

**Towards a Social Ontology of the Firm:  
Emergence, Reconstitution, Organization,  
Institution and Power**

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# **Towards a Social Ontology of the Firm: Emergence, Reconstitution, Organization, Institution and Power**

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**Abstract:** In the past half century, the theory of the firm has become a specific and prolific research field. However, the social ontology of this central institution of capitalism has never truly been the subject of investigation. I consider this negligence harmful for organizational economics and management and, more broadly, for the social sciences, notably because the first and central question raised by the theory of the firm relates to its nature: What is a firm? For this reason, I propose some novel considerations for a social ontology of the firm by focusing on social emergence, reconstitution, the two-level institutional logic of the firm, complex organizational dynamics and interacting mechanisms, and power.

**Key words:** Emergence; firm; institution; organization; power; reconstitution; social ontology.

## INTRODUCTION

Everyday, humans are engaged in multiple projects, associations, groups, etc. that can only exist through the creation of collective action. Each productive market or non-market activity that requires more than one person requires an organization. In our modern societies, organizations are numerous and different in nature. Armies, non-profit or non-governmental entities, charity entities, religious groups, families, tribal structures, mafias, terrorist groups, universities, hospitals, and drug cartels are organizations. However, it is clear that the firm is a special type of organization. Because the firm is an organization, it is evident that we must take an interest in the social philosophical ontology of organization, which refers, in the view of Lawson (2004), to “the study of what it is to be or to exist (*here organization*) with all the things that are have in common” (ibid., p. 2). I believe that enriching the debate on the nature of the firm by including ontological considerations with respect to social organization is in itself a contribution to the theory of the firm. However, it is also fundamental to recall that the firm is a very specific organization in our market societies, which introduces some intrinsically unique elements. What are they? What is the particularity of the firm as a social organization?

The *raison d'être* of the firm was, is and will be to produce the collective action necessary to serve all human needs. The nature of the firm persists. What changes, however, is the institutional and economic environment out of which firms evolve. Thus, firms have changed over time. However, it is crucial to note that the etymology of the term firm is very useful to appreciate its ontological characteristics. The term comes from the Medieval Latin *firma* that refers to convention and from the Latin *firmus* that refers to durability and more particularly to firmness (as opposed to softness). I find that the social philosophical ontology of organization mentioned above underlies this etymological consideration. However, beyond the theoretical divergences in the literature, a consensus emerges on the economic ends of the firm: the search for profit dictates their survival. An organization that does not realize durable profits is not considered a business firm in the literature. Profit, as a creative

process resulting from the coordination and allocation of multiple human and non-human resources, is intrinsically an economic variable (Knight 1921).

Another important distinction concerning the firm is related to the fact that individual members are also workers who receive financial compensation for their subordination. The employment contract is at the core of the firm as an economic entity, as Simon (1951) explained. In this sense, the nature of the firm as a distinctly economic organization differs from other social entities for which the process of collective creation is fully voluntary and not based on any form compensation. Rajan and Zingales (1998) thus consider the firm a specific economic organization in which “the sense of belonging arises from the expectation “good citizens” of an organization have that they will receive a share of future organizational rents” (ibid., p. 388). More broadly, the firm has a specific legal status that maintains the cohesiveness of the whole (Chassagnon, 2011b). This status as an entity is crucial “in identifying the relevant boundaries between the firm and its environment” and “in cohering its interactions with a market environment and its competition or cooperation with other firms” (Hodgson and Knudsen 2010, p. 177). Indeed, the firm evolves in a highly competitive and global competitive environment that requires profitability and specific adaptation. Nevertheless, it is also important to argue that in spite of these special features, the firm is not only an efficient means of organizing production that replaces markets. In the firm, it is appropriate to argue that “employees often make decisions in terms of their expected effects on the firm’s profitability and identify with organizational goals without considering their own economic self-interest” (Cordes et al. 2008, p. 125). The firm is also a social entity with key organizational attributes such as identity, cohesion, culture, cooperation and commitment that define its ontological nature. In this view, the firm cannot be reduced to a simple function of purely private economic self-interest because the firm is also a social institution for the common good.

In his 1937 seminal paper, Coase raises the question of what a business firm is. However, while this question has historically been considered the main question of the theory of the firm, the prevailing organizational economics and managerial theories have not adequately examined the social

ontology of the firm. The term “ontology” comes from the Greek “onto” meaning “being” and “logos” meaning “science”. Social ontology is the science, or rather, the study of social being as social being. More precisely, as I defined (see Chassagnon, 2012), social ontology is the study of the nature and structure of the entity's social reality or the identification of the constitutive components and fundamental characteristics of this social order. The social ontology of the firm is hence the study of the properties and dynamics that govern the existence of firms and give form to their complex social reality.

I believe that it is essential to question the social ontology of the firm by placing it within a processual perspective to make significant “explanatory progress”, to quote Mäki (2004). In this paper, I will propose new considerations for a social ontology of the firm that go further than my previous works on the nature and boundaries of the firm, notably by strengthening critical realist materials and advancing new considerations on the institutional roots and constitutive dynamics of the firm.

The constitutive properties of the firm are those that are necessary for the existence of the institution and the social behaviors to which these properties relate. In this view, Searle (1995, p. 28) argues that “institutional facts exist only within systems of constitutive rules”, before subsequently affirming that “ontology is the mode of existence of an institutional reality” (Searle, 2005, p. 1). I believe that the social ontology of the firm is a conception of the constitutive social relationship between individual actors and institutions. The ontological approach developed in this article is in the tradition of the work of the critical realist theorists from Cambridge, who comprehend scientific social ontology as “the study of what is, or what exists; the study of entities or things” (Lawson 2004, p. 1). In the realm of the social—defined as the “domain of phenomena whose existence depends at least in part on us” (ibid., p. 2)—ontology is the study of social entities. Social ontology allows the definition of the real entity constituted by the firm to be approached while including the socio-political dynamics that reconstitute the firm as required by institutional changes.

