

Extitutional theory: Modelling structured social dynamics beyond institutions

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abstract

This paper introduces an integrated ontological framework to analyse the interplay between formalised social structures composed of impersonal, codified roles and rules which are commonly described as ‘institutions’, and the more latent interpersonal relationships that shape and animate these institutions—putting forward the notion of ‘extitutions’ to describe the latter. The main contribution of this paper is to provide an analytical grid for advancing the formalisation of both institutional and extitutional dynamics and how they affect or influence each other over time, from a multi-faceted and multi-layered network standpoint. This new grid of analysis can be used to characterise the reciprocal interactions between the extitutional and institutional aspects of social groups, explicitly disentangling their respective influences. This makes it possible to prescribe novel configurations of collective action that benefit from a balanced equilibrium between extitutional and institutional dynamics.

Introduction

Several theoretical frameworks have been developed to understand how individuals organise themselves into larger social structures and how these social structures in turn contribute to shaping individual attitudes, behaviours, ideas and beliefs. The concept of institutions is particularly central to most theoretical frameworks in the field of organisational and governance theory. Yet, while most of these frameworks do recognize the

interplay that subsists between the structural elements and the cultural components of these social groups, they often assimilate both of these components into a monolithic framework of analysis—thereby limiting the opportunity to distinguish between the different logics that animate each of these components.

The paper introduces a new ontological framework for the analysis of social dynamics –which we refer to as ‘extitutional theory’– that constitutes an alternative lens to the institutional lens, to help us observe, describe, analyse, but also influence the way in which people interact with one another in a variety of settings.

The paper¹ is organised as follows. First, it presents an overview of the current understanding of institutions in scholarly literature. Second, it introduces a distinction between institutions and extitutions, to subsequently highlight the interplay and reciprocal influence between the two. The paper then provides an illustrated formalisation of the dynamics that emerge within and across the institutional and extitutional layers. It does so by formalising and illustrating the processes of upward and downward causation that exists between institutions and extitutions: on the one hand, the process of institutionalisation that enables the formalisation and the crystallisation of specific extitutional dynamics, on the other hand, the process of extitutionalisation that creates new habits that ultimately may trigger an evolution of institutional structures. The paper concludes with future

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perspectives for further research, highlighting the need for a strong interdisciplinary and transdisciplinary approach to accommodate insights from a variety of different disciplines and integrate them into a common theoretical framework.

Preliminary overview of institutional theory

What is an institution?

The concept of institutions is perhaps one of the most elusive in social sciences. Originally introduced to describe the specific structure of organisations, institutions soon became a catch-all for a large variety of structured social phenomena. A few definitions have been proposed in the literature, as an attempt to describe the role and function of institutions. Weber (1910) advocated for a broad and encompassing definition of institutions, arguing that the term ‘society’ should be replaced with the terms ‘social relations’ and ‘social institutions’ – where institutions represent the ‘rules of the game’ (*Spielregeln*) that inform human behaviour (Nau, 2005).

Other authors focused more on the shared practices, customs and behavioural patterns that constitute an institution. For instance, Hamilton (1932) described institutions as a permanent and recognizable ‘way of thought or action [...] embedded in the habits of a group or the customs of people’ (84), whereas Foster (1981) defined institutions as ‘prescribed patterns of correlated behaviour’ (908). Similarly, behavioural approaches in organisation theory (Griffin and Moorhead, 2011; Newstrom, Davis and Davis, 1993; Robbins and Judge, 2015) have been exploring the link between the structural elements of an institution and the way people act within that institution. These works are anchored in the field of management and business administration, focusing mostly on the practical and operational matters on how to run an organisation. These approaches have, however, been somewhat criticised (Lawson, 2003: 189-194) for putting too much stress on the behavioural aspects of institutions, and not enough attention on the formal rules and constraints that shape these behaviours.

More formalistic definitions of institutions have been provided by other scholars, such as Knight (1992), who describes institutions as any ‘system of

rules that structure social interactions' (*ibid.*: 2). These definitions have however been criticised for being excessively broad (Hodgson, 2006), in that they comprise a wide range of social and cultural artefacts of very different nature – such as language, money, law, social norms, governments and firms. Knight's definition is also limited to the extent that it only focuses on the structural ruleset that constitutes an institution, with little account for the role of individual preferences and dispositions in shaping and putting these rules into practice.

