical level of consciousness under the form of taken-for-granted routines, the latter being essential to the maintenance of agents' ontological security. To the extent that agents can effectively provide rational accounts of the nature of their transaction with their environment, their ability to consciously influence the latter in anticipated

directions is not unlimited. This is so because unintended consequences of action, if not reflexively identified by agents, revert into unacknowledged determinants for agents' future actions. This explains Giddens' interest in social practices, the enacted courses of actions performed by agents, as primary units for his theory [44]. Capability refers to agents' power to act out and modify their social environment. Such power is always contingent upon pre-existing, structural forces such as the social and material circumstances of life under which agents' activity emerges.

To the extent that agency is shaped by such structural forces, it also works the other way around. The duality of structure central to Giddens' theory stipulates that the mere existence of structure rests upon agents' enactment of the latter through their daily activities. Particular to Giddens' theory, structure refers to the resources (e.g., power, material goods) and rules (e.g., sanctions, values) enabling or constraining agents' activity. Structures exist through their manifestations as social systems, extended forms of regularized social practices in time and space. Social systems have structural properties, that is, a social distribution of resources and rules distinctively shaping the social practices of their members.

The structuration of social practices connects together agency and structure. The reciprocal associations between agency and structure can be systematized and abstracted into three analytical modalities. The political modality deals with power dynamics. At the agent level, power takes a transformative (*i.e.*, agents can alter the course of action of a series of events) and relational (*i.e.*, agents can secure outcomes through the doing of others) form. At the structural level, power is embedded in domination properties of the social system under the form of authoritative (e.g., control over the organization of the social time and space) and allocative (e.g., control over material goods) resources. Similarly, the normative modality encompasses the rights and obligations enabling or constraining agents' activity, thus extending the structural legitimation properties of the social system (*i.e.*, social norms, policies and laws). The semantic modality concerns the performative and communication elements of social practices. These elements are posited to integrate both aspects of agency (e.g., the enactment of mutual knowledge allowing agents to make sense about what is being said and done in social exchanges), and of larger signification structures (e.g., the symbolic artefacts and values common to agents of a given social system) [43]. Henceforth, reframing these parameters allows us to investigate the normative, political, and semantic dimensions of organizational learning practices defining organization-members exchanges in time and space.

### 3.2. Reclaiming One's Organizational Identity: Margaret Archer

For Archer [45,46], addressing continuity and change in social life imposes more pragmatic considerations about the connection between agency and structure, one that needs to go beyond the mere assumption of their dual interdependence: "the practical analyst of society needs not only to know *what social reality is*, but also *how to begin to explain it* (italics in text) [45]. In delineating the foundations of her morphogenetic approach, Archer has a clear destination in mind: exposing the conditions under which agents come to causally shaped their social conditions of existence.

At the core of Archer' morphogenetic approach lies a dynamic interplay between agency and structure, putting into play two distinct yet interrelated processes: on the one hand, the morphogenesis which explains the conditions of social change and thus, the elaboration of social structures and, on

the other hand, the morphostatis which corresponds to the absence of change in social structures. Throughout cycles of structural elaboration and stabilization, a sequential ordering in the integration of agency and structure is postulated whereby structure conditions, is altered by and reproduced through agents' activity. For Archer, in order to analytically and methodologically untangle these elements, emergent properties for both agency and structure must be allowed: "Emergent properties are relational (...). This signals *the stratified nature of social reality* where different strata possess different emergent properties and powers (italics in text)" [45]. Emergent properties imply that no precedence is given to agency or structure, as neither can through its sole influence entirely explain the course of the other. From this perspective, what goes on at the collective level of associative forms such as organizations or societies captures such structural emergent features of the social reality. Although Archer's considers structure (e.g., physical artefacts) and culture (e.g., non-physical artefacts) to be distinguishable collective phenomenon, we will retain Giddens' three-modal approach of structure as it offers analytical parameters more fruitfully attuned with our initial objective of delineating the domains of the organizational learning process. That being said, Archer's conceptualization of agency remains integral to our analysis.