The firm differs from a simple aggregation of individual constituents; otherwise, only the individuals who compose the firm are the substance of it. In this individualistic view, firms have no autonomy and no real social existence. Mainstream organizational theories often contend that if the collective entity of “the firm” evolves over time, it is because the individuals have consciously decided that it should be so. Therefore, the firm can be exclusively approached in an upward manner from the properties and actions of its individuals. However, the interdependence between social structures and individual actions cannot be reduced to the classical dichotomy between individualism and collectivism, between reduction and reification. This difficulty explains why some scholars in the social sciences have emphasized the analytical and theoretical interest in complex forms of “individualism” (see; e.g., Giddens 1984). Individual actions are shaped by the social structures that they modify and transform in an unexpected manner and, reciprocally, the social structures cognitively influence the individual’s actions, which requires certain holistic arguments. Holism does not imply a denial of the parts, which have also a real existence, but it does imply the recognition of the existence of the whole. If it is impossible to reduce the firm to individual activities, it is also fallacious to consider the firm as an entity that is strictly independent of them; otherwise the scholar could reify it and fall into a holism that is as reductionist as simplistic ontological individualism (Chassagnon, 2012). How can such obstacles be overcome?

The logic of firm reconstitution is at the core of the analysis of the emergent processes of cooperation and cohesiveness.<sup>1</sup> However, exclusively upward or downward reductionist approaches fail to consider the emergence of cooperation that links individuals (agency) to the institution (structure), the structured processes of social interaction, or the creation of a collective social identity. The social reality of the firm must be recognized as a complex emergent entity that cannot be reduced to the mere sum of its constitutive components. A substantial analysis of the nature of the firm leads to the belief that its systemic dimension is depicted by its emergent properties. The objective reality of the firm can only be understood in light of the elements of cohesiveness that turn this particular institution of capitalism into a unified and sustainable entity. However, to define the firm as an

emergent entity entails understanding the causal logic that constitutes the whole and allows the firm to exist and survive despite changes in its close environment.

To study the firm as a social order, I believe it is appropriate to recognize the firm as an emergent real entity that is dynamically reconstituted. The firm is, in other words, a cohesive and sustainable irreducible whole that consists of interacting human and non-human components. The firm exists as something that generates productive efficiency—that is to say the dynamic capability to produce a good and/or service, simple or complex, in such conditions that satisfy profitability and economic performance criteria that depend on market conditions; this capability results from both complementarity effects between human and non human resources and consummate cooperation between productive actors—which make the firm profitable and persistent over time despite a strong selection environment. More precisely, the firm appears as both an organization and an institution that generates specific dynamics that maintain a cohesive whole through reconstitutive relationships. These arguments thus present an original response to the question of the ontological nature of the firm. This proposal, however, involves interacting organizational mechanisms and specific institutional arrangements that have yet to be approached.

The paper is organized into six sections. Section 1 proposes to address complexity and social emergence in the firm. Section 2 focuses on the existence of a reconstitutive downward causation in the firm. Section 3 elucidates the complex interlocking relationships between the organizational and the institutional aspects of the “firm” as an entity by shedding light on a two-level institutional logic. Section 4 provides insights on the internal institutional structure of the firm. Section 5 questions the dynamics of social identification and the complex organizational mechanisms of the firm. Section 6 extends the paper for future studies by advancing methodological arguments on transformative power and reconstitution within the firm.

## **1. THE FIRM AS A SOCIAL EMERGENT : A CRITICAL REALIST PERSPECTIVE**

According to the theory of complex systems, the complexity of firms is contingent on the degree of cognition (see the work of Gavetti et al. 2012, on the assessment of and prospects for the behavioral theory of the firm). Complexity and cognition are undoubtedly linked in the sense that cognitive mechanisms are used to reduce complex problems and implement the organizational structure of production. Thus, as a complex system, the firm is a meeting place for constituents that interact and generate new properties and attributes<sup>2</sup>. Unlike in reductionism, the firm should be directly perceived within an analysis of the wholes that are distinct from the analysis of their parts, even though it also implies that these parts stick together (see von Bertalanffy 1968; Hull 1988). The approach to the firm as a complex collective entity shows that the firm is a system that reproduces and maintains itself. We speak about autopoiesis—which is a neologism resulting from the Greek “auto” meaning “act” and “poiesis” meaning “creation”—to design this capacity. Thus, we must understand the firm as a social system and an autopoietic unit based on structural coupling.

Structural properties are central to the genesis and durability of the firm, which exists because it generates structural effects and guides social actions by collectively linking its human constituents (see March and Simon 1958). The degree of structural coupling that results from the interaction between two or more units conditions the emergent behaviors and dynamics of structurally linked systems and thus creates the existing conditions of the firm. The cohesive interactions between the cognitive and phenomenological elements make the firm a distinct and durable real entity. This reasoning implies a consideration of the structural relationship between the individual and holistic levels. The firm should be treated as a whole that interacts, through the impetus of individuals, at different hierarchical levels—between different local constituents—but does not need to be reified. Firms are real and plural social actors that are ontologically distinct from their human parts and function and reproduce themselves using their own internal rules.

