

The Constitution of Organization as Informational Individuation

Nicolas Bencherki  
TÉLUQ Montréal  
[nicolas.bencherki@teluq.ca](mailto:nicolas.bencherki@teluq.ca)

Andrew Iliadis  
Temple University  
[andrew.iliadis@temple.edu](mailto:andrew.iliadis@temple.edu)

A more recent version of this paper is published in *Communication Theory* at

<https://doi.org/10.1093/ct/qtz018>

## The Constitution of Organization as Informational Individuation

## Abstract

Communication scholars, especially in organizational communication, call for a constitutive approach to communication that considers communicating and organizing as a single process. Yet, current theorizing seems unable to embrace that equivalence. As an alternative, we present an informationally grounded view of communication drawing from French philosopher Gilbert Simondon. Doing so, we extend scholarship on the communicative constitution of organization by highlighting the importance of framing communication in the context of informational individuation. Following a critical summary of constitutive communication theories, we provide a brief exegesis of Simondon's concepts of *individuation* and *transduction*, which bind information and communication, and contribute four propositions to guide informationally-grounded work on the constitutive power of communication. We then emphasize how a Simondonian view contributes to discussions on the communicating–organizing equation. We end by providing a brief empirical example and analysis using key take-aways from a Simondonian framework and offer areas for further discussion.

Keywords: Gilbert Simondon; organizational communication; organizational discourse; communication theory; individuation; transduction; philosophy of communication

## The Constitution of Organization as Informational Individuation

### Introduction

The idea that communication, discourse, and/or interaction, are *constitutive* of identities, bodies, genders, social ties, capital, and other phenomena is growingly popular (Ashcraft & Mumby, 2004; Butler, 1993; Kuhn, Ashcraft, & Cooren, 2017). This idea has found particular traction in organizational communication research, where communication has been described as constitutive of collective and organizational realities (Boje, Oswick, & Ford, 2004; Cooren, 2007; Grant, Michelson, Oswick, & Wailes, 2005; Putnam & Nicotera, 2009). Such perspectives have appeared as a counter-balance to emphases on structural and institutional dimensions of organizations (see e.g., Zundel, Holt, & Cornelissen, 2013). More generally, the idea that communication is constitutive of social reality has been proposed as a “metamodel” for communication theory (Craig, 1999, 2015).

While communication scholars adopt constitutive approaches to communication to conceptualize the agency in/of collectives – in particular in the case of organizations (Cooren, 2000; McPhee & Zaug, 2000; Putnam & Nicotera, 2009; Taylor & Van Every, 2000) – these efforts are still at a loss when attempting to account for the apparently plural, contradictory, or paradoxical nature of these collectives, thus pointing to the need for a new (meta)theoretical model (Putnam, Fairhurst, & Banghart, 2016). We suggest that understanding communication’s role in the constitution of collectives in all its diversity would benefit from a renewed philosophy of communication. Such a philosophy would situate informational individuation – a notion we define below – as a *prima facie* foundation for understanding organization at various levels of abstraction and granularity, in the way that an animal may be defined or observed by its DNA at

the same time as by its behavior in a group—both examples representing different abstractions of a singular reality made up of the same existing information at various levels.

Current perspectives suggest that communication and organization (or communicating and organizing) are not distinct phenomena (see e.g., Smith, 1993; Taylor & Van Every, 2000), yet, for the most part, they continue to rely on well-traveled theories of communication to understand organizational constitution. Therefore, while scholars seek to explain the constitution of entities, they in fact rely on theories that consider communication as taking place between or within pre-existing entities. This is salient, for instance, in the diversity of perspectives that attempt to reconcile communication with materiality, thus suggesting that material and human entities pre-exist the communicative practices that connect them (Putnam, 2015). As a result, they produce partial accounts bound to appear contradictory, as they have yet to be unified within a cohesive theory of communication. Indeed, few theoretical proposals account at once for communicating and for organizing, as we remain trapped with the idea that we first need people to speak, channels to convey information through space, and ideas to be exchanged. How can communication and information theory explain how speaking, informing, and exchanging generate people, channels, space, and ideas?

One exception is James R. Taylor's (1995, 2001) invitation to think of communication as an "autonomous" process and of conversations as autopoietic units. Communication and conversation, in this sense, are not the products of already-constituted individuals or entities, or the transmission of messages from one person to another. Instead, communication and conversation ensure their own reproduction and distinction from others. As they reproduce themselves, they are constitutive of – rather than constituted by – individual and organizational entities. To formulate his proposal, Taylor draws on Humberto Maturana and Francisco Varela's (1980, 1987) systems theory, but also on conversation analysis (Sacks, 1992; Schegloff, 1989),

speech acts theory (Austin, 1962), as well as the work of Mikhail Bakhtin (1986), Niklas Luhmann (1992) and Karl Weick (1979) – not to mention other systems theorists such as Bateson (1972) or Watzlawick (e.g., Watzlawick, Bavelas, & Jackson, 2011). These additional contributions allow Taylor to account for, respectively, the reflexive and performative nature of communication, the existence of variously-organized domains of language, the way communication constitutes boundaries to both distinguish and interface with the environment, and the enacted nature of that environment.

Yet, while Taylor's work has generally been acclaimed, this particular proposal has received little attention (an exception being Cheong, Hwang, & Brummans, 2014). We therefore reiterate and build on Taylor's work, to spell out its implications for issues of constitution and individuation, signification and methodology. We do so by tracing back the source of these ideas to a different origin. Indeed, decades prior to Maturana and Varela (1980, 1987), and Luhmann (1981, 1992), the French philosopher Gilbert Simondon (1958/2005) had already proposed that communication theory must think about information and communication in the same terms as organizing and structuring. Aligning ourselves with and drawing inspiration from work on the sociomateriality of information (Cecez-Kecmanovic, Galliers, Henfridsson, Newell, & Vidgen, 2014; Dourish, 2017; Dourish & Mazmanian, 2013; Leonardi, 2012, 2013; Leonardi & Barley, 2010), we suggest that Simondon's informationally grounded philosophy of communication (Bardini, 2014; Barthélémy, 2005, 2014; Styhre, 2010) may be well-suited for thinking about the constitution of social order and collectives, including organizations, to understand more broadly what Barad (2007, p. 24) refers to as the nature of "meaning making, and the relationship between discursive practices and the material world." Specifically, Simondon offers answers to many questions that Taylor raises, such as the relationship between action and communication, boundaries between systems, and homogeneity within one system. While Simondon's ideas have

become popular in the technology literature (Dakers, 2016; De Boever, Murray, & Roffe, 2009), his relevance to the study of collectives and organizing is just being discovered (Bencherki, 2017; Styhre, 2010, 2017), as evidenced by a recent *Culture and Organization* special issue (see Letiche & Moriceau, 2017).

We refer to Simondon's theory as informational because the notion of information is key in his work. From Claude Shannon and Warren Weaver (1998) to Gregory Bateson (1972), information has traditionally been defined as a difference between two states; a homogeneous, uniform system contains no information. Information, mathematically, is what is (im)probable within a given system; in a broader sense, it is a symbol, state, etc. that differs from an alternative. Uniquely, for Simondon (1958/2005), information consists of potentially active energy differentials; information exists where "domains" – understood as similarly-ordered regions of social, physical, technical, or cognitive activity, in the way that an open clearing is a domain distinct from the forest – within a system, or two or more systems, carry different levels of potentially active energy. Keeping in mind that energy's Greek etymology finds its roots in *ergon* (action), then it is the difference in action potential between domains that defines information, not unlike the way a "sick" body is defined by its different (potential) behavior in comparison to the surrounding bodies whose behavior define "normalcy" and "health" (Canguilhem, 1989). This difference between two action potentials – what Simondon refers as "disparation" – will tend to seek resolution, which takes place through communication, namely the movement of action from one domain to another (or different regions within a domain, which then form domains within the broader domain, like subsystems within a system, *ad infinitum*). The energy from one domain to the other transmits from kin to kin, a phenomenon Simondon refers to as "transduction." By "kin to kin" (*de proche en proche* in French), Simondon means that any action propagates in a proximal way, from one being to the next, one encounter at a time.

There is no abstract transmission of information, but a finger pressing on a keyboard, transmitting an electrical signal to a microprocessor, and then on to a Wi-Fi antenna, to a router, to an optical fiber, to another and another, all the way to the screen of a reader, each time reordering a domain. To make a difference, then, communication must be taken up by the receiving domain, which can only welcome this new contribution if it (the receiving domain) is already structured in such a way to allow for the new action to make any difference. The difference that is made is the signification (i.e. meaning) of communication. For instance, the internal ordering of a classroom is such that students talking to each other – forming a domain of their own with a different energy potential – would “mean” a disturbance; during recess, the same group of students, possibly in the same room, would be ordered differently, and the same two students’ conversation would mean something different, such as friendly play.