Today, while there is no single nor widely established definition of institutions, they are commonly accepted as encompassing both explicit rules (*formal* or *informal*) and the tacit attitudes or social norms that represent the embodiment of these rules. Indeed, 'institutions both constrain and enable behaviour' (Hodgson, 2006: 2). Specific rules and constraints are established in order to guide, promote and support specific actions or behaviours that would be difficult – perhaps even impossible – to achieve otherwise. For instance, language enables us to communicate more easily with one another, money enables us to trade more effectively, law enables us to act more freely based on expectations of mutual respect, and governments enable us to pool resources together and act in a more coordinated manner. At the same time, the ongoing use and acceptance of these rules contribute to their tacit adoption and assimilation within the social fabric of an organisation. This reduces their need for enforcement as they are no longer perceived as behavioural constraints, but rather as behavioural habits.

In other words, institutions can be described as a combination of rules that generate relatively stable equilibria of social behaviours which persist over time (Aoki, 2001; Crawford and Ostrom, 1995). These rules reinforce themselves – by acquiring more normative weight – as they are recognized, accepted, internalised and replicated through the behaviours of individual actors (Hodgson, 2006). Such a dynamic understanding of institutions enables us to better grasp the interplay between individuals and institutions, focusing on how individuals simultaneously shape and are being shaped by the institutions they create. It is this continuous back and forth between the establishment of normative rules and the assimilation of these rules by individuals that determines the long-term sustainability of institutions.

How do institutions evolve?

Among the multiple theories of institutional change (see Kingston and Caballero, 2009, for a comparative analysis), some focus on the deliberate attempts at creating new institutional forms in order to better serve a particular purpose or satisfy specific needs and desires. These theories understand institutional change as a result of deliberate intervention by political or economic actors (Alexander, 2005). They investigate the design choices stemming from these particular sets of actors, whose evolving preferences, knowledge and beliefs generate progressive variations in institutional forms.

Institutions do not, however, exist in a vacuum; they subsist in a particular social, political and economic context, which they must attune to. As the context in which they operate becomes more complex, institutions need to adapt to their changing environment by either modifying their institutional structure or by extending beyond their original organisational boundaries, so as to better connect and communicate with a wider variety of social systems (Andersen, 2001; Andersen and Born, 2007).² Some scholars have theorised institutions from an evolutionary perspective, investigating the process of institutional formation as a spontaneous phenomenon triggered by changes in the larger ecosystem. Specifically, evolutionary theories of institutional change analyse variations in institutional forms through the application of Darwinism (Lewis and Steinmo, 2012), whereby different institutional forms compete with one another for survival. According to these theories, institutions are regarded as social structures, whose attributes and characteristics progressively evolve as a result of external pressures and environmental stimuli (Potts, 2007). Those that best accommodate existing social, economic, and political arrangements will have higher chances to survive – spreading through a process of imitation or replication – whereas those that are the least fit for their environment will eventually fade into extinction.

² According to Andersen (2001), *polyphonic organisations* are connected to several systems, coupling previously separate concepts, e.g., political organisations, market-oriented political parties, ethical investment firms.

Beyond external or environmental pressures, institutions may also evolve as a result of internal social pressures, as a response to the individual expectations of its constitutive members. As such, while in an ideal-typical Weberian bureaucracy, organisations are ‘designed to function independently of the collective actions which can be mobilised through interpersonal networks [...], when turnover is low, relations take on additional contents of an expressive and personal sort which may ultimately transform the network and change the directions of the organisation’ (Lincoln, 1982: 26). Conversely, substantial company turnover could equally trigger significant changes in the structure of an institution, as different directors or employees may have different ideas or expectations on how the company should effectively be run.