As an interactive system, the firm generates emergent properties that are in essence new, non-reducible and unexpected (see, e.g., Kauffman 1995). Firms appear to result from both human intentionality and causes that are independent of it. If these causes are structural elements, it is crucial to understand that the firm's emergence is not exclusively directed by human intentions. Non-intentional effects crystallize in an emergent system that no one has predicted nor has anyone required and that functions relatively independently of the actors that have produced it by following its own autonomous laws. Emergence implies that the activities of the parts do not determine the actions of the group. This implication means that the resulting interactions and systems are not linear; the system's behavior as a whole cannot be obtained by aggregating the behaviors of its constitutive parts. I consider it useful here to quote the work of Lawson (2012, p. 348) to emphasize that "emergence so understood however is not an explanatory term but rather one that marks the spots where (diachronic) explanatory work remains to be undertaken to reveal how the higher levels entities do (or have) emerge(d)." In this paper, I wish to reiterate that emergence in my work refers to what exists, to ontological statements linked to the social reality of the firm, and not to methodological statements as such<sup>3</sup>.

The emergent properties of firms are hence influenced by both the fundamental properties of their constituents and the nature and history of their relationships and interactions. A firm's emergent properties result from both human beings and natural factors, but they can never be explained by their lower hierarchical elements alone. In other words, emergence is distinct from aggregativity (Wimsatt 2007) in the sense that the firm emerges from a constitutive relationship that qualitatively differs from its parts. The qualitatively new, emergent properties of the firm differ from the macro-properties that result from the aggregation of the firm's constituents (Goldspink and Kay 2004). The firm exists as relational and systemic entity—which gives it an ontology that is specific to real social entities—that is constituted by a system of embedded relationships that produce the distinctive properties of its individual constituents. Additionally, it is important to note that the rules of emergence change depending on whether the system is a social one. The difference is critical and related to the reflexive capacity of human beings (Chassagnon, 2012). We have all the capacity to

distinguish the *self* from the *other* and thus to interact in a reflexive manner with our organizational and institutional environment (see *infra*). Human action is coordinated by mechanisms and aptitudes, which are themselves guided by their autopoiesis, i.e., by their capacity to reproduce through time. This argument means that the firm is the result of numerous relationships between the macro- and micro-levels of the organization. Social actions are the consequence of human interactions guided by structural elements that allow the individuals to make sense of their activities.

The firm is a higher level emergent, the properties of which depend on lower components, but it cannot be causally and ontologically reducible to these lower components. In the words of Lawson (2012), the firm as social structure “is (synchronically) emergent in the sense of being dependent upon, but distinct from, and ontologically and causally irreducible to, the individual activities that it serves in turn to facilitate and coordinate” (ibid., p. 372). He thus explains that the components of the emergent entities (and not of the aggregate collections), “do what they do *qua* components only because of the manner in which they are organized (arranged, structured or related) as parts of the whole” (ibid., p. 351). In summary, the firm can be considered an emergent entity “from some lower (or different) level where they arise through the relational organizing of lower-level elements and the emergent properties in question are not possessed by any of the lower-level elements that get to be organized” (ibid., p. 348). In this Cambridge critical realism perspective, the firm is a specific social emergent that generates a causal dynamic that transforms its elements. I explained that the firm’s emergent properties affect the elements that constitute the firm without being independent of it. This relationship does not explicitly lead to an argument that there is both bottom-up and a top-down causation, but instead, it implies that the firm cause vertical rules of causation to emerge, and these rules are not linear but constitutive.

The firm as a generative social emergent has a collective causal power (firm properties differ, hence, from atomistic properties, which have no causal powers) that is not reducible to its parts. It means that the firm’s components are influenced by constitutive forces that would not exist without emergence effects. From Bhaskar’s (2008[1975]) perspective, a firm’s causality rests on emergent

generative mechanisms. Downward causation in the firm is explained through the changes and constraints provoked by the higher hierarchical levels among the lower levels, which determine the boundaries and perimeters of interactions; if the collective entity perishes, its constitutive components also perish. However, the reverse does not hold (Chassagnon, 2012). In a complementary view, Rosser (2012) links emergence to evolutionary processes and argues that “higher level emergence might actually reconstitute the entities at the lower levels rather than merely constraining them” (ibid., p. 126). This is why substantial attention must be devoted to the nature of the complex causation we observe in the social ontology of the firm.

## **2. AGENCY, STRUCTURE AND RECONSTITUTION IN THE FIRM**

In this section, I wish to explain that the argument of emergence is linked to the fact that the firm rests on an intrinsic reconstitutive logic based on a form of causation that is neither bottom-up nor top-down. I thus share the position of Lawson (2005, p. 9), who argues that “the notion of downward causation seems to presuppose the realist notion of emergent social phenomena, including social structures, that is of phenomena emergent from human interactions.” Thus, the emergent properties of the firm do not horizontally affect their hierarchical levels but can affect the lower levels. This ontological position is advocated by the critical realists, for whom there are two distinct and interdependent moments—structural and agential—that do not belong to the same process but are at the origin of double causal relationships (see, *e.g.*, Archer 2000; Bhaskar 2008[1975]; Elder-Vass 2008b).<sup>4</sup>

Hodgson (2002) uses a notion of “reconstitutive downward causation” that is opposed to the upward reconstitutive relationships often accepted in mainstream organizational economics and management. A reconstitutive downward causation can exist in the sense that the causal power of the structure changes the attributes of the agents. For Hodgson (2002, p. 168), “with downward causation it is impossible to take the parts as given and then explain the whole. This is because the whole, to some extent, reconstitutes the parts.” It is not a form of collectivist determinism that would create local

constituents from nothing within the lower levels of the hierarchy, but rather to consider the notion that the emergent whole constitutes the lower level components that interact and are constantly changing within the firm. The essence of firms is directly linked to the causality between the interacting local (individual) constituents and the collective (and social) entity.