In the morphogenetic framework, human beings are thought to experience different developmental stages of their agentic identity, each stage having distinctive connections with the collective as a whole. Primary agents represent groups of individuals sharing the same life chances (e.g., genetic, social, material). Any individual is thus considered a primary agent per se. Primary agents embody a passive form of agency derived from social position since individuals who remain at such stage lack either the structural opportunities allowing them to have influence on, or the individual interests to participate in structural change. Corporate agents emanate from individuals' awareness of their shared interests, outcomes (e.g., interests groups), thereby leading to their strategic affiliation. For Archer, reaching the stage of corporate agency confers to regrouped individuals the causal powers to change their social environment and conditions. However, to the force of the numbers also correspond group conflicts and concessions that may constraint the full expression of their individual potentiality. Hence, it is only when individuals become actors that full agency and social personality culminate. Actors are active and creative role incumbents. What separates them from corporate agents resides in their reflexive capacity to reconcile their personal interests with those of the collective.

What this subject is doing is conducting endless assessment of whether what it once devoted itself to as its ultimate concern(s) are still worthy of this devotion, and whether the price which was once paid for subordinating and accommodating other concerns is still one with which the subject can live. If yes, then we have a person who has determined to marshal his or her personal powers into a genuine act of commitment. [46]

As such, the acquisition of social identity is not a fully volitional endeavor, but it is seen in close interdependence with the succession of life chances which fostered or inhibited its developmental trajectory: "We cannot tell the story of how some of us can find subjective satisfaction in a role without reference to the objective structural factors in which the role is embedded in the first place" [46]. In that respect, translating Archer's reflexive and creative actor into organizational analysis becomes a matter of understanding the emergence of conditions within organizations that will support the deployment of organizational identity and commitment among their members.

#### 4. The Concept of Organizational Learning Practices

Bringing together the contributions of Anthony Giddens and Margaret Archer, this section proceeds with the systematic identification and articulation of key analytical elements from which the organizational learning process can now be understood. Our critical analysis of the extant literature on organizational learning sought to address the following questions: What are the constitutive core domains of the organizational learning process? Through which analytical levels is the organizational learning process operating? How do individuals and organizations intersect in bringing about organizational learning? Answers to these questions are summarized in Table 1 and further discussed through the following propositions.

*Proposition 1: Knowledge is a power resource pivotal to the sustainability of organizations.*

Following Giddens' work, a structurationist definition of organizations frequently used by organization theorists invites us to reframe organizations as administrative systems [47]. Administrative systems are characterized by systemic relations in time and space "coordinated and controlled through the exercise of administrative procedures which ultimately are meant to serve the intentions of the superordinate agents" [44]. Hence, the determination of organizational goals (e.g., productivity, growth, and innovation) is inherently tied back, at the source, to superordinate agents' rationality and activity for strategic orientation. Superordinate agents (e.g., business owners, executives, managers, *etc.*) are defined by the quantity and effectiveness of resources they have access to, along with the range of expert skills they have developed to master these resources [44]. Their efficient governance thus critically rests on knowledge as a power resource as its access and mobilization is determining the course of the trajectory of their organization [41].

For the sake of clarity in light of the multiple epistemological stances associated with later [4], the concept of knowledge expresses "tested, evaluated, and surviving information", individual learning agents access and mobilize in the course of their transactions with their social environment [48]. Thus, not all information achieves the status of knowledge at the core of the learning process experienced by individual learning agents [4]. From an organizational learning perspective, not all forms of knowledge either become relevant to insure the sustainability of organizations: only knowledge that is current, valid, and evaluated in congruence with the sustainability of the organizations is of matter to the organizational learning process [7,36]. For instance, organizations may deploy evaluation mechanisms (e.g., criteria for decision-making procedures aiming at knowledge evaluation) seeking to assess whether such appraised knowledge is in constant relevance to the pursuit of organizational goals (e.g., productivity, growth, and innovation) [49]. Considering the above, knowledge becomes a power resource where only certain groups of agents can effectively define, evaluate and shape its relevancy with regards to organizational goals, to the advantage of superordinate agents [50].