There are, however, situations when the individual elements of social groups will experience substantial variations, without triggering an actual change in the institutional formation. For instance, replacing a company’s CEO will most likely have a significant impact on the network of interpersonal relations that had previously been established within the company. Yet, none of these changes will be reflected within the institutional structure of the company, which remains essentially the same: the role of the CEO has simply been assigned to a new individual, but the set of rules and functions associated with that role has not been affected by it. Similarly, the coming and going volunteers of a non-profit organisation remain invisible from an institutional perspective, since volunteers are not officially part of the institutional fabric. Yet, the involvement of volunteers is essential to the success of many non-profit organisations, and the departure of key volunteers could trigger a significant drop in the involvement and participation for other volunteers. Hence, even if not formally or explicitly reflected in the organisation structure, changes in the social fabric of an organisation could have drastic consequences on the operations of that organisation.⁵

⁵ In the words of Granovetter (1985: 502), ‘it hardly needs repeating that observers who assume firms to be structured in fact by the official organisation chart are sociological babes in the woods.’

The multiple facets of institutions

These examples show that there are important factors affecting social dynamics which do not only refer to the institutional but also to the relational aspects of social groups or organisations. Indeed, every social organisation exhibits both institutional and non-institutional forces that together contribute to shaping the social dynamics of all those involved in such organisation. Specific typologies of social organisations (e.g., companies or governments) have strong institutional components that govern the large majority of social dynamics, with a view to influence social behaviour towards the achievement of a particular objective or mission. Yet, there exist many other types of social organisations, which prioritise interpersonal relationships and personalised social dynamics over institutionalised ones. This is the case of many informal groups, self-organised communities, but also large-scale organisations which account for both the structural and relational forces affecting social dynamics (Laloux, 2014).

To be sure, many of the structural components of an institution are intended to support or constrain specific social dynamics, which are to be either encouraged (e.g., promoting emotional care and positive work relationships) or discouraged (e.g., avoiding corruption, conflict of interest, etc). To properly do so, however, these structural components need to account for the interpersonal relationships occurring within these social structures, and the impact these have on the broader social dynamics. This requires distinguishing between the impersonal components of institutions, defined by a particular set of roles and rules, with the more personalised and relational components thereof. This distinction is helpful to analyse the interplay, and the generative process of coevolution that exists between these different yet interrelated aspects of a social group: the codified (normative) rules that prescribe social behaviour, and the personalised network of relationships that subsist among the group.

The relationship between institutions, social norms and individual behaviours has already been analysed by scholars from a variety of disciplines, including economics (Alesina and Giuliano, 2015; Bowles, 2004; Dal Bó, Foster and Putterman, 2010; Guiso, Sapienza, and Zingales, 2015; Tabellini, 2008, 2010), political sciences (Bednar and Page, 2018; Hofstede, 2001; Jackman and

Miller, 2004), anthropology (Bennett, 1996; Billig, 2000; Wright, 2004) and even biology (Bowles, Choi and Hopfensitz, 2003). Most relevant for the purpose of this paper is the work in structural sociology of Granovetter (1985), which builds upon the notion of ‘embeddedness’ as previously developed by Polanyi (1944) to argue that market economies, and the social dynamics that emerge within them, are intrinsically embedded within a much broader social and cultural context than traditional economic theories would suggest. Granovetter believes that neoclassical economics prescribes an ‘under-socialised’ and atomized account of human behaviour that is excessively separated from culture and society. At the same time, he claims (albeit contentiously) that Polanyi’s substantivist approach prescribes an ‘oversocialized’⁴ view of economic actors, minimising the role of rational choice over human behaviour. In his account, ‘most behaviour is closely embedded in networks of interpersonal relations’, a view that avoids ‘the extremes of under- and oversocialized views of human action’ (Granovetter, 1985: 504).⁵ However, Granovetter limited his field of observation to market societies, with little account for how his neo-substantive theory of embeddedness could apply to nonmarket social organisations more generally.

Another relevant body of literature is the work of Lazega (1992, 2020, 2021), who analyses the phenomenon of collegiality, as an alternative organisational logic to the bureaucratic logic (Lazega, 2001, 2020). Lazega considers that most social organisations are complex multilevel organisations that combine these two contrasting logics – *bureaucracy* and *collegiality* – to support and enable collective action amongst a variety of (often rival) actors. He distinguishes between ‘networks of impersonal interactions, often analysed by identifying predefined groups of members based on ex ante attributes

⁴ This view is shared by James Duesenberry who believes that ‘economics is all about how people make choices; sociology is all about how they don’t have any choices to make’ (Duesenberry, 1960: 233).