A downward causation perspective allows us to analyze the constitutive rules of the firm that underlies the theory of emergence. Constitution and causation go hand in hand, which shows, on the one hand, that complexity is not explained by upward relationships alone and, on the other hand, that downward causations are reconstitutive and not simple linear relationships (Chassagnon, 2012). This ontological approach to the firm “provides a means of avoiding both, on the one hand, the exclusively top down’ explanations of individuals in terms of cultures, structures or institutions, and on the other hand, the exclusively bottom up’ modes of explanation that attempt to start from individuals alone” (Hodgson 2004, p. 658). The firm has emergent causal powers, and because the firm is durable (and earns sufficient profits over time to survive), it appears possible to say that the firm is a productively efficient causal entity. The firm possesses a certain form of “causal difference” when confronted with the other entities that surround it. The firm is a real entity with the particularity of being engaged in a process of economic survival narrowly linked to a strong selection environment. Selection here is not disconnected from human and collective agency and refers to “the mechanisms that bring about the survival of some variations rather than others, often reducing variety” (Hodgson and Knudsen 2010, p. 36). This issue of selection is crucial for understanding the specificity of the firm as an organization and thus completes my arguments on firms’ dynamics by raising the question of the organization and reorganization of production processes.

This causal power of the firm is hence the result of a system of multiple relationships among the constitutive elements, but it cannot be exerted without a collective organizing process and mediation. In this perspective, reality should be seen as processual because “novel entities continually arise of, and through (re)organizations of, what was there before (albeit with the latter possibly transformed in the process)” (Lawson 2012, p. 354). My use of the term “entity” to approach the nature of the firm is

hence consistent with Lawson's notion that "a category such as entity is appropriately used just to express (or can be thought of as expressing) a relatively stable actualization of a feasible emergent organization or system of underlying processes" (ibid., p. 357). The processual view of the entity category as applied to the firm addresses new insights for the ontological analysis of the firm.

Regarding the last arguments, the firm relies on strong forms of cohesiveness and integrity, which means that the whole influences all of the constituents such that the "detachment" of a part does not fatally affect the generative mechanism of the whole. Similarly, the integration of a new component does not presage the dissolution of the entity as a whole. The firm persists due to the causal power generated by the organization through the institutionalization of the different systemic orders (see *infra*). Individuals create, in a new and unexpected way, the emergent properties—such as organizational routines<sup>5</sup>—that similarly cause the individual's behaviors by influencing their cognitive structures, intentions and perceptions, in what I called "collective and cognitive mediations." I think that it is crucial to attribute a "causal capacity" to collectives, and beyond self-organizational considerations, we must regarding the firm within its emergent and generative relationships, considering its constitutive rules (Chassagnon, 2012).

In mainstream theories, which limit the firm to an aggregation of contractual relationships implemented by contract law, the rules for the constitution of this social institution (see the next section) that is the firm are nonsensical. Mainstream theories often approach human behavior as auto-referential and solely consider upward relationships causal (van den Bergh and Gowdy 2009). Similarly, mainstream theories of the firm do not consider causal chains between inter-constituent interactions and replication processes. I believe that there are collective and cognitive mediations that make complex downward causation a reconstitutive mechanism because, as Hodgson (2004, p. 657) notes, "to provide a reconstitutive causal mechanism, we have to point to factors that are foundational to purposes, preferences and deliberation as a whole. This is where habits come in." Habits (see also the works of "pragmatic" philosophy, notably Dewey 2002[1922] and Veblen 1898) constitute mediations indicating that causation is not strictly top-down, but that they pass by the cognitive

mechanisms that they model (see also Thornton and Ocasio 2008, on “institutional logics”). As Hodgson (2002, p. 171) argues, “habit is the crucial and hidden link in the causal chain.”

Similarly, routines—which relate to the whole organization, just as habits relate to individuals—are the main criterion for a firm’s differentiation. Routines are crucial generative mechanisms in the process of (organizational and institutional) change. The firm is not an invariant entity that refuses to evolve as required by institutional transformations. Firms change dynamically based on phenomenological transformations. These changes occur because the firm brings together two crucial aspects of emergence and reconstitution and hence of the social ontology of the firm: organization and institution (see also Scott 2008[1995]).

### **3. UNDERSTANDING THE TWO-LEVEL INSTITUTIONAL LOGIC OF THE FIRM AS AN ORGANIZING ENTITY**

I contend that firms are social business organizations because there are also specific institutions of capitalism (see Zucker 1983; Langlois 1992)<sup>6</sup>; institutional and organizational aspects are linked together in the firm and are mutually constitutive of the persistent and emergent entity of the “firm”. Organizations such as firms are special institutions that, according to Hodgson (2013), involve: “(a) criteria to establish their boundaries and to distinguish their members from nonmembers, (b) principles of sovereignty concerning who is in charge, and (c) chains of command delineating responsibilities within the organization” (ibid., p. 143). This view is consistent with my definition and also requires the inclusion of power and responsibility in the analysis (see *infra*). This organization/institution distinction is very useful in the analysis of the internal operations of the firm and hence the complex social interactions between the individuals and the collective (as is the case in this paper). However, I argue that it is not sufficient to consider this distinction the final word, as we also must recall that the firm is embedded in a broader institutional environment and hence has to address the complex interactions between the firm and its outsized social context. This dimension has not been sufficiently

developed in my previous works. This is why I consider it useful to provide additional considerations on the two-level institutional logic of the firm as an organization.