**Table 1.** The Organizational Learning Practices Heuristic Tool.

Theoretical Propositions	Domains	Key Organizational Learning Practices
<i>Proposition 1: Knowledge is a power resource pivotal to the sustainability of organizations.</i>	P	Coordination and control mechanisms (e.g., knowledge management systems [7]); Transformative power (e.g., critical assessment of knowledge [15]); Relational power (e.g., power imbalance in access and mobilization of knowledge [51]).
<i>Proposition 2: Collectively shared practices defining a given organization are the main analytical units of the organizational learning process.</i>	-	This proposition stipulates that key organizational learning practices from core dimensions are collective-level phenomenon.
<i>Proposition 3: The constitutive domains of the organizational learning process can only be understood comprehensively in relation to the political, normative and semantic modalities of its organizational context of emergence.</i>	N	Enabling or constraining organizational sanctions framing individual learning agents' work environment and its involvement with knowledge access and mobilization (e.g., safe psychological climate for experimentation [51], enriching psychosocial work environment [52,53]).
	S	Acts of acquiring, interpreting, and sharing knowledge expressed by the individual learning agents in a context where knowledge is seen as a highly praised resource paramount to organizational sustainability (e.g., knowledge sharing [54,55]).
	P	See Proposition 1
<i>Proposition 4: Transformative opportunity structures embedded in the organizational learning process provide the conditions for the development and consolidation of organizational identity and commitment.</i>	N, P, S	This proposition stipulates that key organizational learning practices (Proposition 1 to 3), when facilitated in organizations, consist in transformative opportunity structures framing individual learning agents' active participation to the organizational learning process.

Note: N: Normative; P: Political; S: Semantic.

Applying Giddens' political modality of social practices informs us here that to access such current and validated knowledge, superordinate agents must rely on a range of control and coordination mechanisms. The purpose of such mechanisms resides in the constant scanning of the internal and external environment of organizations in time and space. Such insights are in line with control and coordination systems discussed earlier by the structural functionalist approach [13]. Arguably, coordination and control mechanisms are thus a key *organizational learning practice* whose *function* resides in the acquisition of knowledge. Likewise, stored information in knowledge management systems most often associated with the function of organizational memory (e.g., [7]) can be reconceived as an authoritative resource supporting such mechanisms of control and coordination [44].

The essence of power in Giddens' structuration theory is also relational and transformative. The inherent asymmetrical distribution of knowledge within organizations derived from agents' position in the organizational structure is in our view at the heart of the organizational learning process. For instance, the exercise of superordinate agents' authority and governance over organizational members' exchanges is vested in the relational power they have over their subordinates' course of actions. But the mere exercise of this power is not without boundaries. Relational power is dialectical, meaning that subordinates, through their own agency, can more or less consciously comply with, resist to, or tacitly reproduce directives coming from above, thereby establishing such boundaries. By considering knowledge as a power resource, a shift in the analytical focus is introduced emphasizing the larger political conditions under which differentiation processes among all organizational members happen. The issue of knowledge access is intrinsically related to that of its mobilization, as well, in our view, to that of its validity assessment. Indeed, the seminal work of Argyris and Schön [15] on double loop learning reminds us that the process of securing the validity of knowledge in organizations is dependent upon agents' ability to question and critically assess taken-for-granted assumptions about organizational norms, values and practices.

From both Giddens and Archer's standpoints, the capacity to reflexively connect one's course of actions to its social contexts of emergence is a key transformative leverage in the constitution of agency. Equitable chances in access to (*i.e.*, relational power) and efficient mobilization of knowledge (*i.e.*, transformative power) in organizations correspond to two additional complementary organizational learning practices embedded in power relations.

*Proposition 2: Collectively shared practices defining a given organization are the main analytical units of the organizational learning process.*

The agency-structure lens put forth here emphasized two important precisions with regards to the meaningful units of analysis of the organizational learning process. First, attention is primarily drawn towards organizational practices specifically aiming at maintaining knowledge in flow within organizations. Thus, organizational learning practices are about how knowledge circulates through political, normative and semantic dynamics, and should therefore be distinguished from their outcomes (e.g., innovation, performance, or change). This clarification is important, as many authors have equated organizational learning with actual or potential change in individual learning agents' behaviors [7]. In addition, moving away from cognitive outcomes such as potential change in individual learning agents' behaviors or motivation to learn as benchmarks for the organizational learning process,

to factual social practices performed by individual learning agents, redirects the analysis to what concretely happens when organizational learning occurs [15]. Empirically, targeting social practices supporting or hindering the organizational learning process yields new potentials in terms of accuracy of the observations sought by researchers and practitioners, accuracy that could only have been approximated with cognitive outcomes for instance.