⁵ This intermediate position is also reflected in parallel works by Burt (1982). As stated by Granovetter, ‘There are many parallels between what are referred to here as the “undersocialized” and “oversocialized” views of action and what Burt calls the “atomistic” and “normative” approaches. Similarly, the embeddedness approach proposed here as a middle ground between under- and oversocialized views has an obvious family resemblance to Burt’s “structural” approach to action.’

derived from formal hierarchy' and 'networks of personalised relationships, with inductively defined clusters of members based on a combination of dyadic, triadic and higher-order relational substructures' (Lazega, 2020). According to Lazega, understanding the interplay between both of these networks is necessary to understand the behaviour of any social organisation.⁶ Yet, as recognized by Lazega himself, more research is needed to formalise and analyse the underlying dynamics that animate these different networks, and to understand how they affect or influence each other over time. Such a formalisation is of particular importance if one wants to prescribe novel configurations of collective action that benefit from a balanced equilibrium between the multiple levels at play. This is the gap that extitutional theory aims to bridge.

Extitutional theory proposes an integrated approach to the analysis of structured social dynamics aimed at reconciling these different aspects within a common theoretical framework. It provides an alternative and complementary framework to theorise and conceptualise the emergence, sustenance and evolution of structured social dynamics, by focusing not only on the roles and rules that shape and influence social norms and behaviours, but also on the individual relationships that emerge within these structures, and that equally contribute to the establishment or the reinforcement of specific social dynamics. As such, extitutional theory contributes to the existing literature by providing a new vocabulary and ontological framework to support the description and analysis of some of the non-institutional aspects of social organisations.

The term 'extitution' has already been used to describe aspects of social life that cannot be subsumed into existing institutional frameworks, in that they have not (yet) taken on a form that is recognisable from an institutional standpoint (Spicer, 2010). Building upon that work, we provide a formalised account of the interplay between extitutions and institutions, which regards extitutions as the personal and relational counterpart of institutionalised

⁶ 'The main issue is not interplay between formal and informal structures in organisations, but the interplay of two organisational logics, each with its formal and informal dimensions, when they are activated together in everyday collective agency' (Lazega, 2020: 16).

social structures, which are traditionally more rigid and impersonal. In particular, this paper leverages Grannoveter's neo-substantive approach to 'embeddedness', Lazega's neo-structural sociological approach to bureaucracy and collegiality, combined within a network approach to represent the internal dynamics and operations of extitutions, as well as to help map the interplay between institutions and extitutions in an interdependent framework.

The contribution of extitutional theory is twofold: *conceptual* and *analytical*, on the one hand, and *normative* and *prescriptive*, on the other hand. To begin with, extitutional theory provides a new vocabulary and conceptual toolkit that will help put the focus on the extitutional aspects of existing and established institutional structures, in order to better describe and understand the social dynamics at play within existing organisations. In addition, extitutional theory also has a prescriptive or normative function, in that it can help us shape existing institutions and design new organisational structures capable of better accommodating a larger variety of social dynamics, and in particular the extitutional dynamics that one wants to promote, with a proper balance of impersonal rules and personalised relationships.

A typology of institutions and extitutions

Social groups are constituted by individuals and the interactions between them. When observing these groups, we can apply different theoretical frameworks to understand the underlying social dynamics that drive these interactions. In this section, we distinguish between the *institutional framework*, focused on the overarching normative and codified structure created to affect and influence these social dynamics, and the *extitutional framework*, focused on the emerging network of relationships associated with the different identities within these social groups.

The distinction between institutional and extitutional dynamics is not based on the *formal vs. informal* dichotomy. Indeed, while institutional frameworks are often more formal than their extitutional counterparts, one cannot simply assume that anything that is informal is always and necessarily extitutional.