In this perspective, the firm is also reconstituted by the complex causality emanating from the broader institutional environment, which has its own philosophical social ontology (see Hall 2010). In North's (1990) perspective, firms are unitary players; this necessitates devoting attention to their surrounding national and other higher institutional levels (the external institutional level). The firm as both a specific internal institution and a social actor requiring rules (the internal institutional level) and coordination conventions is also an organization—a player—with broader institutional structures (see, e.g., Selznick 1957; Meyer and Rowan 1977; Coleman 1982; DiMaggio and Powell 1983; Scott and Meyer 1983) that produce the rules necessary for social interactions and cohesion<sup>7</sup>.

The two institutional levels must be differentiated because firm-individual interactions are characterized by human and reflexive agency, whereas the interactions between firms and external institutions are characterized by what I term a form of “organized collective agency” (see also Swanson 1992; Grossi et al. 2007). This is why Hodgson (2006) rightly writes: “There are multiple levels, in which organizations provide institutional rules for individuals, and possibly in turn these organizations can also be treated as actors within broader institutional frameworks” (p. 10). From a Veblenian perspective, there is a process of positive feedback between different institutional levels—for example between what he calls the “cultural scheme” and (lower) isolated institutions such as the firm. This reconstitutive process is based on complex interacting institutional elements that he calls “the institutional logic” (see Brette 2003). Similarly, Zucker (1983, p. 3) reiterates that it is necessary to combine “the view that organizations are constrained by the larger institutional structure<sup>8</sup> and the view that organizations are themselves institutions”. It is however important to note that “although all organizations within a given institutional field are subject to the effects of institutional processes within the context, all do not experience them in the same way or respond in the same manner” (Scott 2008[1995], p. 160). To complete this argument and advance towards new insights on the social

ontology of the firm, I believe that we must bear in mind that the institutions of the firm both empower individual and collective actors and regulate their actions in different ways.

The argument developed in this section goes beyond the argument of North (1990), who contends, if institutions are the rules of the game, organizations are the players. Indeed, organizations such as firms are both the “players” in a global system and the producers of the internal rules of the game. The private ordering that exists within state boundaries is institutionalized, becomes a social order and, in this sense, has an influence on what we could call the “public domain” (see Smith 2007[1974]). I deem it fundamental when developing a social ontology of the firm that consideration be given to the complex and productive interrelationship between the different environments of the firm. I think it will also be interesting to develop more in depth the strong interactions and embeddedness between the institutional levels (and so between different types of institutions) on the one hand and between the organizational and institutional aspects of the firm on the other hand. I leave this crucial question for future studies and new contributions.

To sum up, it appears that the firm is an organization, that is to say, a dynamic and cooperative human system of coordination (with its own boundaries) of/between productive resources that aim to determine individuals’ (daily) activities, create collective action and achieve the collective goal of the individual actors, who have potentially divergent objectives and different cognitive representations. However, as an organization, the firm is not just an entity facing an external environment but also an (internal) institutional entity, that is to say, a cultural and normative system made of formal rules, legal devices, conventions, informal norms and shared beliefs that structure social interactions and relationships, govern and constrain individuals’ behaviors and prevent and resolve conflicts between actors who permanently adapt to their environment (Chassagnon, 2012). From an economic perspective, productive performance rests on the interlocking of the structural and agency dimensions that leads us to regard the firm as both an organization and an institution that structures the internal functioning rules of the firm and that is directed toward production and even profitability. That’s why it is important to recall that the internal structure of production within the firm rests on the

embeddedness of distinct but complementary institutional orders. The firm implements a coherent process of production through its organizational structure that is effective thanks to its internal institutional structure—which is embedded in a broader set of institutions.

#### **4. THE INTERNAL INSTITUTIONAL STRUCTURE OF THE FIRM AS A SPECIFIC ORGANIZATION**

I explained that firms achieve a certain form of productive efficiency that makes them a specific capitalist form of organization. They develop their organizational designs to ensure intrinsic productive performance that will be continually reproduced over time despite a strong selection environment. In his 2004 book, Roberts, who focuses on the intertwining of organizational design and institutional devices to explain that the complementarity effects rest on the “holistically” complex interdependencies that we find in the architectural elements of the firm, among which are culture, routines or networks. Cohesive interactions between humans emanate from the organizational and institutional aspects of the firm. The lower-level elements are organized through the same dynamics from which the higher-level entity emerges. In this spirit, the organization and the organizing mechanisms are important in terms of causation and transformation and can explain differences in firm profits and productivity. Beyond positivism and constructionism, critical realist views provide new epistemological foundations for analyzing the dovetailing between the organizational and the institutional aspects of the firm and, more generally, for business management and economics (see, e.g., Tsang and Kwan 1999; Kwan and Tsang 2001; Van de Ven 2007) by understanding organizations such as firms as real social entities that “have form, structures, boundaries, purposes and goals, resources, and members whose behaviours result from structured relations among them” (Dubin, 1982, p. 372).