Another important precision associated with this second proposition is tied to Archer's analytical dualism positing emergent properties at the individual and organizational level. We identify the organization as the main unit of analysis since it is at that structuring level that exchanges with the external environment critical to the organizational learning process are the most clearly and intensively anchored in time and space. By this precision, we do not wish however to dismiss the importance of mesosystemic structures such as communities of practices to the organizational learning process. Rather, we see them as intra-organizational sources of variation modulating the organizational learning process within organizations. In our view, the fundamental basis of human activity in organizations reflects structures of domination, legitimation and signification located at the macrosystemic level of the organization as the main unit of analysis.

This brings us to another important clarification. Organizational learning is about the presence of collectively shared practices or otherwise stated, typical ways of being, doing and experiencing characterizing members of a given organization. Organizational practices are history and context-dependent [8]. They express the regularization or routinization of individual learning agents' organizational activities in time and space. For example, a knowledge management system that is not recurrently used by a significant proportion of individual learning agents could not be equated as a regularized organizational learning practice. As individual learning agents are undeniably the medium of the shared social practices supporting the organizational learning process, the identification of collective patterns in such practices clearly points to the organization as the main analytical unit of reference yet again.

*Proposition 3: The constitutive domains of the organizational learning process can only be understood comprehensively in relation to the political, normative and semantic modalities of its organizational context of emergence.*

Throughout our analysis, we have demonstrated that the structural functionalist, social constructivist and middle range approaches presented important caveats with regards to their respective integration of agency and structure. A direct result from this is the inconsistency encountered in the primary organizational learning practices underlying the organizational learning process. As we have begun to outline above, centering the analytical focus on power relations (*Proposition 1*) embedded in organizations unveiled sources of inequalities among organizational agents otherwise obscured by the mere formulation of the organizational learning process through its structural functions (*i.e.*, acquisition, diffusion, interpretation and institutionalization). We have further suggested that agents, through their social interactions, actively contribute to the production and reproduction of organizational-level structural dynamics (*i.e.*, normative, political, semantic) superseding organizational exchanges above and beyond other associative forms also present within organizations (e.g., communities of practices, occupational groups). The latter observations are thus indicative that

emergent knowledge may relevantly be derived from a reconfiguration of the organizational learning process from an agency-structure approach.

Following this, we posit that the identification of the *core domains* of the organizational learning process could heuristically be guided by a systematic examination of the normative, political and semantic modalities of its underlying collectively shared practices. Furthermore, and in line with Giddens' recommendations, the separation between the three modalities should exclusively be viewed as analytical as these are likely to be closely intertwined in reality. Given that the political domain of the organizational learning process and associated organizational learning practices (*i.e.*, transformative power, relational power, control and coordination) were discussed above, we will now turn to the semantic and normative domains.

The semantic domain integrates the performative components of the individual act of acquiring, interpreting, and sharing knowledge whose definition rests on commonly held assumptions by members of a given organization about the meaning of this highly praised resource paramount to organizational sustainability. Past empirical work has shown that subjective perceptions about group members' behaviors and attitudes towards knowledge sharing positively impacted on personal intent to share knowledge in return [56]. Reciprocity in knowledge sharing translates trust among agents; that is the willingness to take risks and engage in mutual cooperation and disclosure of knowledge [54,55]. For such risks to be undertaken, the alleviation of power imbalance in the definition of what is an acceptable, skilled performance needs to be achieved [51]. Moreover, individual and sectorial interests gained from the potential retention of knowledge need to be surpassed for such reciprocity to be completely instilled by agents. The valuing of knowledge in organizations through reciprocity in social exchanges underscores a key organizational learning practice disclosed by the semantic domain of the organizational learning process.

Lastly, the normative domain is concerned with enabling or constraining sanctions framing individual learning agents' activities. Assuming that the democratic development of agents' critical reflexivity is fundamental to the organizational learning process (*Proposition 1*), the normative dimension acknowledges the presence of positive or negative organizational sanctions shaping the deployment of the latter. The implementation of a safe psychological climate where experimentation and risk acceptance are being positively rewarded [51] as well as of a high quality psychosocial work environment (e.g., high rewards, involvement in decision-making process, supportive colleagues and supervisory exchanges, adequate workload levels) [52,53], conveys the message that individual learning agents' aspirations and needs for well-being, productivity and self-development are legitimately acknowledged as an integral part of the sustainability of organizations [57,58].