Information is therefore what triggers metastable systems (i.e. where energy is not homogeneously distributed) to resolve their internal incompatibility into an organised reality; in doing so, they also produce further transductions (Iliadis, 2017). Information is an action—it is the difference that affects a metastable system and leads it to a new ordering through communication (the active taking up of this ordering). For instance, the coupling between two students’ conversation and a classroom is a metastable system made up of two differently ordered domains, while a conversation and recess in the playground constitute a more stable, similarly ordered system. Communication is the process of information’s circulation through the very systems whose reordering it provokes (Simondon, 2010). In other words, communication systems do not pre-exist the communication of information, since a system – whether physical, technical, or social – is made up of information, at different levels of abstraction and granularity, separated by invisible partitions. In this sense, Simondon’s take on information and communication offers a theory that thinks of communication from the vantage point of its organizing power. That is why,

for Simondon, information and communication lead to individuation—the constitution of new entities or collectives.

To clarify how communicating and organizing can be thought together through a Simondonian perspective, the next section reviews existing literature on the connection between the two notions and identifies key attempts to establish an equivalence between them. Following that, the section titled “Informational Individuation” presents our approach to Simondon’s theory and introduces the relevant vocabulary. The heart of the argument is presented in the section after that and includes four proposals that briefly summarize the implications of Simondon’s thinking for organizational communication research. An empirical example then shows how these four proposals can guide an analysis of organizational communication data. The paper’s contributions, limitations, and suggestions for future research are given in the conclusion.

### **Current Understandings of the Constitutive Power of Communication**

The idea that communication is constitutive of social order and collectives is *per se* not new. Arguably, it can be traced to social constructivism (Berger & Luckmann, 1966) and even prior to that to symbolic interactionism and to the idea that people jointly constitute meaning (e.g. Mead, 1934). The “constitutive model” considers that communication has the power to constitute realities, including communication as a discipline (Craig, 1999), through the mediation of the meaning human interactants make as they exchange signs (Carey, 1989; Krippendorff, 1997). This perspective, as Taylor (2001) notes, arguably restricts communication’s constitutive power to its ability to generate meaning within the minds of already-constituted human beings that are distinct from the material and/or social world they attempt to understand. This raises questions about the mode of existence of the “social realities” it helps bring about, as they may be suspected to only exist within human imagination.



These limitations are attributable, we argue, to the theories of communication that underlie even the most earnest efforts to describe communication as constitutive. The subfield of organizational communication probably is host to the most heated conversations surrounding communication's ability to constitute collective entities, namely organizations (Putnam & Fairhurst, 2015). In particular, a tradition within organizational communication has been gradually emerging, under the name of Communicative Constitution of Organization (or CCO), that puts the constitutive model at its center (for a review, see Boivin, Brummans, & Barker, 2017). Recently, CCO researchers have become concerned about their own assumptions, as demonstrated by a series of roundtable meetings confronting perspectives within the tradition, including a 2012 debate between François Cooren, David Seidl, and Robert D. McPhee at the University of Hamburg, Germany; a panel bringing together Dan Kärreman, Linda Putnam, and Cliff Oswick during the European Group for Organizational Studies conference in 2015; or Putnam's intervention at the 2015 Philosophy of Communication conference at Duquesne University, where she presented a comprehensive overview of the contradictions and paradoxes organizations face, and how organizational communication has attempted to deal with them (Putnam et al., 2016).

The 2012 Hamburg roundtable is reproduced in Schoeneborn, Blaschke, Cooren, McPhee, Seidl and Taylor (2014) in a point-counterpoint format that allows a glimpse into the underlying theories of each of the three CCO perspectives represented: the Montreal School, voiced by François Cooren; the Luhmannian school, voiced by David Seidl, and Robert McPhee's Four Flows perspectives. The debate reveals that each perspective rests on a view of communication that is not, as such, specifically linked to the idea that communicating and organizing are a single process. Dennis Schoeneborn, acting as a facilitator, asked the panelists a question concerning how each of them defined communication. Seidl, describing Luhmann's

theory, explained that the German philosopher conceived of communication as the synthesis between information, utterance, and understanding. McPhee suggested that communication involves the interplay – or, to use his term, “transtruction” – of signification, domination, legitimation, and constitution, each being mediated by the others, while preserving the “interpretive emphasis on tacit skills and interaction as achievement” (Schoeneborn et al., 2014, p. 291). Cooren admitted that there is no consensus on what communication means even within the Montreal School, before suggesting that “communication is, first and foremost, considered as action,” and that action is not limited to a single human agent (Schoeneborn et al., 2014, p. 286). In saying this, Cooren acknowledges the Montreal School’s reliance on speech acts theory (Austin, 1962; Searle, 1979) and a pragmatic understanding of communication (mostly drawn from Peirce, 1958; Taylor, 2001, also evokes American pragmatism).

The three different answers provided by Cooren, Seidl, and McPhee illustrate that a unified theory of communication is largely absent from research on the constitutive power of communication. There is indeed a general lack of reflexivity on this question in communication scholarship, including in organizational communication. Focusing on talk, conversation, interaction, or similar phenomena is certainly a valid criterion to situate the conversation within the field of communication, but it may not be quite enough to provide us with a coherent theory of what makes communication “organizational” or constitutive of collectives, including society.

For instance, Seidl’s answer may imply a systems-based or cybernetic understanding of communication that is coherent with Luhmann’s systems theory, but which perhaps brings the question “How does communication constitute organizations?” back to an emitter (utterance), message (information), receiver (understanding) model that may not be specific to or informed by an interest in *organizations in the making*. For instance, despite the title of his article – “What is communication?” – Luhmann (1992) never actually defines communication, but convincingly

demonstrates its role in the self-reproduction of systems. This is perhaps why Seidl and other Luhmann-inspired researchers do a good job at describing how organizations may be viewed as based on communication, but they – similar to the field of communication more generally – do not address the way the opposite could be possible. As for structuration theory, on which the Four Flows model is erected, its relation to communication remains ambiguous in Giddens' (1984) work, as Richter (2000) notes. Even though communication, along with power and rules, is one of the dimensions along which agency and structure are articulated, Richter explains that communication as such is addressed only in passing. Indeed, "Giddens was notoriously brief in his discussion of communication" (McPhee & Iverson, 2009, p. 52). The Montreal School, for its part, does show how communication has *organizing properties* (Cooren, 2000), i.e., how communication impacts organizing processes from a perspective combining speech acts and interaction analysis, but remains somewhat unclear on whether this process rests on human understanding (see Wilhoit, 2016).

CCO researchers, like other communication scholars, continue, despite claims to the contrary, to think of communication as a phenomenon distinct from the entities whose constitution they try to elucidate. It consists of – to quote Cooren's answer – "what people say, write, or do," which then, in a second stage, may or may not influence the constitution of the organization. Any truly constitutive theory of communication we end up adopting should not consider communication as a supplement or a double to an allegedly prior reality (see Rosset, 2012)—for example as a layer of description on top of a stable substrate of material and social reality (see the critique of Bourdieu in Butler, 1999).

Some social theories have been imported into (organizational) communication studies exactly because they do not need to postulate a prior social order. For instance, ethnomethodology and conversation analysis (Garfinkel, 1967; Sacks, 1992; Schegloff, 1989)

take as their starting point situated interactions, and show how, from there, people (re)constitute the rules that bind them in turn. Ethnomethodology is employed in some branches of CCO, in particular within the Montreal School (Brummans, 2006; Cooren & Fairhurst, 2008), which supplements it with actor-network theory to provide an account of the endurance of collectives (with which ethnomethodology is not concerned as such). Ethnomethodology conceives itself largely as being a-theoretical and, despite its relative popularity in communication departments, it has not troubled itself with any definition of communication. That said, it is perhaps ethnomethodology – and its focus on the actions people perform as part of their enactment of social order – that Cooren had in mind when, in his answer to Schoeneborn, he equates communication with action. This equation and emphasis on action are also important to Simondon.

Another set of theories that were brought into the discipline to account for communication's constitutive power is American pragmatism (see Misak, 2013) and in particular the pragmatic semiotics of Peirce (1958), which has been explored more recently by Taylor and Van Every (2014). Peirce's semiotics locates signification in a three-way relationship between a first item (the thing alluded to), a second (the symbol, icon, or trace that stands for it) and a third – the interpretant – which is the rule, routine, or process by which the relation is performed. For Taylor and Van Every (2014), this triad is inherently organizational, inasmuch as signification is both made possible by and productive of a structure where the interpretant operates the semiosis. In other words, signification is equated, in Peirce's theory, with the creation and maintenance of a configuration of relations between the components of the triad.