It is important to note that the institutional mechanisms of firms guide individual actions towards productive and consummate cooperation (see Baudry and Chassagnon, 2010) and a specific, common goal. Organizational designs are only durable and effective because diverse internal institutional rules

fix and structure their boundaries. These boundaries turn organizations into institutions, in the view of Parsons (1960), as they constitute the normative principles of government that regulate social actions and relationships either through law or other mechanisms of social control. Nevertheless, this definition is incomplete in the sense that rules are not exclusively regulatory. Some institutional rules are also constitutive within the firm, as Searle (1995) has explained. Without these rules, the firm would not exist. This relationship appears to apply, for example, to the legal foundations of the firm (see Chassagnon, 2011a 2011b) and, notably, to internal legal rules based on employment contracts. I believe that socially constitutive behaviors are not isolated acts; they are embedded in complex internal institutional arrangements.

The firm acts and produces through the mediation of the “institutionalization” of humans, who cooperate to achieve a common purpose. In this view, as Elder-Vass (2008a) reminds us, “social structure is causally effective because real social entities have emergent properties (institutions) that arise from the way their parts (human individuals) are related to each other (through their mutual commitment to endorse and enforce the practice concerned)” (ibid., p. 292). The internal organization of the firm is at the center of an individual’s institutionalization because the firm conceives of and implements rules, norms, conventions and other organizational routines that efficiently guide the behavior of productive individuals. The behavioral elements of the firm are at the core of its social ontology. It is these behaviors that then create the cohesiveness and persistence of the collective entity. The institutionalization of the individuals in the firm means that they follow rules of conduct, work for the group and wish to remain members. This argument strongly opposes the thesis of opportunism of Williamson (1985); collective action does not imply free-riding and hold-up (see Baudry and Chassagnon, 2010). On the contrary, norms and regulatory and constitutive rules allow for the creation of incentives for agents to deliberately resolve the problems of the collective entity and act for its benefit and the creation of a positive-sum game (Chassagnon, 2012). The survival of the firm in a strong selection environment—which it is, currently owing to global competition—is hence clearly related to the firm’s capacity to maintain a cooperative and coherent system of production. This notion also implies that the internal institutional structure of the firm is accorded moral value. Cooperation

and individual commitment are linked to a firm-specific moral culture that diffuses among employees and managers such that, as Hodgson (2013) rightly explains, “morality can act (*in the firm*) as a social glue, bringing groups together and focusing them on shared goals” (ibid., p. 148).

In organizations, individuals’ behaviors and preferences are not immutable and institutions structure individuals’ behaviors over time by generating emergent properties that ensure the reconstitution of human actors. I share here the perspective of Hodgson and Knudsen (2010) who consider that institutions influence the individual representations of humans through habits—which become “generative social replicators”, i.e., “mechanisms that help mold human capacities and that are transmitted, not genetically, but at the social and cultural level” (ibid., p. 137). Institutions are thus emergent internal entities that develop causal effects that are not directly linked to individual behaviors but pass through routines, conventions (see Bickhard 2008) and habits (at the individual level) that refer to what I have termed cognitive mediations.

It is the crucial positive and reciprocal relationship between institutions and individuals who allows for the reproduction and durability of the firm without employing a determinist perspective. Thus, the firm is also based on the beliefs and norms that define the social roles in an organization. It is important to distinguish between the institutional structures of production that direct human behaviors and the system of multi-level organizing relationships that exists among individuals, that is to say, the causal networking among individuals that is the source of productive relationships and productive efficiency (both individual and collective productivities). Therefore, scholars must pay attention to the complex and multi-level organizational mechanisms and identification dynamics that influence actors’ behaviors and contribute to the productive efficiency of the firm.

## **5. SOCIAL INTERACTIONS, ORGANIZATIONAL MECHANISMS AND COLLECTIVE SOCIAL IDENTITY**

The firm is a cohesive entity that is composed of human beings and non-human resources and that generates a reconstitutive causal power materialized by a collective social identity that makes the

firm durable. Collective identity encourages the integrity, stability and durability of the firm. The identification that is at the center of the social emergence of the firm can be defined as “the degree to which people cognitively merge their sense of self and the group, i.e., think of themselves and the group in similar terms or define themselves in terms of their group membership” (Tyler and Blader 2001, p. 210). I suggest conceiving of identity as a critical dynamic resource of the firm that evolves and reconfigures over time and through changes in its close environment to maintain the cohesiveness and persistence of the firm. Identity is the cognitive mechanism that gathers individuals into a collective whole—into a firm (see Brown 1969; Ashforth and Mael 1989). The stronger the process of identification, the greater the ability of the firm to reorganize according to industrial transformations and hence to survive despite new organizational environments (Chassagnon, 2012). Identity in the firm is a method for the coordination of individuals through an enhanced moral order, which clearly distinguishes business firms from markets.

Cohesive identification dynamics structure the individuals’ behaviors’ and intentions in their interactions with both other individuals and non-human resources. The interaction processes are the ontological regularities of the firm, the regularities that yield the firm’s causal power and allow it to survive and resist the other real entities that act against its persistence. Thus, owing to its unity, the firm maintains and contends with the selection environment; the firm becomes an integrated, dynamic and adaptive system with effective boundaries (see Van de Ven 1976; Miles et al. 1978). If the firm generates emergent properties that are not fully based on human intentionality, this does not mean that there is not a “we-intention” or a “we-attitude” (see Tuomela, 1989; Simon, 1991)<sup>9</sup> at the level of operative agents, which appears to be a necessary condition for the cohesiveness and persistence of the whole. Discussing the work of Searle, Lawson (2012) explains that “an individual can have a collective intentionality taking the form of ‘we-intend’ allowing that, in the case of cooperative behavior, the individual intends only as a part of a group intending” (ibid., p. 375).