For this to happen, a rebalancing in the access and the mobilization of positive features of the organizational environment (*i.e.*, enriching psychosocial tasks content, safe psychological climate fostering critical reflexivity and knowledge exchange) has to take place. We would like to borrow from the work by Macintyre and associates [59] to characterize these positive features of the organizational environment as opportunity structures: "We have conceptualised features such as these as 'opportunity structures', that is, socially constructed and socially patterned features of the physical and social environment which may promote or damage health either directly, or indirectly through the possibilities they provide for people to live healthy lives". Organizations do this when they explicitly state and agree to a work organization that allows for organizational knowledge to be accessed and critically

assessed (e.g., career-long training curricula, job enrichment policies, *etc.*). Active promotion of such opportunity structures constitutes the last key organizational learning practice that emanates from our agency-structure analysis of the organizational learning process.

*Proposition 4: Transformative opportunity structures embedded in the organizational learning process provide the conditions for the development and consolidation of organizational identity and commitment.*

Thus far, we have sought to describe how the political, normative and semantic dimensions of the organizational learning process were constituted within organizations. We have proposed that knowledge, as a pivotal power resource to the sustainability of organizations, was unevenly distributed, its concentration notably among superordinate agents leading to inequalities in its definition, access, and mobilization. What remains to be addressed now are these two pivotal questions: Why, under such imbalanced circumstances, subordinate agents still participate through their daily work activities to the organizational learning process? How can we describe the nature of their participation accordingly?

In substance, Giddens' account of the legitimacy basis of administrative power rests on subordinate agents' tacit compliance with the enduring character of organizational hierarchy and asymmetry. Tacit compliance presupposes the acceptance by subordinate agents of their inability to have fully delimited causal powers to change the dominant order in place [44]. While this distinction shares some proximity with that of Archer's primary and corporate agents, it seemingly lacks the analytical depth of Archer's organizational actor who actively invests and fulfills himself/herself through his/her role in the organization [40].

Translating Archer's actor into the organizational learning process incorporates a compelling argument for the necessity of considering the sustainability of organizations from an integrative view in sync with individuals' basic needs for healthy self-development in adulthood [57,58]. Accordingly, *transformative opportunity structures* conveyed by the organizational learning process can be understood as *those opportunity structures specifically fostering individual learning agents' capacity to critically appraise their tacit frames for action and organizational circumstances* [15,41], *thereby allowing for the meaningful reconnection between their individual goals and those of their organization* [46]. In sum, individual learning agents can be said to be genuinely willing to constructively acquire, self-reflect and share knowledge on behalf of larger organizational purposes because they are apt to critically and reflexively connect such collective endeavors with their own purposeful trajectory. This reconciliation can only result in a specific arrangement between the normative, political, and semantic features of the organizational context for such transformative opportunity structures to be set in place within organizations.

## 5. Discussion

The objective of this paper was to provide a systematic account of the core domains of the organizational learning process through a critical appraisal of three dominant approaches in organizational learning theory (*i.e.*, structural functionalist, social constructivist and middle range approaches). The ecology of the organizational learning process required that strong theoretically anchored assumptions emanating from such systematization efforts also adequately addressed the complexity of its multilevel dynamics. In order to achieve our objectives, we relied on agency-structure

theory and, in particular, on the contributions of Anthony Giddens and Margaret Archer. In line with a recent stream of research building on the rich exploitation of theoretical complementarity in agency-structure theory [40], our reformulation of the organizational learning process under such theoretical assumptions emphasized the strengths of both Giddens and Archer's contributions to the study of organizations.

The four theoretical propositions introduced in this article adhere, along with Giddens and Archer's theories of change and continuity in social practices, to a dynamic appreciation of the organizational learning process. In our view, organizational learning can be best understood as the process inherent to the constitution of organizational knowledge embedded in political, normative and semantic dynamics of organizations and conveyed by the collectively shared social practices held by their members. Organizational learning is about organizations and their members, about structure and agency being considered as equally important parts of the equation. This perspective sheds novel insights as to how common grounds for discussion can be established to connect the plurality of theoretical approaches in organizational learning theory.