Without dismissing the importance these ideas have had in communication studies, we introduce an alternative theoretical tradition in the writings of Simondon and suggest a philosophy of communication based on his conceptualization of informational individuation.

Simondon's informational ontology (Iliadis, 2013) considers communicating and organizing as a single practice governed by constitutive informational structures. It offers an integration of many conceptual elements that are currently scattered across theories, including that communication creates (social) order, provides endurance to that order through materiality, and that signification proceeds from the relations it constitutes.

### **Informational Individuation**

We suggest that Simondon's (1958/2005) notions of *individuation* and *transduction* may contribute to communication theory by extending debates on the constitutive power of communication with a nuanced articulation of the materiality of information. Simondon explains that the notion of "form" should be replaced by the notion of "information," arguing that information provides a clearer pathway for understanding how entities and relations are organized and individuated at multiple scales through transduction.

Simondon conceptualized individuation as the processual emergence of physical, technical, psychological, or collective entities, and argued that we should prioritise processes of informational individuation over individual objects and subjects themselves. He often stated that it is information – as an action differential that may take many guises; what we understand as data, semantic information, environmental information, etc. – that is the engine of individuation, rather than supposedly external factors that would precipitate a rudimentary form of physical causality. Simondon suggested that even when seemingly external forces produce entities (one of his more popular examples refers to molds that shape clay into bricks), what is at play is the proximal propagation of information, i.e. transduction, across levels of abstraction. The process of transduction organizes entities as it propagates from one level to another. In the words of Simondon (1958/2005, p. 32, we translate):

What is meant by transduction is the physical, biological, mental, social operation by which an activity propagates from kin to kin within a domain, grounding this propagation on the structuration of the domain, from place to place: each constituted region of structure serves as a principle of constitution to the next region, in such a way that a change extends progressively at the same time as the structuring operation.

Transduction is therefore the process by which action circulates through propagation, reorganizing elements along the way. If we equate transduction to communication (as was Simondon's intention), then it becomes apparent how the communication of information is not distinct from organization. For Simondon, then, communication is action that propagates by informationally organizing; action is both the process of communication and its content.

The fact that transduction implies organization is clear in the field of biology, where Simondon first encountered the notion. In biology, transduction refers to the translation of one signal into another, for example the translation of a chemical signal into an electrical signal at the level of synapses. Transduction is therefore not the invariable displacement of one *thing* from one place to another but rather the precarious and continuous translation of action into equivalent action. Latour's (1999) notion of "immutable mobiles" covers a similar idea; that equivalence may be preserved but only at the price of the important toil of transformation. This means that transduction occurs as it transforms its domain, and structures it in ways that allow its propagation. Citton (2004) suggests that, in Simondonian thinking, disparation is productive and allows the constitution of collectives; it is the differences or inconsistencies between orderings that lead to the creation of new ways of communicating between them and therefore to new orderings.

Simondon's informational perspective also attends to a common concern in the literature on the communicative constitution of organizations, namely how situated action may "scale up" to constitute seemingly larger entities (Cooren & Fairhurst, 2008; Hardy, 2004; Robichaud,

2003). That process is not a matter of sequential physical steps (individual people first and then a collective) nor is it a synthesis (Simondon, 1958/2005). Levels of informational abstraction exist, in the same way that the DNA of a single cell exists and is as real as the human individual to whom it belongs—Simondon would say that to causally prioritise one over the other is a fallacy. Simondon contrasts transduction with induction; the latter creates abstract categories by reducing the terms to some of their commonalities (for instance, the category of “tall men” reduces individuals to their size and gender), thus sacrificing their singularity. This is what happens when an organization or a nation is reduced to some *general features* of the people who work or live within them. Transduction, in contrast, is the discovery of the ways in which the total reality of each entity may be informationally “communicated” (Simondon uses the word, p. 34) and ordered “without loss, without reduction, into the newly discovered structures.” He further explains the materiality of information in transduction, writing that

Transduction is characterized by the fact that the result of this operation is a concrete fabric including all the initial elements; the resulting system is made up of concreteness and includes all concreteness (p. 34).

For Simondon, the outcome of the constitutive process is not an abstraction of the similarities between pre-existing individuals. Rather, transduction is the practical effort of finding out tangible ways in which concrete information can pass on actions along an informational chain. In doing so, information reconfigures or constitutes collectives, societies, and organizations that are not more abstract than, say, human beings; rather, they are of a different informational *level*, as they correspond to the ordering (including the ordering of human beings) that took place as action found a way to circulate. Simondon’s informational view is therefore resolutely relational, in the sense that the structure of information precedes any notion of an already constituted being that would initiate communication. In that sense, Simondon converges with current efforts to bring to

the forefront the relational underpinnings of CCO scholarship (Cooren, 2015; Kuhn et al., 2017; Martine & Cooren, 2016) and to avoid thinking of communication as occurring between pre-existing entities. Simondon contrasts the notion of information with that of form, which supposes that “the relation is posterior to the existence of the terms” and that can only “capture an impoverished reality, without potential, and consequently unable to individuate” (p. 35).

Simondon’s ideas have important implications, we argue, for how we think about meaning, as there are no individuals already available to “interpret” information. Instead, meaning or, as Simondon refers to it, signification, emerges when the disparation between two domains is resolved. In other words, what an action means corresponds to the ordering that action brings about in a given domain. To return back to the example of students chatting in the classroom, their voices interrupt the teacher’s lesson and, thus, question the current ordering; during recess, it means business as usual or even a reinforcement and validation of the current activity, i.e., playtime. For Simondon (1958/2005, p. 35), “the significant [meaningful] form [...] is the structure of compatibility and of viability”—signification is obtained in the process of communication that attempts to resolve the disparation between orderings, to make them compatible and to ensure their continued existence. Indeed, for a teacher in a classroom, the adjustments they would make to make their pedagogy “compatible” and “viable” with respect to the ordering that prevails between the talkative students would mean something quite different than the adjustments needed to accommodate them during recess. Such an understanding can be equated with a pragmatic view of meaning that is inherently organizational; meaningful communication is communication that succeeds at resolving inconsistencies between ways of organizing. Information, then, is the process of bringing about a new ordering to practically resolve the disparity.



Furthermore, for Simondon, informational individuation does not exist in a single, homogenous reality—for instance, it is not only the individuation of people, or that of organizations, that interests him. Rather, individuation exists according to ordered levels of abstraction that disclose new informational levels where entities emerge at greater or lesser degrees of granularity. Said otherwise, the individuation of a cell, of a person, and of an organization continue into each other and coexist at once (think, for instance, of an individual's mental health issues at work that make a difference at the biological, psychological, and organizational levels all at once). In this sense, information has the capacity to propagate action across levels; the action of chemical deficits within a synapse can make a simultaneous difference in the way a person organizes their behaviour and in the way an organization organizes its work, for instance, at the human resources department. Insurance forms will need to be produced to consider medication formulated according to the way brain cells work. In other words, a same action can have cascading meanings as it reorganizes systems at several levels of abstraction, without ever losing specificity.

A Simondonian view of communication and signification may rework the presumption, in communication studies, that talking, or writing should be primary concerns. For instance, while Taylor (1995, 2001) suggests that an autopoietic systems perspective allows recognizing that conversations self-reproduce and lead to further conversations, thinking in terms of transduction recognizes that conversations are first and foremost ordered systems of actions, that must further reorder under the impulse of new action; in this sense, it brings Taylor's proposal closer to the way ethnomethodology or conversation analysis thinks of conversations, i.e. in terms of actions that are produced to deal with an interlocutor's prior actions. Yet, Simondon also allows doing so without the need to presume that communication is the product of individuals or that its interpretation lies in the mind of people, thus also connecting with Luhmann's (1992) invitation

to de-center communication from human beings, but also allowing to account for the way humans may interact with non-human participants within a system (see Cooren, 2015).

Simondon's most important contribution, we think, is to be able to speak at once of communication and existence, or information and individuation. In this sense, he collapses the usual distinctions between subject/object, micro/macro, realism/antirealism, and abstract/concrete. These dualities are at the heart of communication studies' struggle with paradoxes and contradictions (see Putnam et al., 2016) and may be resolved once reality is thought of in terms of informational individuation operating at several levels simultaneously.