As noted by Hogdson (2016), a formalised set of rules is not a prerequisite for the establishment of institutions, which are often made of a combination of both formal and informal components. The discriminating factor is rather based on the distinction between *explicit* and *declarative* vs. *implicit* and *emergent* rules. As such, we distinguish between explicitly declared rules and conventions, codified into a particular set of *enforceable* rules, which we refer to as *institutions*; and tacitly *inferred* patterns of behaviours, established through habits and shared values embodied by specific individuals, which we refer to as *extitutions*. In other words, institutions are the forces responsible for the establishment and development of new rules and roles, either *ex-nihilo*, in a declarative manner, or *ex-materia*, resulting from the observation and codification of existing practices to ensure their retention over time. Extitutions are the underlying forces that contribute to both the emergence and embodiment of these social practices, incarnating the roles and performing the rules in a process of constant and on-going experimentation. The distinction between ‘*enforceable*’ rules and ‘*inferred*’ patterns is therefore important, because it highlights one of the main differences between institutions, whose codified rules generally also stipulate the way in which they should be enforced, and extitutions, whose customs and practices are mainly inferential, and do typically not comprise a codified enforcement mechanism.

We present here a typology of institutional and extitutional dynamics, highlighting their core characteristics and distinctive features. Indeed, while both institutional and extitutional aspects contribute to the emergence and evolution of structured social dynamics, they differ with regard to their nature and modus operandi: their different constitutive elements operate according to distinct logics. Hence, it is important to understand their distinctive characteristics in order to better analyse the manner in which they can each influence the overall social structure to which they refer.

We examine below the distinction between institutional and extitutional dynamics with regard to (1) their *basic constituents*, *i.e.* their key defining factors and components; (2) their *formation* mechanisms, *i.e.* the mechanisms that enable them to come into being and to be recognized as such by other individuals and collectives; (3) the *types of expectations* they engender with regard to social behaviours and interactions; (4) the *evaluation criteria* by

which they can be assessed and evaluated; (5) the means by which they operate and perpetuate themselves over time; (6) their *reaction to change*, i.e. the way they handle changes or deviations from the expected behaviours; and (6) the *lubricants* that fuel and reinforce social dynamics.

The goal of this exercise is not to provide a comprehensive overview of the distinctive characteristics and ordering logics of both institutions and extitutions, but rather to illustrate the features of an extitution by contrasting them with those of an institution. Ultimately, our aim is to decouple the notion of institutions and extitutions, delineating their boundaries and dynamics, in order to facilitate the analysis of how their interplay shapes social dynamics.

	Institutional lens	Extitutional lens
Basic constituents	Roles & Rules	Identities & Relationships
Formation	Declarative	Constitutive
Expectations	Normative	Inferential
Evaluation	Objective	Subjective
Perpetuation	Codified behaviours	Integrated habits
Reaction to change	Enforcement	Recalibration
Lubricant	Confidence	Trust

Table 1: Characteristic features of the institutional and extitutional lenses of analysis

Basic constituents

Institutions are defined by *roles* and *rules* – which, combined, represent the basic constituents or the DNA of an institution (Weber, 1920).⁷ This means that the institution changes whenever its roles and its rules change, independently of the persons assuming these roles. Roles and rules create basic expectations as to how individuals are expected to behave in specific circumstances, when acting within the framework of the institution. As such, institutions are typically characterised by routine tasks and impersonal interactions driven by formal rules (Lazega, 2020). Roles are a particular subset of rules, which are assigned to individuals who match a particular role description, and who will automatically inherit the rights and obligations associated with that role, as defined through the institutional rules. Specifically, the rules of an institution define the realm of activities that shall or shall not be undertaken by a particular role, as well as the various ways in which different roles might interact with one another. For instance, the CEO of a company is responsible for managing the operations and ensuring the economic viability and success of the company. As such, the CEO resides at the top of the operational decision-making and is endowed with specific powers with regard to day-to-day business operations and the management of employees. At the same time, the CEO is obliged towards the Board of Directors to implement strategic decisions and promote the company's long-term goals, as well as to protect the investor's interests. Sometimes, roles can be associated with specific titles that represent a recognition given by a figure of authority, such as the *advisors* of a company, or the *ambassadors* of an organisation. These individuals acquire specific privileges as a result of their role, but are also bound by a duty of care to act in such a way as to promote the interests of the organisation. The particularity of the institutional fabric is that, regardless of the role they assume within a given institution, individuals are generally regarded as fungible and are expected to act as mere *role-takers*. The individual acting as the CEO of a company only has influence because of her role within the company. Were the CEO title to be transferred