This intention or attitude is the reason why identity and motivation are linked. Simon (1991, p. 36) in such a spirit thus notes, “motives are based upon a discrimination between a ‘we’ and a

'they'. Identification with the 'we', which may be a company [...], allows individuals to experience satisfaction (to gain utility) from successes of the unit thus selected. Thus, organizational identification becomes a motivation for employees to work actively for organizational goals. A realistic picture of how organizations operate must include the importance of identification in the motivations of employees." The argument of identity must not lead to a belief that there are no disagreements, tensions or conflicts within the firm. Rather, the argument implies that the firm is cohesive enough to cope with these disturbances and avoid dissolution; the firm achieves this cohesiveness thanks to human actions and individuals who act and respond to the stimuli of an on-going process of institutionalization. Cohesiveness thus means that the firm's components remain united within the boundaries of the entity as a whole and also implies a form of collective acceptance. Lawson (2012, p. 360) adds: "many individual participants in a collective practice may be particularly dissatisfied. Rather, the term acceptance indicates a way of proceeding that is in fact widely adhered to or observed or recognized by members of a specific community, whatever its intrinsic appeal".

The emergent properties of the firm are caused by interactions between different multi-level organizational mechanisms and by complementarity effects resulting in productive activities that mutually strengthen each other such that the firm creates a collective output. This relationship is located at a meso-level in the sense that relational phenomena are influenced by and, in turn, influence cohesive forces that act at different levels of analysis. Thus, the complementary effects, which intercede in the emergence process, can be primarily explained by the difference in the natures of the powers of human beings and those of non-human resources.<sup>10</sup> In this view, the "resource proprieties could be seen as mediating mechanisms in the causal relationships" (Durand and Vaara 2009, p. 1262). Humans make it possible for the components to interact and allow the firm to cause events. Human capacities appear to be a necessary condition for interaction and cooperation. Individuals who have autonomous causal power constitute collective action that must be related in a non-simple manner to the joint actions of the firm's members. We find this notion in the work of Ennen and Richter (2010), who consider that complementarities are system-specific phenomena resulting from the embeddedness of individual characteristics in the organizational network of relationships among

multiple elements. Between the whole (the firm) and productive humans, there are complex multi-level mechanisms that are, in their essence, causal. When the firm “acts”, it uses the organizational power that is inherent and implanted in humans. For example, it is humans that develop trust relationships and forge the organizational culture of the firm (Barney, 1986); culture allows humans to construct “the sense of individual and organisational identity and creates images that are taken for the self and the organisation” (Hatch 1993, p. 682). In organizational analysis, mechanisms appear to be more “bits of theory about entities at a different level (e.g., individuals) than the main entities being theorized about (e.g., groups), which serve to make the higher-level theory more supple, more accurate, or more general” (Stinchcombe 1991, p. 367). Durand and Vaara (2009) explain that causation results in organizations through the complex activation of mechanisms and countervailing forces. I contend that mechanisms should be considered a knowledge vector in the complex interaction processes among different organizational levels, the component processes of individuals as causal units (lower level) and social structures (higher level).

The organizational dimension is crucial when approaching the ontology of the firm as a collective entity. Another aspect must now be elucidated in this paper: the role of knowledge, learning and routines in my approach to the firm. Cognitive mechanisms are crucial to firms, which are also both collective, knowledge-based entities and systems of distributed knowledge (Nonaka et al. 2000). Additionally, as Kogut and Zander (1996, p. 502) note, “firms are organizations that represent social knowledge of coordination and learning”. In this context, collective learning processes constitute interactive mechanisms that are an element of the collective cognitive mediation that we find in reconstitutive downward causation. Learning allows humans to adapt to changes at higher hierarchical levels and must be understood as a firm-specific emergence. Collective learning appears to be a way for individuals to develop their competences and individually contribute to firm-specific social knowledge.

## 6. RESEARCH PERSPECTIVES ON POWER

This article began with the fact that it is urgent to question the ontology of the firm when studying its nature. I attempted to begin to fill this gap in the organizational economic and management literature and enrich my previous works on the nature of the firm by advancing new and more in-depth considerations for a social ontology of the firm as a reconstitutive emergent entity. More precisely, my argument primarily consisted of the following: (1) explaining how the firm can be treated as an emergent entity based on a form of reconstitutive downward causation; (2) elucidating the constitutive interlocking between the organization and the institution by shedding light on the two-level institutional logic of the firm; (3) analyzing the main regularities of the internal institutional production structures of firms; (4) and proceeding with an analysis of the cohesive dynamics and complex, multi-level mechanisms that make the firm a real entity because it has an identity. From this perspective, it is fundamental to reintroduce power relationships into the theory of the firm for methodological reasons. Power relationships constitute the submerged component of a firm's cohesiveness and concern each productive actor in the firm, from the top of the hierarchy to the lower-levels. For me, power is a vehicle for social institutionalization and both individual and collective empowerment in the firm.

Power participates in the emergence process of the social entity of the “firm” by structuring the interactions between individuals, and hence power dynamically contributes to its reconstitution. Power is often defined through a periphrasis like “having the ability or an influence on”, which leads us to think about its Latin root “potere”—meaning being able to. The causal relationship is hence consistently presumed in the definition of the term “power”.<sup>11</sup> Chassagnon (2011b) defines power as follows: “in a whole system power is an individual or collective entity’s ability (that will be exerted or not) to structure and restrain choices and actions of another individual or collective entity by some particular mechanism intrinsic to the given social relationship that may be formal, as well as informal” (ibid., p. 39). By definition, power is the ability to act on and change human behaviors and actions (see Dahl 1957). I contend that the firm cannot act without “human” powerful individuals. As a strong

element of interaction and federation, power ensures that individuals are strongly and responsibly linked to the collective entity and that the firm is a real emergent entity.