In this sense, Simondon viewed information as multimodal and as something that could be exchanged not only between beings who are already individuated (e.g. people engaging in conversation) but *also* within systems to come that are productive of *new* individuations. On this theory, information is internally complex and should not be confused as consisting only of things like (media) signals.

### **Implications for Research Methodology and Organizations**

What sort of organizational communication research would communication scholars be doing if they adopted a theory of communication inspired by Simondon? The philosopher himself provides some very useful starting points in answering this question. First of all, as Combes (1999, p. 18) notes, a Simondonian approach implies a focus on the individuation of the entities under study: "we can only account for the possibility of knowing individuated beings by providing a description of their individuation." This entails, for instance, that there is not, on the one hand, a description of an organization and, on the other hand, a description of the constitution of the organization. Any description of organizations, membership, identity, power, or any of the things that organizational communication scholars study should be a description of the way those

entities have come to exist. This does not mean that descriptions are also performative (although they may be), but – on the contrary – that descriptions must recapitulate the performances that allowed the being to come into existence in the first place.

While we may be comfortable with this first epistemological suggestion, Simondon pushes the envelope further when he discusses the relationship between the researcher and the object being observed. If we cannot describe an entity but by describing its individuation, it results that we cannot describe ourselves – researchers – or the knowledge we produce, without also making those descriptions in terms of individuation processes: “the operation of individuation cannot tolerate an already-constituted observer” (Combes, 1999, p. 16). Simondon sheds some light on how this seemingly tall order could be fulfilled: “This process consists in following the being through its genesis, and to accomplish the genesis of thought at the same time as the object’s genesis unfolds” (Simondon, 1958/2005, p. 34). He further notes that “it is by the individuation of knowledge rather than by knowledge alone that the individuation of beings is comprehended” (p. 36). The apprehension of the researcher’s capacity to know and how this capacity is formulated is as important as the object of study, clearly showing parallels with calls for reflexivity in qualitative research (Arvay, 2003; Cunliffe, 2003; Macbeth, 2001).

Concretely, this means that knowledge of the constitution of organizations does not proceed from external relationship to communication processes. Rather, researchers are implicated in those processes, which shape them in turn. This is consistent with a transductive communication theory that necessarily implies transduction and, therefore, transformation. Information – say, about organizational processes – is not simply *transmitted* to the researcher; rather, it shapes a domain, propagates from the host organization to the university, and produces a new way of ordering research, students, writings, and thoughts. What a “finding” means is what it does to the researcher to the extent as they are embedded in a domain (or several domains,

which each provide it with meaning): their field, their community, their department, and so forth. It is only in this new ordering that a new piece of knowledge can be significant or meaningful (compare this with Latour, 1987).

In connection with the issue of distinguishing the researcher from their object of study, Simondon's proposal more generally invites caution in distinguishing all beings (or categories of being) from each other. The key element of a Simondonian methodology, as Iliadis (2013) suggests, is that it is an invitation to look at the way beings' individuation proceeds through the communication of action. Whether in describing others or in describing the self, what matters is how beings of different levels of abstraction – from molecules to society – are constituted through information, as they organize to accommodate new actions that affect them and as their organization, in turn, creates new information that affects others. What distinguishes beings from each other, including the researcher from his or her field, is difference in ordering, rather than external or *a priori* categories.

Going back to our earlier discussion about the origins of CCO research, in Seidl's answer to a question about his view of organizations, he was careful to restrict his understanding of organization to the "narrower, institutional sense" (Schoeneborn et al., 2014). This answer recognizes the problem that Sillince (2009) identified with research on the communicative constitution of organizations, namely that communication researchers tend to use the term "organization" to speak of all sorts of things – businesses, markets, groups, and so forth – without specifying what distinguishes each of those collectives from the other.

What matters, for Simondon, is not so much an external definition or bracketing of a domain, as much as an internal ordering whose logic distinguishes different domains for practical purposes. This should be contrasted, for example, with the notion of boundary that is common in organizational literature, perhaps most importantly in a Luhmannian perspective that states that

“to maintain its existence, the organization continuously needs to reproduce a *boundary* that distinguishes it from its environment” (Schoeneborn, 2011, p. 678). Relying on an internal logic rather than an external definition or delineation means that what counts or not as a separate organization may be anything from a group of colleagues at work, a sub-unit, a portion of a market, and so on, as long as they are ordered differently from their neighbors. In fact, Simondon’s work consists precisely in showing how transduction can propagate from the physical, to the biological, to the psychological, and to the collective, with a detour through the technical; even the very ontology of entities is an after-the-fact outcome, rather than the starting point of investigation.

To summarize Simondon’s ideas of individuation, transduction, and information, and their import for (organizational) communication, we may formulate four propositions:

1. Information is a differential in action potential that emerges from disparity in ordering between domains. Communication is the kin to kin propagation of action that seeks to resolve disparity and, in doing so, organizes a domain as it circulates through it.
2. Entities, including organizations and other collectives, are not at different stages of individuation, but rather different informational levels that preserve all the characteristics of their organized components. An employee is not prior to the organization, nor is the organization an abstraction of its employees; they each exist fully and simultaneously.
3. The meaning or signification of any action – including acts of language – corresponds to its participation in the resolution of a disparity of ordering. In other words, what information means – its signification – corresponds to the way it reorders a domain. The announcement of a new contract, for instance, does not mean the same thing if it mobilizes troops than if it leads to people going on sick leave.

4. Knowledge of an entity or of any of its facets should focus on its individuation process and should reflect on the way that knowledge itself has individuated. Said otherwise, knowing, say, an organization, is knowing how I have changed along with it as I have come to know it.

In concrete terms, these proposals mean that the researcher would need to free themselves from the shackles of a dualistic epistemology opposing the knowing subject and the known object. Deductive knowledge, establishing categories of beings and possible causalities in advance, would also have to be abandoned. The goal of research would consist in following action itself as it moves along information paths, from one being to the next. Those paths are not given in advance either; they consist precisely in the way a domain is organized to become capable of accommodating that information. To understand what action means, the researcher would need to note how the observed domain has had to reorganize itself considering that new information. They would have to show, for instance, how a teacher had to stop their lesson to shush two talkative students; this new ordering of the classroom *means* that the talk was a disruption.

Any research method that a communication researcher chooses, in this sense, would have to fulfill a specific agenda. First, it would have to allow observing action as it unfolds and follow its movements. It would need to have the empirical precision and granularity not to mix up, for instance, action with people's interpretation of it in interviews. The latter, if they are used as data, would have to be treated as action in their own right. Second, it would have to avoid recreating the subject-object dichotomy, for instance, in presuming a knowing researcher and a knowable organization. In this sense, it would have to treat knowledge creation as a process taking place on the same ontological and epistemological plane as the observed processes and consider the researcher on the same terms as the researched. Third, it would have to remain agnostic as to the

nature of the beings and entities that participate in information and individuation, as well as to the nature of those that may come out of information and individuation processes. It would have to be able to speak in the same terms of humans, technologies, documents, ideas or rules, and recognize that determining which is which is the outcome of inquiry, not its starting point. Finally, and in relation with the prior point, it would have to refrain from presuming the prior existence of some beings, for instance, human beings making sense of their organization—otherwise, it would take for granted the very result it seeks to reach. These four points could in fact be seen as different formulations of a same principle: to avoid giving ontological priority to one being or set of beings at the expense of others, by presuming that they already exist and are available to shape, interpret, or otherwise bring into existence.

While a Simondonian perspective on communication corresponds more to a change in attitude than to prescription, it is still possible to identify, provisionally, at least a few data-gathering and data analysis avenues that fulfill the above agenda. For instance, ethnography (Heath & Hindmarsh, 2002; Meunier & Vásquez, 2008; Ybema, Yanow, Wels, & Kamsteeg, 2009) or ethnomethodologically-inspired methods (e.g. Llewellyn & Hindmarsh, 2010; Pomerantz & Fehr, 1997) both share a commitment to the study of action as it unfolds. They also consider language use as action rather than as a mere report of prior events (Pomerantz, Sanders, & Bencherki, 2018; Spradley, 1979). Both methodological strategies also share a commitment to reflexivity, in order to avoid presuming that the researcher is all-knowing, although their approach to reflexivity differs (see Macbeth, 2001). Ethnography and ethnomethodology alike have been used in studies that call for the rejection of the distinction between humans and non-humans as far as agency is concerned (e.g. Cooren, 2004); for instance, they both underpin actor-network theory (see Latour, 2005).