⁷ As elaborated by Weber (1920: 956) (Chapter XI of Vol. II) when describing 'bureaucratic organisations', these are characterised, *inter alia*, by (1) the definition of rules ordering activities in jurisdictional areas, and (2) principles of office hierarchy establishing a system of subordination and supervision.

to another individual, such influence will immediately be assigned to whoever has become the new CEO.

Extitutions are defined by *identities*⁸ and *relationships*. This means that the extitution changes as soon as the people that constitute it change, or as soon as their individual relationship evolves. This makes extitutions much more malleable and dynamic than institutions. For instance, while the CEO of a company needs to comply with the rules associated with a particular role-description, the CEO might also establish personal relationships with some of her employee, such as a friendship or romantic relationships, that will influence the way in which these people interact with one another, regardless of the expectations set up by their respective roles. As such, individuals within an extitutions assume specific identities that do not fit into any institutional role description, but rather assume a variety of roles out of their own whims (i.e., they act as *role-makers*). Relationships between identities are not determined *ex-ante*, as in the case of institutional roles and rules, but rather emerge organically, as a result of repeated interactions (Lazega, 2020) – and are constantly evolving over time, with every new interaction, or lack thereof. These relationships are a complex combination of *social interdependencies* and *relational scaffoldings* (Lazega, 2020): a *relational infrastructure* that informs individual interactions. Relationships vary in terms of quality and intensity. The nature of a relationship depends on the amount and the type of these interactions, as well as the medium (or context) in which these interactions take place. Individual relationships within the extitution determine the extent to which and the manner in which individuals can participate in the activities of the extitutions: those who are the most intensively or qualitatively connected will bear more influence than those that are at the margin.

⁸ *Identity* is a multi-faceted concept. In this paper, we build on Goffman's identity typology (Goffman, 1963), referring to the notion of 'identity' as the constructed image of the self that an individual either directly identifies with (personal identity), or indirectly has been associated with by third parties, as a result of its affiliation to a particular culture or subculture (social identity). As such, for the purpose of this paper, the identity does not represent the internal representation of the individual person (ego identity), but rather its representation in the cognitive space of social relations.

Formation

An institution is a *normative infrastructure* established (*formally* or *informally*) through a process of codification, and which is recognized as such by all members of the institutions, and often by other institutions as well. The formation of an institution is generally done in a *declarative* manner, via the stipulation of a particular set of roles and rules, which determines the degrees of freedom within which the institution can act and evolve over time (e.g., rules for changing the rules). This also typically involves a stipulation of the enforcement mechanisms that come with these rules, *i.e.*, who is responsible for enforcing the rules against whom, and what such enforcement looks like.

Different combinations of roles and rules will lead to different types of organisations. For instance, bureaucratic organisations are often described as being very rigid and process-oriented (Weber, 1920), trapping individuals into an ‘iron cage’ of rationalised procedures and control. Conversely, holacratic organisations that rely on self-organising architectures require less intermediate levels of checks and balances, and allow for larger degrees of freedom for innovative individual actions (Laloux, 2014).

Because they can only be created in a *declarative* (as opposed to constitutive) manner, institutions must be recognized by an *authoritative figure* which acts as a single source of truth.⁹ For instance, a company is created by registering the organisation in a particular jurisdiction, and complying with all formalities necessary to bring the company into being. Sometimes an institution can be established through a minimum set of formalities, e.g., in most jurisdictions, there are no formal filing or registration requirements needed to create a general partnership. To the extent that it is recognized as such by an authoritative figure (e.g., the state), it will also be recognized by all those who fall within the jurisdiction of such figure.

⁹ Some authors recognize informal and uncodified conventions, like language, as institutions (see, e.g., Hodgson 2016). Yet, we believe that language can itself be decoupled into its institutional (e.g., for the French language: the *Academie de la langue française*, the *Larousse* dictionary) and extitutional components (e.g., the *verlan* slang and other oral dialects, neologisms which are not yet officially recognized, etc.)