Traditionally, causality refers to the principle that events have causes. Power sets off a certain form of self-realization and dynamically contributes to productive social interactions between human constituents. The social reality of the firm is based on these interactions that give it its causal power. Additionally, Blais (1974) argues that the real world through which power relationships exist and in which they evolve is the world of interactions, a type of complex framework made of actions, reactions and anticipations that pass through power positions. Consequently, I argue that it is crucial to have a realistic and transformative view of power that clearly opposes instrumental theory that cannot consider power without a precise operational requirement (see, e.g., Williamson 1996).

Hofstadter (1935) proposes a very informative analysis of power as “a power of” (p. 10). For him, power is transformative. More precisely, he contends that “powers are as actual as their actualized qualities and actualized qualities are as potential as the powers requisite to their production” (*ibid.*). He sees in power a different and specific quality, namely the property of a “superior order” that makes the existence of multidimensional power possible. These new properties linked to complex wholes often, according to him, escape scientific attention, although these properties are what “make the difference, which make it that sort of change, constitute that change” (Hofstadter, 1935, p. 8). He adds, “the fact that things do change necessitates the fact that they can change; and this capability for change is marked by power” (*ibid.*, p. 6). From this analytical perspective, power is a meeting point between the social institutions and individuals in the firm.

In a social ontology perspective, Lawson (2012) explains that it is suitable “to refer both to rights and obligations as powers. Indeed they are constitutive of what reasonably be termed social, collective or positional power” (*ibid.*, p. 367). He considers that the social reality of organizations is based on a multitude of interrelating and multicomponent collective relationships that constitute a complex system of power relationships. In this view, the firm pursues and dynamically creates complex and

new structures of powers between human constituents (see also Chassagnon, 2011b). This idea can be summed up as follows: “a significant feature of social life in modern communities (*like the firm*) is the prevalence of activities oriented to getting access to, transforming (or just maintaining/defending), and/or creating, novel forms of positional powers (over others)” (*ibid.*, p. 370).

By endorsing a vision of power based on collective group—à la Arendt (1969), who defines power as “the human ability not just to act but to act in concert” because “power is never the property of an individual; it belongs to a group and remains in existence only so long as the group keeps together” (*ibid.*, p. 44)—, we can bypass the limits of simple, top-down causation in favor of a reconstitutive causation between human agency and structures: in dynamic situations, the emergent properties of the firm, through their power, influence the properties of individuals, who through their interactions influence the firm in turn and so on. In other words, power seems to be an element of collective mediation (an interactive mechanism that is clearly lacking in mainstream organizational theories) in the firm, in the sense that it exists, manifests itself and reproduces through the sharing of an identified and legitimated common goal. In other words, power relationships could play a mediating role within the socio-political dynamics of the firm between agency and that social structure. Thus, power would appear to be a cohesive dynamic in the firm that structures cooperation, and because it is a causal power, it strengthens the integrity of the firm over time. Power, which does not result from the sole attributes of individuals, acts in the reconstitution of the firm by having causal effects. I believe that researchers should be interested in developing this assertion from a political and social perspective in the future.

### Notes:

<sup>1</sup> Cooperation, which refers both to the ability to act for a common goal and the cohesiveness that is created to achieve this goal, is the firm's social organization.

<sup>2</sup> For Simon (1962, p. 468), a complex system is “one made up of a large number of parts that interact in a nonsimple way” so that “the whole is more than the sum of the parts in the important pragmatic sense that, given the properties of the parts and the laws of their interaction, it is not a trivial matter to infer the properties of the whole” (*ibid.*).

<sup>3</sup> Hodgson (2013, p. 33) writes in this spirit: “Statements about what exists, or concerning the nature of reality, are very different in character from statements on how one should explain phenomena”.

- <sup>4</sup> For Edler-Vass (2008b, p. 463), “In the structural moment, individual action is influenced by the causal powers of social structures – though not fully determined by it, since other interacting causal powers, including those of the individual concerned, interact in determining individual action. In the agential moment, individual actions contribute to reproducing and/or transforming the structure concerned (again interacting with other causal powers)”.
- <sup>5</sup> Hodgson and Knudsen (2010, p. 171) argue that “routines exist because structured interactions of individuals give rise to emergent properties that (by definition) are not properties of individuals taken severally”.
- <sup>6</sup> Zucker (1983, p. 37) writes: “organizations are institutions – indeed, the central defining institution of modern cultural systems”.
- <sup>7</sup> See also the correspondence between North and Hodgson on this point and presented in a 2006 paper by Hodgson.
- <sup>8</sup> Zucker (1983, p. 4) argues that “the external institutional environment constrains the organization, determining its internal structure, its growth or decline, and often even its survival”.
- <sup>9</sup> Tuomela (1989, p. 471) argues that “if collectives are construed as real entities, it must be admitted that they are entities clearly different from single human persons – to which action concepts and other mental concepts apply in the first place”.
- <sup>10</sup> Each of these components has a causal existence, and, as Elder-Vass (2008b, p. 469) argues, “we achieve symmetry in the treatment of human and non-human actors, not by treating them all in the same terms, but by treating each in the terms that are appropriate to its own particular structure and properties”.
- <sup>11</sup> Hofstadter (1935, p. 6) writes: “the best synonym for power is ability. It readily suggests that what is signified is not absolute possession, but a possibility”.

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