While both methodological traditions seem well aligned with Simondon's program, the latter diverges from them significantly when it comes to the fourth item of the agenda, namely not to consider any being as already existing. Indeed, while ethnography pays attention to action, it also gives great importance to the meaning people make of that action, which is a central ingredient to the tradition's notion of "thick description" (Geertz, 1973). In this sense, it needs to assume that human beings pre-exist the situations that are being described. As for ethnomethodology, while it is careful not to give undue weight to people's intentions and cognition, it takes "members" as its starting point and has built its analytical apparatus around them (see Munro, 1999). Yet, people (and the meanings they make) are but one set of beings in the scene, and in fact their constitution – as members, as people endowed with identities or as human beings to start with – can be a situational problem rather than a fact to be taken for granted (Ashcraft & Mumby, 2004; Butler, 1990; see on members Bencherki & Snack, 2016).

These differences are attributable to the different claims that each approach seeks to make in relation to communication. Ethnography views communication as a privileged vehicle to access culture, including the beliefs, rules and principles that guide action. For ethnomethodology, communication is, so to speak, the construction yard where those social reality is continuously constructed; it does not exist anywhere but in communication. Simondon's interest, in contrast, lies in the communicative processes themselves, which to him are not distinct from the constitution of beings and social reality alike, including the researcher's own constitution. Said otherwise, the question for Simondon is not so much to use communication to gather data *about* constitutive process, but to view any data as communication that is involved in constitutive processes. Communication, therefore, is not a gateway to one aspect of reality or another, but reality itself.



### **An Empirical Example**

To illustrate the analytical power of a Simondonian perspective on communication, and more generally of a perspective that fully embraces the constitutive power of communication, we devote the remainder of this article to the analysis of real-life data drawn from prior empirical work we have carried out. Also, while the notion of information is usually associated with media and communication technology, where Simondon and in particular his book *On the Mode of Existence of Technical Objects* (2016) has had some traction, this simple case will allow us to illustrate that Simondon has broader relevance and how the principles laid out above can be mobilized to conduct empirical research.

The case consists in an excerpt from the meeting of a committee that serves as a coordination platform for various community organizations in a particularly underprivileged and diverse district of Montréal, Québec, Canada. In the excerpt below, Marie, the representative of a member organization, shares an idea that a few colleagues and herself, as members of a subcommittee on diversity, had and would like to see implemented. It consists in federating the various activities that organizations carry out for the integration of immigrants under the umbrella of a special “week”—the Integration Action Week (IAW). The case was selected because it offers an example of discourse that follows Simondon’s logic; Marie, in a sense, evidences a Simondonian theory of communicating and organizing. We include here the transcript of her intervention, which is translated from French and edited to exclude some irrelevant portions for the sake of space.

#### ***Excerpt***

1 Marie: It’s the Integration Action Week, here in [district]. Uh... So, it’s a week,  
2 you have heard about it a little bit at the last general meeting, ... you may have  
3 received a first document inviting you to register. Let me explain a little bit what it  
4 is. So, my goal here today isn’t to do a report. Of course, you will learn some things,  
5 but I mostly want that you uh: that you commit with us in this: uh: this celebration.

6 Okay? So, uh, because the IAW, it integrates in the Council's work, in relation with  
7 the priorities we just talked about the uh: social housing priority on [location], now  
8 it's the concerted work on intercultural relations. I remind you that... [quoting from  
9 sheet] "That the Community Council multiplies and strengthens the ties with groups  
10 and members from cultural communities, in order to unfold uh their participation  
11 uh in the Council (?)". So, it's also in relation with the accessibility project that  
12 we've got with [funding agency]. Uh: so, the IAW (.) I will distribute the sheets. [...]

18 Marie: So, from Monday to Thursday. We want to highlight [*mettre en valeur*] the  
19 wonderful work that we do regarding integration, in our respective groups.  
20 But now we would like it to be seen, that we let it be known in the media, among  
21 others, and so we want to set up a calendar of activities. It's not about making up  
22 actions you're not doing, but maybe about saying "there is that thing we're doing  
23 with parents, where we encourage exchanges, where we foster mutual help" or  
24 whatever formula you've got. Uh, well, *that's* integration work. It's integration  
25 work, we'll take it in a broad sense. Even if you can't welcome more than twenty  
26 people in your premises, it's worth saying, inscribing it in the calendar and  
27 saying "that, it exists." Or maybe to invite a person or two from another group  
28 to see what's happening, to get acquainted, to highlight it, in the media, uh, on the  
29 map, but also among ourselves, because isn't the work of knowing each other part  
30 of integration? You know it, we develop many things, we do a really extraordinary  
31 work, but we have to highlight it. So, uh, during that week, well, uh, first, I am  
32 talking to you as a member of the "Intercultural Concerted Work" committee,  
33 and of the IAW sub-committee. [...]

39 Marie: Uh, uh, it's the committee that had the idea of doing  
40 this week, but the week, it's not the committee's week. (1) It's everyone's  
41 week (.) That of all the community workers in [district], and we were even saying  
42 uh there's extraordinary work from the community groups, at least that's what I  
43 see as a member of the Community Council, but there are other kinds of groups  
44 there are other uh other interventions that are being done in the district  
45 that are entirely in the spirit of integration, of facilitating integration, for example  
46 in institutions, whether the [French-learning] centre across, whether the [proximity health  
47 centre] services, or others. So, what we want to do is a calendar  
48 of activities (1), so I invite you to register in that calendar. Uh, we also want to do  
49 a "passport for integration" and a web site. So, the passport uh will give uh uh  
50 (inaudible) to the residents and to the community workers. So, we are aiming at  
51 workers a lot, of course, eh, I think that it's up to us to share information  
52 on what we're doing. But obviously, our members, there are many other groups,  
53 maybe, bring our gr: our gang, once, of course during the week we can't see  
54 everything, but say to yourself, "ah, I'll go see what they're doing over there"  
55 or go see the neighbour, even if it's next door, what are they doing at their place.  
56 Uh, so, then, we've got, we've got a web site, we will write the week's activities  
57 and people will be able to spot that on a map as well and if groups have web sites  
58 we'll put a link to your own web site. To get on the calendar (0.5) to get in the  
59 network of integration.

While this transcript is a very partial representation of what took place during those few minutes, it provides us with some insight regarding what went on concretely. One of us, the first author, was present at the event and had witnessed many similar meetings of that committee over his years of involvement as an ethnographer.

I (the author who participated) saw the organizations change, people come and go, struggles being won or lost, partnerships being formed and dissolved. In that respect, my knowledge of the involved organizations, people, or events is also a knowledge of their individuation, of the way they became who or what they have become. This knowledge is not simply based on observation—these organizations, people, and events also affected me. I changed along with them in significant ways; not only did I get a PhD thanks to them, I also became committed to community-engaged research, I did consultation work for some of the organizations, and I made several friends. The meaning of my fieldwork, therefore, comes from the way it contributed to ordering relations, including to make me who I am (proposition 4).

Marie's speech is reminiscent of Simondon's conception of communication. Indeed, she recognizes herself that her goal is not to report, but to get others to "commit with us [...] in this celebration" (l. 5). She therefore has in mind a view of communication (or at least of her speech) as aiming to create new connections between people and organizations. For instance, she presents the subcommittee as being ordered in a particular way—it believes in the "wonderful work" (l. 19) and the "really extraordinary work" (l. 34) that the organizations do in terms of integration and in the importance of holding the week in a particular way. Now, Marie wants to propagate that ordering to the rest of the Council. Marie wants to "inform" her fellow Council members, not only in the sense of letting them know about the subcommittee's idea, but also because she wants to organize her colleagues and their organizations into the Integration Activity Week. Seemingly espousing Simondon's understanding of information, her goal is not only to transmit pieces of

“information,” in the common sense of the word, but to give a new shape to the Council, order it in a particular way, and provide it, so to speak, with new organs that would allow it to capture “integration work,” and thus (re)organize it (Cooren, 2018). Indeed, as she reminds later, the week does not only belong to the subcommittee, “It’s everyone’s week” (l. 41), her effort thus consisting in leading others to appropriate it (Bencherki & Cooren, 2011).

To do so, she shows that in fact the Council is already ordered in a way that makes it receptive to the new information. First, she establishes that her suggestion agrees with prior decisions and priorities of the Council, by quoting from a sheet (presumably her notes from the prior conversation). For instance, she explains that the week is “in relation with the priorities” (l. 8) that they had just talked about and quoting one such priority regarding the strengthening of ties with cultural communities (l. 11). Then, she explains that she is in fact not asking of her colleagues to undertake new actions: they are already doing the work. Indeed, it is not a matter of “making up actions you’re not doing” (l. 21-22), but simply of highlighting them and providing them with a new and heightened meaning through their inclusion in the week.