Major implications for research associated with our heuristic tool of organizational learning practices are two-fold. Our analysis of the organizational learning theory allowed us to: (a) bridge major streams of organizational learning theory to systematically pinpoint overarching key constitutive domains of the organizational learning process; and (b) delineate the contribution of individual learning agents and organizational structures in the understanding of the ecology of the organizational learning process. Comprehensive advancements in organizational learning theory should target its underlying political, normative and semantic domains, as well as how they dynamically condition agency and structure within organizations. Mapping out these analytical elements and showing their interconnections is an important task at hand. A future step for research therefore resides in moving on with a finer empirical appreciation as to how the normative, political and semantic dynamics of organizational learning process operate under different organizational settings (e.g., private/public sectors, small medium sized enterprises *vs.* large enterprises, local/national *vs.* multinational enterprises). Additionally, given that organizations are always in constant movement, narrowing the causal dynamics of the organizational learning process should also be prioritized. Designing longitudinal case studies drawing from quantitative and/or qualitative methodological paradigms will inform us of potential key milestones defining the trajectory of achieving a facilitated organizational learning process.

At the practical level, perhaps the most significant contribution of the organizational learning practices tool is the identification of the conditions under which transformative opportunity structures are most likely to unfold. One possible area where benefits both at the individual and organizational level can be triggered in that respect relates to human capital development. Following our analysis, corporate training represents an important source of organizational rewards for workers, opening them to novel organizational knowledge which can relevantly expand and refine their understanding of their work activities [60]. Yet, for this knowledge to be transposed and altered to adequately fit individuals' work environment and task structure, optimal political, normative and semantic leverages must be in place to allow for the integration and conversion of that new knowledge into durable organizational learning practices. As such, workers need to be exposed to transformative opportunity structures that will allow them to confidently build their own competency in critically evaluating the potential benefits—and limits—of this newly acquired knowledge for themselves, as well as for their organization.

Hence, we can only concur with the view of Bokeno [61] suggesting that organizational interventions targeting the development of transformative opportunity structures may have a profound impact on matters of democracy, empowerment and equity in organizations in that regards.

## 6. Conclusions

By interrogating the political, normative and semantic domains of organizational learning practices, researchers and practitioners are invited to think about the kind of transformative opportunity structures they wish to see emerging in organizations. The rewards that will punctuate their quest are of great appeal: building a better future for our organizations, as well as their members.

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## Author Contributions

All authors helped conceiving the paper. Nancy Beauregard designed the paper, and Louise Lemyre and Jacques Barrette contributed to comment and edit it. All authors have read and approved the final manuscript.

## Conflicts of Interest

The authors declare no conflict of interest.

## References

1. Cyert, R.M.; March, J.G. *A Behavioral Theory of the Firm*; Prentice-Hall: Englewoods Cliffs, NJ, USA, 1963.
2. Easterby-Smith, M. Disciplines of organizational learning: Contributions and critiques. *Hum. Relat.* **1997**, *50*, 1085–1113.
3. Dixon, N.M. Organizational learning: A review of the literature with implications for HRD professionals. *Hum. Resour. Dev. Q.* **1992**, *3*, 29–49.
4. Vera, D.; Crossan, M.M. Organizational learning and knowledge management: Toward an integrative framework. In *The Blackwell Handbook of Organizational Learning and Knowledge Management*; Easterby-Smith, M., Lyles, M.A., Eds.; Blackwell Publishing: Malden, MA, USA, 2003; pp. 122–141.
5. Dogson, M. Organizational learning: A review of some literatures. *Organ. Stud.* **1993**, *14*, 375–394.
6. Fiol, C.M.; Lyles, M.A. Organizational learning. *Acad. Manag. Rev.* **1985**, *1985*, 803–813.