As opposed to institutions which can be established in a declarative manner, extitutions can only be created in a *constitutive* manner. An extitution is a *relational infrastructure* that emerges through a process of experiential induction and mutual recognition by a set of individuals that collectively agree (either implicitly or explicitly) to identify themselves as a group, and to act as a group – therefore enabling others to recognize them as such. For instance, many communities are initiated by a small group of friends or acquaintances that begin to interact with one another in a recurrent manner, often with a common purpose in mind. These recurrent interactions contribute to creating a social bond amongst the group, with a series of habits or rituals emerging over time, and a progressive alignment of values within the members of the group. At some point, the group might begin to be recognized as an entity in its own right (e.g., a collective or a community), either from the inside (by the group members themselves) or from the outside (by people external from the group). This is when the extitutional dynamics emerge, as the individual members no longer regard themselves as separate actors acting out of their own individual interest, but as members of a collective acting in concert to further the interests of the whole. As such, an extitution depends upon and directly contributes to shaping the culture of a social group. Culture consists of shared beliefs, values and social norms held by a social group (Lazega, 2020). As opposed to rules – whose declaration comprises not only the rights and obligations associated with specific roles, but also the enforcement mechanisms that come with them – social norms do not include a stipulation of their own enforcement mechanisms. This means that social norms may or may not be enforced, by different people, and the modalities of enforcement will ultimately depend on the people who chose to enforce these norms. Hence, in contrast to institutions, which subsist in the institutional fabric of society, an extitution is a cognitive entity that is not declared or codified in an *exogenous* fashion, but is recorded *endogenously* in the mind of all actors involved within it.

Expectations

The normative infrastructure of an institution is made of a codified set of roles and rules that provide affordances and constraints to the members of the institution: they determine the privileges that an individual enjoys when assigned a particular role, and the duties that the same individual must fulfil

with regard to that role. From an institutional standpoint, roles and rules assume a normative function: they stipulate what can or cannot be done in a particular context, independently of what was done before. Indeed, because of their declarative nature, institutions are not constrained to the codification of existing behaviours, they can introduce new roles and rules out of thin air, both in order to promote desirable behaviours that did not exist before, or in order to discourage detrimental behaviours presently occurring within an organisation. By merely looking at the rules and roles of an institution, one can thus understand the expectations with regard to the appropriate behaviour in a particular institution.

Relationships between individuals also create expectations as to how an individual may behave with respect to another individual or the community at large. These expectations are, however, not of a *normative* kind, but rather of an *inferential* and *predictive* kind: they emerge from the repeated observation of existing social behaviours, and are then used to build predictive models regarding the behaviour of specific identities in any given circumstance. For instance, if the CEO of a company is married to one of her employees, others might expect that this employee would receive preferential treatment even if this might go counter to the institutional rule-set of the company. Because of their constitutive nature, these particular types of expectations cannot be established by simply looking at the rules and roles of an institutional framework; they must be discovered and inferred as a result of a large number of social interactions – and every new interaction will thus provide valuable information necessary to revise and refine the predictions. Hence, these expectations are never set in stone, they are constantly evolving over time by means of a statistical and inferential model.

Evaluation

To be regarded as successful, an institution must deliver upon its stipulated objectives and mission. Roles within an institution are always associated with a particular set of deliverables or tasks. While the performance of these deliverables or tasks remains ultimately subjective, their scope is objectively defined (*via* associated rules) and can thus be evaluated *ex-post* through specific performance indicators (e.g., KPIs), based on global metrics of

efficacy and efficiency which have been agreed upon by the institution as a whole.

Conversely, the successful operation of an institution is not objectively verifiable. It is determined by the strength and cohesion of its social fabric, which cannot be assessed via objective metrics or KPIs. Institutions must be evaluated via subjective indicators, such as culture, trust, sense of belonging, individual participation, harmony, self-actualization, or other metrics of enhanced human potential (Maslow, 1943), which are inherently localised in nature (i.e., specific to a particular group or individual).