She then provides the ordering principles that would allow constituting the IAW and therefore connect together the individual actions in a new way: the calendar in which she invites her colleagues to write down the integration actions they are doing. For Marie, there is an equivalence between inscribing an activity in the calendar and creating a new ordering of these activities: “To get on the calendar (0.5) to get in the network of integration” (l. 58-59). She presents the calendar as a solution to giving more meaning to their activities: “we would like it to be seen [...] and so we want to set up a calendar of activities” (l. 20-21). This ordering therefore proceeds from kin to kin, in the minutiae of how people will register using the document they received (l. 3) or the sheets she distributes (l. 12). Later, she explains, this will be turned into a “passport” (in fact a flyer with the calendar printed on it), which will offer one materialization of

the activities' ordering. Marie shows how it is a very concrete, kin to kin accomplishment. It consists in a calendar where she invites her colleagues to write down activities they wish to contribute to the week; the calendar will then be turned into what she calls a "passport" (which in fact will turn out to be a printed flyer with a calendar on it), and put on the committee's website. She even brought sign-up sheets with her, so that people can write down activities right away. Achieving a particular ordering is therefore a kin-to-kin performance; Marie makes a speech, each human participant writes down an activity in a sheet, which are compiled into a calendar, and turned into a passport and a website, which are then sent to partners and to the media, and so forth. Each time, relations are established or strengthened between the various actions – but also between the organizations – and are defined by the "week" to which they participate. Each time, also, the existence of both the week and of "its" activities is highlighted. This existence is established as the week's ordering propagates from a sub-committee's conversation, to a speech, to the committee, to the sign-up sheets, to the calendar, to the passport, etc. (proposition 1).

Eventually, when the IAW takes place, Marie promises that the "wonderful work" the organizations do will gain more existence and signification: as she explains, "we want to highlight" (l. 18; also l. 31) that work. The French "mettre en valeur" is even more explicit, as it literally translates to "put in value," thus stressing that the activities would be more valuable if they were part of the week. Contributing their actions to the week allow the activities to "be seen" (l. 20) and to get "on the map" (l. 28-29). "Inscribing [an activity] in the calendar" amounts to "saying, 'that, it exists'" (l. 26-27). The week consists in ordering otherwise scattered actions into a new, coherent collective being; what ordering the actions into a week also does is order the organizations and other partners in a more significant way.

The result of Mary's speech is not only that her audience is better "informed" in the conventional sense of the word. It is also that an ordering that existed within the subcommittee

(their perception of the connection between diverse action and their value, their commitment to integration, their understanding of the Council's mission, and so forth) is propagated outside, to other members of the Council, who are now similarly ordered. This new ordering did take place: the IAW saw the light of day, thus giving meaning to actions of the community-based organizations, but also rebounding on Mary's speech and showing its significance and signification as a founding moment of the new initiative.

This analysis makes a certain number of assumptions: we suppose that whoever participated in that meeting understands the French language in which it originally took place, can read the various documents, and knows the conventional meaning of each of the words, expressions, tables, etc. There is also an assumption that people have some understanding of what the words and other practices refer to in the situation where they find themselves. We could argue that each of those elements may also be explained by referring to the four propositions above. For instance, an immigrant's ability to use French – and there were indeed many immigrants at the meeting, including the first author – is the outcome of that person's continued individuation in a French-speaking society (say, Québec), and their knowledge of French is also a knowledge of how they have changed over the past months or years along with their adoptive country or city (proposition 4). The same could be said of native speakers, if we extend the timeframe to each person's whole biography. Indeed, what the words, expressions, etc., signify to that person is what the words have done to them and how they have changed them (compare this with Wittgenstein, 1953).

### **Conclusion**

Ruth Smith's (1993) formulation of the root metaphor equating communication to organization has received, for the most part, a one-sided treatment in organizational communication theorizing, showing how communication builds identities, collectives,

organizations and societies, but not the other way around. In a sense, communication scholars interested in its constitutive power have been studying collectives and their communicational nature more than they have been doing research on *communication* as such, to possibly show in what ways communication may be conceptualized from an organizing perspective. Obviously, our goal is not to suggest that communication scholars start studying exclusively in the other direction but rather that they find theoretical positions where communicating and organizing (or constituting) are truly a single process. We provided one example of a theory of communication that is genuinely “organizational” in its treatment of communication; Simondon’s (1958/2005) notion of informational individuation. By showing how communication organizes, in a single process, the domains through which it circulates, Simondon fuses communicating and organizing; i.e., his theory of communication is a theory of organization-in-the-making.

The example of a Simondon-inspired transductive perspective on communication illustrates that there are still unexplored ways in which (organizational) communication scholars could conceptualize communication for the sake of redefining the organization-communication relation. Our hope with this paper is to elicit more debates over the relationship between organization and communication and on underlying conceptions of communication. We think this is needed to rejuvenate the sort of methods that communication researchers use, the kind of knowledge they produce, the understandings of organization that they adopt, and the way they relate to communication practitioners. This paper has attempted to at least question the assumptions on which organizational communication theories have been constructed, while making explicit the understandings of communication that are at the heart of organizational communication research.

Revisiting the metatheoretical assumptions of communication dynamics would amount to more than a cosmetic change to theorizing, as it would impact methods (including the communication

researcher's role within research), views of beings, collectives and organizations, as well as, arguably, the sort of advice that researchers may be able to provide to practitioners. Indeed, on the latter point, a Simondonian perspective, by equating communicating and organizing, also implies not distinguishing between managerial functions and communication roles in organizations, for instance. Communication professionals, thus, are positioned on the center stage, and communication activities – whether marketing, advertising, journalism, and so forth – cannot be separated from their performative role in shaping up our common world. The suggestion to question assumptions in organizational communication theory may be met with some resistance, given that we are formulating it at a time when the suggestion that communication has constitutive power is being increasingly well-received, and when it may appear that there is no need to question the work being done. The maturation of a research tradition, however, requires that theories be kept flexible and that the field remains in a constant process of re-organizing. Another limitation to our suggestion is that, of course, current theories were developed in given contexts and inherit from many debates and conversations. It is hard, if possible, at all, to “retrofit” new conceptions of communication in an already well-developed field. This difficulty should not prevent researchers from trying. We are not expecting that communication researchers change all their theories from one day to the next because they would suddenly “discover” a new theory of communication. We know the sociology and history of science too well to believe that the field of communication could follow such a model of discovery (Bijker, 1995; Latour, 1987). Yet, if communication researchers keep the conversation alive about collective assumptions regarding communication, and how interest in organizations and collectives may fuel a theory of communication, then communication researchers may be in decent shape to make contributions not only to the understanding of organizations, but also to the way communication is comprehended, well beyond the boundaries of any single sub-field.



## References

- Arvey, M. J. (2003). Doing Reflexivity: A Collaborative Narrative Approach. In L. Finlay & B. Gough (Eds.), *Reflexivity* (pp. 163–175). <https://doi.org/10.1002/9780470776094.ch12>
- Ashcraft, K. L., & Mumby, D. K. (2004). *Reworking gender: a feminist communicology of organization*. Thousand Oaks, CA: Sage.
- Austin, J. L. (1962). *How to Do Things with Words*. Cambridge, MA: Harvard University Press.
- Bakhtin, M. M. (1986). *Speech Genres and Other Late Essays*. Austin, TX: University of Texas Press.
- Barad, K. (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.
- Bardini, T. (2014). Simondon, Individuation and the Life Sciences: Interview with Anne Fagot-Largeault. *Theory, Culture & Society*, 31(4), 141–161.  
<https://doi.org/10.1177/0263276413508450>
- Barthélémy, J.-H. (2005). *Penser l'individuation : Simondon et la philosophie de la nature*. Paris: L'Harmattan.
- Barthélémy, J.-H. (2014). *Simondon*. Paris: Les belles lettres.
- Bateson, G. (1972). *Steps to an ecology of mind*. New York, NY: Ballantine Books.
- Bencherki, N. (2017). A pre-individual perspective to organizational action. *Ephemera. Theory and Politics in Organization*, 17(4), 777–799.
- Bencherki, N., & Cooren, F. (2011). Having to be: the possessive constitution of organization. *Human Relations*, 64(12), 1579–1607. <https://doi.org/10.1177/0018726711424227>
- Bencherki, N., & Snack, J. P. (2016). Contributorship and Partial Inclusion: A Communicative Perspective. *Management Communication Quarterly*, 30(3), 279–304.  
<https://doi.org/10.1177/0893318915624163>

- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: a treatise in the sociology of knowledge*. Garden City, NY: Doubleday.
- Bijker, W. E. (1995). *Of bicycles, bakelites, and bulbs : toward a theory of sociotechnical change*. Cambridge, MA: MIT Press.
- Boivin, G., Brummans, B. H. J. M., & Barker, J. R. (2017). The Institutionalization of CCO Scholarship: Trends from 2000 to 2015. *Management Communication Quarterly*.  
<https://doi.org/10.1177/0893318916687396>
- Boje, D. M., Oswick, C., & Ford, J. D. (2004). Language and Organization: The Doing of Discourse. *Academy of Management Review*, 29(4), 571–577.  
<https://doi.org/10.5465/AMR.2004.14497609>
- Brummans, B. H. J. M. (2006). The Montréal School and the question of agency. In F. Cooren, J. R. Taylor, & E. J. Van Every (Eds.), *Communication as organizing: Empirical and theoretical explorations in the dynamic of text and conversation* (pp. 197–211). Mahwah, NJ: Lawrence-Erlbaum.
- Butler, J. (1990). *Gender trouble feminism and the subversion of identity*. New York, NY: Routledge.
- Butler, J. (1993). *Bodies That Matter: On the Discursive Limits of Sex*. Abingdon, Oxon ; New York, NY: Routledge.
- Butler, J. (1999). Performativity's Social Magic. In R. Shusterman (Ed.), *Bourdieu: A Critical Reader* (pp. 113–128). Oxford: Blackwell.
- Canguilhem, G. (1989). *The normal and the pathological*. New York, NY: Zone Books.
- Carey, J. W. (1989). *Communication as culture: Essays on media and society*. Winchester, MA: Unwin Hyman.

- Cecez-Kecmanovic, D., Galliers, R. D., Henfridsson, O., Newell, S., & Vidgen, R. (2014). The Sociomateriality of Information Systems: Current Status, Future Directions. *MIS Q.*, 38(3), 809–830. <https://doi.org/10.25300/MISQ/2014/38:3.3>
- Cheong, P. H., Hwang, J. M., & Brummans, B. H. J. M. (2014). Transnational immanence: the autopoietic co-constitution of a Chinese spiritual organization through mediated communication. *Information, Communication & Society*, 17(1), 7–25. <https://doi.org/10.1080/1369118X.2013.833277>
- Citton, Y. (2004). Sept résonances de Simondon. *Multitudes*, 18(4), 25–31. <https://doi.org/10.3917/mult.018.0025>
- Combes, M. (1999). *Simondon. Individu et collectivité : pour une philosophie du transindividuel*. Paris: Presses universitaires de France.
- Cooren, F. (2000). *The organizing property of communication*. Amsterdam/Philadelphia: J. Benjamins.
- Cooren, F. (2004). Textual agency: How texts do things in organizational settings. *Organization*, 11(3), 373–393.
- Cooren, F. (2007). *Interacting and organizing : analyses of a management meeting*.
- Cooren, F. (2015). In medias res: communication, existence, and materiality. *Communication Research and Practice*, 1(4), 1–15. <https://doi.org/10.1080/22041451.2015.1110075>
- Cooren, F. (2018). Materializing Communication: Making the Case for a Relational Ontology. *Journal of Communication*, 68(2), 278–288. <https://doi.org/10.1093/joc/jqx014>
- Cooren, F., & Fairhurst, G. T. (2008). Dislocation and Stabilization: How to Scale Up from Interactions to Organization. In L. L. Putnam & A. M. Nicotera (Eds.), *The Communicative Constitution of Organization: Centering Organizational Communication* (pp. 117–152). Mahwah, NJ: Lawrence Erlbaum Associates.

- Craig, R. T. (1999). Communication Theory as a Field. *Communication Theory*, 9(2), 119–161.  
<https://doi.org/10.1111/j.1468-2885.1999.tb00355.x>
- Craig, R. T. (2015). The Constitutive Metamodel: A 16-Year Review. *Communication Theory*, 25(4), 356–374. <https://doi.org/10.1111/comt.12076>
- Cunliffe, A. (2003). Reflexive Inquiry in Organizational Research: Questions and Possibilities. *Human Relations*, 56(8), 983–1003. <https://doi.org/10.1177/00187267030568004>
- Dakers, J. R. (2016). Taking a Bicycle Ride into the Virtual With Simondon, Deleuze and Guattari. In M. C. A. van der Sanden & M. J. de Vries (Eds.), *Science and Technology Education and Communication* (pp. 9–26). [https://doi.org/10.1007/978-94-6300-738-2\\_2](https://doi.org/10.1007/978-94-6300-738-2_2)
- De Boever, A., Murray, A., & Roffe, J. (2009). “Technical Mentality” Revisited: Brian Massumi on Gilbert Simondon. *Parrhesia*, 7, 36–45.
- Dourish, P. (2017). *The stuff of bits: an essay on the materialities of information*. Cambridge: MIT Press.
- Dourish, P., & Mazmanian, M. (2013). Media as Material: Information Representations as Material Foundations for Organizational Practice. In *How Matter Matters: Objects, Artifacts, and Materiality in Organization Studies* (p. xxx).
- Garfinkel, H. (1967). *Studies in ethnomethodology*. Englewood Cliffs, NJ: Prentice-Hall.
- Geertz, C. (1973). Thick Description: Toward an Interpretive Theory of Culture. In *The Interpretation of Cultures: Selected Essays* (pp. 3–30). New York, NY: Basic Books.
- Giddens, A. (1984). *The constitution of society: outline of the theory of structuration*. Cambridge: Polity Press.
- Grant, D., Michelson, G., Oswick, C., & Wailes, N. (2005). Guest editorial: discourse and organizational change. *Journal of Organizational Change Management*, 18(1), 6–15.  
<https://doi.org/10.1108/09534810510579814>

- Hardy, C. (2004). Scaling up and Bearing Down in Discourse Analysis: Questions Regarding Textual Agencies and Their Context. *Organization*, 11(3), 415–425.  
<https://doi.org/10.1177/1350508404042000>
- Heath, C., & Hindmarsh, J. (2002). Analysing Interaction: Video, ethnography and situated conduct. In T. May (Ed.), *Qualitative Research in Practice* (pp. 99–121). London: Sage.
- Iliadis, A. (2013). Informational ontology: The meaning of Gilbert Simondon's concept of individuation. *Communication +1*, 2(1), 1–19.
- Iliadis, A. (2017). Introduction to Ontologies of Difference: The Philosophies of Gilbert Simondon and Raymond Ruyer. *Deleuze Studies*, 11(4), 491–497.
- Krippendorff, K. (1997). Seeing oneself through others' eyes in social inquiry. In M. Huspek & G. P. Radford (Eds.), *Transgressing discourses: Communication and the voice of the other* (pp. 47–72). Albany, NY: SUNY Press.
- Kuhn, T., Ashcraft, K. L., & Cooren, F. (2017). *The work of communication: relational perspectives on working and organizing in contemporary capitalism*. New York, NY: Routledge.
- Latour, B. (1987). *Science in action: how to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.
- Latour, B. (1999). Circulating Reference: Sampling the Soil in the Amazon Forest. In *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press.
- Latour, B. (2005). *Reassembling the social: an introduction to actor-network-theory*. Oxford: Oxford University Press.
- Leonardi, P. M. (2012). Materiality, Sociomateriality, and Socio-Technical Systems: What Do These Terms Mean? How are They Related? Do We Need Them? In P. M. Leonardi, B.

- A. Nardi, & J. Kallinikos (Eds.), *Materiality and Organizing: Social Interaction in a Technological World* (pp. 25–48). Oxford: Oxford University Press.
- Leonardi, P. M. (2013). Theoretical foundations for the study of sociomateriality. *Information and Organization*, 23(2), 59–76. <https://doi.org/10.1016/j.infoandorg.2013.02.002>
- Leonardi, P. M., & Barley, S. R. (2010). What’s Under Construction Here? Social Action, Materiality, and Power in Constructivist Studies of Technology and Organizing. *The Academy of Management Annals*, 4(1), 1–51. <https://doi.org/10.1080/19416521003654160>
- Letiche, H., & Moriceau, J.-L. (2017). Simondon: investigating the pre-organizational. *Culture and Organization*, 23(1), 1–13. <https://doi.org/10.1080/14759551.2016.1240358>
- Llewellyn, N., & Hindmarsh, J. (2010). *Organisation, interaction and practice: studies in ethnomethodology and conversation analysis*. Cambridge, UK: Cambridge University Press.
- Luhmann, N. (1981). The improbability of communication. *International Social Science Journal*, 33(1), 122–132.
- Luhmann, N. (1992). What is Communication? *Communication Theory*, 2(3), 251–259. <https://doi.org/10.1111/j.1468-2885.1992.tb00042.x>
- Macbeth, D. (2001). On “Reflexivity” in Qualitative Research: Two Readings, and a Third. *Qualitative Inquiry*, 7(1), 35–68. <https://doi.org/10.1177/107780040100700103>
- Martine, T., & Cooren, F. (2016). A Relational Approach to Materiality and Organizing: The Case of a Creative Idea. In L. Introna, D. Kavanagh, S. Kelly, W. J. Orlikowski, & S. V. Scott (Eds.), *Beyond Interpretivism? New Encounters with Technology and Organization* (pp. 143–166). [https://doi.org/10.1007/978-3-319-49733-4\\_9](https://doi.org/10.1007/978-3-319-49733-4_9)

Maturana, H., & Varela, F. J. (1980). *Autopoiesis and cognition: the realization of the living*. Boston, MA: D. Reidel.