7. Huber, G.P. Organizational learning: The contributing processes and the literatures. *Organ. Sci.* **1991**, *2*, 88–115.
8. Levitt, B.; March, J.G. Organizational learning. *Annu. Rev. Sociol.* **1988**, *14*, 319–340.
9. Burrell, G.; Morgan, G. *Sociological Paradigms and Organizational Analysis*; Heinemann: Portsmouth, NH, USA, 1985.
10. Ritzer, G. *Modern Sociological Theory*, 4th ed.; McGraw-Hill: New York, NY, USA, 1996.
11. Shrivastava, P. A typology of organizational learning systems. *J. Manag. Stud.* **1983**, *20*, 7–28.
12. Hedberg, B. How organizations learn and unlearn. In *Handbook of Organizational Design*; Nystrom, P.C., Starbuck, W.H., Eds.; Oxford University Press: Oxford, UK, 1981; pp. 3–27.
13. March, J.G. Exploration and exploitation in organizational learning. *Organ. Sci.* **1991**, *2*, 71–87.
14. Casey, A. Enhancing individual and organizational learning—A sociological model. *Manag. Learn.* **2005**, *36*, 131–147.
15. Argyris, C.; Schön, D. *Organizational Learning: A Theory of Action Perspective*; Addison Wesley: Reading, MA, USA, 1978.
16. Daft, R.L.; Weick, K.E. Toward a model of organizations as interpretation systems. *Acad. Manag. Rev.* **1984**, *9*, 284–295.
17. Lawrence, T.B.; Mauws, M.K.; Dyck, B.; Kleysen, R.F. The politics of organizational learning: Integrating power into the 4i framework. *Acad. Manag. Rev.* **2005**, *30*, 180–191.
18. Bernoux, P. Le changement dans les organisations: Entre structures et interactions. *Relat. Ind.* **2002**, *1*, 77–99.
19. Hayes, J.; Allinson, C.W. Cognitive style and the theory of practice of individual and collective learning in organizations. *Hum. Relat.* **1998**, *51*, 847–871.
20. Lipshitz, R.; Popper, M.; Friedman, V.J. A multifacet model of organizational learning. *J. Appl. Behav. Sci.* **2002**, *38*, 78–98.
21. Blackler, F. Knowledge and the theory of organizations: Organizations as activity systems and the reframing of management. *J. Manag. Stud.* **1993**, *30*, 863–884.
22. Lave, J.; Wenger, E. *Situated Learning: Legitimate Peripheral Participation*; Cambridge University Press: Cambridge, UK, 1991.
23. Brown, J.S.; Duguid, P. Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organ. Sci.* **1991**, *2*, 40–57.
24. Yanow, D. Seeing organizational learning: A “cultural” view. *Organization* **2000**, *7*, 247–268.
25. Elkjaer, B. Social learning theory: Learning as participation in social processes. In *The Blackwell Handbook of Organizational Learning and Knowledge Management*; Blackwell Publishing Ltd: Malden, MA, USA, 2003; pp. 38–53.
26. Wenger, E. Communities of practice and social learning systems. *Organization* **2000**, *7*, 225–246.
27. Gherardi, S.; Nicolini, D. The organizational learning of safety in communities of practice. *J. Manag. Inq.* **2000**, *9*, 7–18.
28. Swan, J.; Scarbrough, H.; Robertson, M. The construction of “communities of practice” in the management of innovation. *Manag. Learn.* **2002**, *33*, 477–496.
29. Gherardi, S.; Nicolini, D.; Odella, F. Toward a social understanding of how people learn in organizations—The notion of situated curriculum. *Manag. Learn.* **1998**, *29*, 273–297.
30. Roberts, J. Limits to communities of practices. *J. Manag. Stud.* **2006**, *43*, 623–639.