Maturana, H., & Varela, F. J. (1987). *The tree of knowledge: the biological roots of human understanding*. Boston, MA: New Science Library.

McPhee, R. D., & Iverson, J. (2009). Agents of constitution in Comunidad: Constitutive processes of communication in organization. In L. L. Putnam & A. M. Nicotera (Eds.), *Building theories of organization: The constitutive role of communication* (pp. 49–87). New York, NY: Routledge.

McPhee, R. D., & Zaug, P. (2000). The communicative constitution of organizations: A framework for explanation. *Electronic Journal of Communication*, 10(1–2).

Mead, G. H. (1934). *Mind, Self, and Society: From the standpoint of a social behaviourist*. Chicago: University of Chicago Press.

Meunier, D., & Vásquez, C. (2008). On Shadowing the Hybrid Character of Actions: A Communicational Approach. *Communication Methods and Measures*, 2(3), 167–192.

Misak, C. J. (2013). *The American Pragmatists*. Oxford: Oxford University Press.

Munro, R. (1999). Power and Discretion: Membership Work in the Time of Technology. *Organization*, 6(3), 429–450. <https://doi.org/10.1177/135050849963004>

Peirce, C. S. (1958). *The Collected Papers of Charles Sanders Peirce* (A. W. Burks, Ed.). Cambridge, MA: Harvard University Press.

Pomerantz, A., & Fehr, B. (1997). Conversation Analysis: An Approach to the Study of Social Action as Sense Making Practices. In T. A. van Dijk (Ed.), *Discourse as Social Interaction* (pp. 64–91). Thousand Oaks, CA: Sage.

Pomerantz, A., Sanders, R. E., & Bencherki, N. (2018). Communication as the Study of Social Action: on the Study of Language and Social Interaction. An interview with Anita

- Pomerantz and Robert E. Sanders, by Nicolas Bencherki. *Communiquer. Revue de Communication Sociale et Publique*, (22), 103–118.
- Putnam, L. L. (2015). Unpacking the Dialectic: Alternative Views on the Discourse–Materiality Relationship. *Journal of Management Studies*, 52(5), 706–716.  
<https://doi.org/10.1111/joms.12115>
- Putnam, L. L., & Fairhurst, G. T. (2015). Revisiting “Organizations as Discursive Constructions”: 10 Years Later. *Communication Theory*, 25(4), 375–392.  
<https://doi.org/10.1111/comt.12074>
- Putnam, L. L., Fairhurst, G. T., & Banghart, S. (2016). Contradictions, Dialectics, and Paradoxes in Organizations: A Constitutive Approach. *The Academy of Management Annals*, 10(1), 65–171. <https://doi.org/10.1080/19416520.2016.1162421>
- Putnam, L. L., & Nicotera, A. M. (2009). *Building Theories of Organization: The Constitutive Role of Communication*. Mahwah, NJ: Lawrence Erlbaum.
- Richter, C. J. (2000). Anthony Giddens: A Communication Perspective. *Communication Theory*, 10(3), 359–368.
- Robichaud, D. (2003). Narrative institutions we organize by: The case of a municipal administration. In B. Czarniawska & P. Gagliardi (Eds.), *Narratives we organize by: Advances in organization studies* (pp. 37–54). Amsterdam: John Benjamins.
- Rosset, C. (2012). *The real and its double*. London: Seagull Books.
- Sacks, H. (1992). *Lectures on conversation* (G. Jefferson, Ed.). Cambridge, MA: Blackwell.
- Schegloff, E. A. (1989). Reflections on language, development, and the interactional character of talk-in-interaction. In M. H. Bornstein & J. S. Bruner (Eds.), *Interaction in human development* (pp. 139–153). Hillsdale, N.J: Lawrence Erlbaum Associates.



- Schoeneborn, D. (2011). Organization as Communication: A Luhmannian Perspective. *Management Communication Quarterly*, 25(4), 663–689.  
<https://doi.org/10.1177/0893318911405622>
- Schoeneborn, D., Blaschke, S., Cooren, F., McPhee, R. D., Seidl, D., & Taylor, J. R. (2014). The Three Schools of CCO Thinking: Interactive Dialogue and Systematic Comparison. *Management Communication Quarterly*, 28(2), 285–316.  
<https://doi.org/10.1177/0893318914527000>
- Searle, J. R. (1979). *Expression and meaning: studies in the theory of speech acts*. Cambridge, UK: Cambridge University Press.
- Shannon, C., & Weaver, W. (1998). *The Mathematical Theory of Communication*. Urbana: University of Illinois Press.
- Sillince, J. A. A. (2009). Can CCO Theory Tell Us How Organizing Is Distinct From Markets, Networking, Belonging to a Community, or Supporting a Social Movement? *Management Communication Quarterly*, 24(1), 132–138. <https://doi.org/10.1177/0893318909352022>
- Simondon, G. (2005). *L'individuation à la lumière des notions de forme et d'information*. Grenoble: Jérôme Millon. (Original work published 1958)
- Simondon, G. (2010). *Communication et information: cours et conférences*. Chatou: Editions de la Transparence.
- Simondon, G. (2016). *On the mode of existence of technical objects*. Minneapolis, MN: Univocal.
- Smith, R. C. (1993). Images of Organization: Root-Metaphors of the Organization-Communication Relation. *Annual Conference of the International Communication Association*.
- Spradley, J. P. (1979). *The Ethnographic Interview*. Orlando, FL: Harcourt Brace.

- Styhre, A. (2010). The Concept Of Transduction And Its Use In Organization Studies. *Emergence: Complexity & Organization*, 12(3), 115–131.
- Styhre, A. (2017). Ravaisson, Simondon, and constitution of routine action: Organizational routines as habit and individuation. *Culture and Organization*, 23(1), 14–25.  
<https://doi.org/10.1080/14759551.2016.1240399>
- Taylor, J. R. (1995). Shifting from a Heteronomous to an Autonomous Worldview of Organizational Communication: Communication Theory on the cusp. *Communication Theory*, 5(1), 1–35. <https://doi.org/10.1111/j.1468-2885.1995.tb00096.x>
- Taylor, J. R. (2001). The “rational” organization reconsidered: an exploration of some of the organizational implications of self-organizing. *Communication Theory*, 11(2), 137–177.  
<https://doi.org/10.1111/j.1468-2885.2001.tb00237.x>
- Taylor, J. R., & Van Every, E. J. (2000). *The emergent organization: communication as its site and surface*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Taylor, J. R., & Van Every, E. J. (2014). *When Organization Fails: Why Authority Matters*. New York, NY: Routledge.
- Watzlawick, P., Bavelas, J. B., & Jackson, D. D. (2011). *Pragmatics of Human Communication: A study of interactional patterns, pathologies, and paradoxes*. New York: W. W. Norton.
- Weick, K. E. (1979). *The social psychology of organizing* (2d ed.). Reading, MA: Addison-Wesley.
- Wilhoit, E. D. (2016). Ventriloquism’s methodological scope. *Language Under Discussion*, 2(1), 45–49.
- Wittgenstein, L. (1953). *Philosophical Investigations* (G. E. M. Anscombe & R. Rhees, Trans.). New York, NY: The Macmillan Company.

Ybema, S., Yanow, D., Wels, H., & Kamsteeg, F. H. (2009). *Organizational Ethnography: Studying the Complexity of Everyday Life*. Los Angeles: Sage.

Zundel, M., Holt, R., & Cornelissen, J. (2013). Institutional Work in The Wire An Ethological Investigation of Flexibility in Organizational Adaptation. *Journal of Management Inquiry*, 22(1), 102–120. <https://doi.org/10.1177/1056492612440045>