31. Gherardi, S.; Nicolini, D. Learning in a constellation of interconnected practices: Canon or dissonance? *J. Manag. Stud.* **2002**, *39*, 419–436.
32. Simard, M.; Marchand, A. A multilevel analysis of organisational factors related to the taking of safety initiatives by work groups. *Saf. Sci.* **1995**, *21*, 113–129.
33. Mikkelsen, A.; Gronhaug, K. Measuring organizational learning climate: A cross-national replication and instrument validation study among public sector employees. *Rev. Public Pers. Adm.* **1999**, *19*, 31–44.
34. Watkins, K.E.; Marsick, V.J. Making learning count! Diagnosing the learning culture in organizations, advances in developing human resources. *Adv. Dev. Hum. Resour.* **2003**, *5*, 132–151.
35. Bontis, N.; Crossan, M.M.; Hulland, J. Managing an organizational learning system by aligning stocks and flows. *J. Manag. Stud.* **2002**, *39*, 437–469.
36. Crossan, M.M.; Lane, H.W.; White, R.E. An organizational learning framework: From intuition to institution. *Acad. Manag. Rev.* **1999**, *24*, 522–537.
37. Thomas, R.; Hardy, C. Reframing resistance to organizational change. *Scand. J. Manag.* **2011**, *27*, 322–331.
38. Den Hond, F.; Kees Boersmaa, F.; Heresa, L.; Kroesb, E.H.J.; van Oirschotc, E. Giddens à la Carte? Appraising empirical applications of structuration theory in management and organization studies. *J. Political Power* **2012**, *5*, 239–264.
39. Herepath, A. In the loop: A realist approach to structure and agency in the practice of strategy. *Organ. Stud.* **2014**, *35*, 857–879.
40. Llewellyn, S. Introducing the agents. *Organ. Stud.* **2007**, *28*, 133–153.
41. Giddens, A. *The Constitution of Society, Outline of the Theory of Structuration*; Polity Press: Cambridge, UK, 1984.
42. Giddens, A. *The Consequences of Modernity*; Stanford University Press: Stanford, CA, USA, 1990.
43. Giddens, A. *New Rules of the Sociological Method*; Stanford University Press: Stanford, CA, USA, 1993.
44. Cohen, I.J. *Structuration Theory: Anthony Giddens and the Constitution of Social Life*; St. Martin's Press: New York, NY, USA, 1989.
45. Archer, M.S. *Realist Social Theory: The Morphogenetic Approach*; Cambridge University Press: New York, NY, USA, 1995.
46. Archer, M.S. *Being Human: The Problem of Agency*; Cambridge University Press: New York, NY, USA, 2000.
47. Briand, L.; Bellemare, G. A structurationist analysis of post-bureaucracy in modernity and late modernity. *J. Organ. Chang. Manag.* **2006**, *19*, 65–79.
48. Firestone, J.M.; McElroy, M.W. Doing knowledge management. *Learn. Organ.* **2005**, *12*, 189–212.
49. Peters, K.; Maruster, L.; Jorna, R.J. Knowledge claim evaluation: A fundamental issue for knowledge management. *J. Knowl. Manag.* **2010**, *14*, 243–257.
50. Haugaard, M. Reflections on seven ways of creating power. *Eur. J. Soc. Theory* **2003**, *6*, 87–113.
51. Edmondson, A.C.; Wooley, A.W. Understanding outcomes of organizational learning interventions. In *The Blackwell Handbook of Organizational Learning and Knowledge Management*; Easterby-Smith, M., Lyles, M.A., Eds.; Blackwell Publishing: Malden, MA, USA, 2003; pp. 185–211.

52. Karasek, R.; Theorell, T. *Healthy Work: Stress, Productivity, and the Reconstruction of Working Life*; Basic Books: New York, NY, USA, 1990.
53. Siegrist, J. Effort-reward imbalance at work and health. In *Historical and Current Perspectives on Stress and Health*; Perrewé, P., Ganster, D., Eds.; Elsevier Science: Amsterdam, The Netherlands, 2002; Volume 2, pp. 261–291.
54. Levin, D.Z.; Cross, R.; Abrams, L.C. The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Manag. Sci.* **2004**, *50*, 1477–1490.
55. Wu, W.-L.; Lin, C.-H.; Hsu, B.-F.; Yeh, R.-S. Interpersonal trust and knowledge sharing: Moderating effects of individual altruism and a social interaction environment. *Soc. Behav. Pers.* **2009**, *37*, 83–93.
56. Chow, W.S.; Chan, L.S. Social network, social trust and shared goals in organizational knowledge sharing. *Inf. Manag.* **2008**, *45*, 458–465.
57. MacIntosh, R.; MacLean, D.; Burns, H. Health in organization: Towards a process-based view. *J. Manag. Stud.* **2007**, *44*, 206–221.
58. Lowe, G. The healthy organization. In *Creating Healthy Organizations: How Vibrant Workplaces Inspire Employees to Achieve Sustainable Success*; University of Toronto Press: Toronto, ON, Canada, 2010; pp. 16–41.
59. Macintyre, S.; Ellaway, A.; Cummins, S. Place effects on health: How can we conceptualise, operationalise and measure them? *Soc. Sci. Med.* **2002**, *55*, 125–139.
60. Siegrist, J. Effort-reward imbalance at work and health. In *Research in Occupational Stress and Well Being, Historical and Current Perspectives on Stress and Health*; Perrewé, P.L., Ganster, D.C., Eds.; JAI Elsevier: New York, NY, USA, 2002; pp. 261–291.
61. Bokeno, R.M. The work of Chris Argyris as critical organization practice. *J. Organ. Chang. Manag.* **2003**, *16*, 633–649.

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