Perpetuation

The roles and rules of an institution are aimed at codifying individual behaviours, in such a way as to ensure the continuity of the institution over time, independently of whether it incurs a change in its constituents. Hence, the recording of these rules and roles must be done in an external medium (i.e., beyond the human brain) to allow for the creation of an institutional memory that survives the renewal of individual members.¹⁰ Codification can take many different forms, depending on the type of institution at hand: e.g., the laws and regulations of a nation-state; the bylaws of an organisation; the grammar rules of a language, etc.

Conversely, an institution perpetuates itself through the establishment of integrated habits of thought and action (Dewey, 1922; Kilpinen, 2000). These habits are not recorded on any external medium, but rather integrated within the individuals themselves. The purpose of these integrated habits is twofold. On the one hand, they create new dispositions for people to engage in previously adopted or acquired behaviour or thoughts, given a particular context or stimulus (Hodgson, 2006). On the other hand, these habits also facilitate the collective synchronisation process that reinforces the institution as a shared cognitive entity. This back-and-forth process was modelled by Hodgson and Knudsen (2004) who elaborated an agent-based model exhibiting a continuous feedback process between the individual and the

¹⁰ Weber (1920: 67) specifically states that ‘management by written documents’ in bureaucratic organisations is important to separate the bureau from the official’s private domicile.

collective levels as a mechanism underlying the evolution of a traffic convention, with habit formation causing individual preferences of agents to change (Hodgson and Knudsen, 2004). Accordingly, integrated habits are both shaped by the extitutional fabric and are, in turn, responsible for reinforcing or influencing it.

Reaction to change

In an institutional framework, roles and rules are of a declarative nature, meaning that they do not need to reflect the current state of affairs. New rules can be enacted to change an existing state of affairs, by either modifying existing habits and routines, or enforcing the emergence of new behaviours that did not exist before. Institutional rules are also normative claims, which must be respected and fulfilled by everyone subject to these rules. Deviance from the rules is not acceptable, as any mismatch between the roles and rules which define the institution, and the actual behaviours of its members might bring the perennity of the institution into jeopardy. There is, therefore, a predictable expectation that, if individuals are caught violating or infringing these rules, they will eventually be punished or sanctioned for such a violation. Indeed, instead of reformulating its rules in order to match actual behaviours (which might require a change in the institutional fabric), the institution will instead focus on enforcing its own rules in order to modify people's behaviours. In most institutions, roles and rules are enforced (or at least enforceable) by one or more identified authorities – e.g., the managers of a company, the school teachers, or even the police force.

In an extitutional setting, there are no rules dictating the behaviours of a particular identity. The culture of an extitution shapes individuals' perceptions and behaviours, helping them make sense of, stabilise, or destabilise existing structures (Lazega, 2020). At the same time, ongoing interactions constantly influence the extitutional culture by strengthening, weakening, or modifying it. These two mechanisms together constitute an ongoing process of reconstitutive downward and upward causation where emergent layers of extitutional culture both influence and are influenced by individuals' behaviours (Granovetter, 1985; Hodgson, 2006), thereby guiding and affecting their behaviour as a collective. Yet, despite the lack of precise rules and roles, expectations exist nonetheless. If someone were to act

differently from what is expected the consequence will not be an enforcement of the expected behaviours – as in the case of institutions – but rather a recalibration of the inferential model in order to account for such unexpected behaviours, and thereby improve the accuracy of future predictions. Sometimes, however, social expectations are strong enough to spur to the establishment of shared beliefs and collective responsibilities, which can be enforced through a (more or less coordinated) process of peer influence. For instance, if the culture of a company has developed a strong stigma against smoking, employees might peer-pressure each other for not smoking near the office, even if smoking is not strictly-speaking prohibited. Yet, given that there is no predefined entity responsible for such enforcement (and thus no guarantee of enforcement), pressure can only be exerted in a distributed manner by any of the actors involved in the extitution, in proportion to their realm of influence within the group.

Lubricant

Interactions within the same social groups can be motivated by two separate mechanisms. Some – mostly personal – interactions are built upon trust, others – less personal – are grounded upon confidence. The distinction between trust and confidence, and how they relate to expectations, has been clearly delineated by Luhmann (2000). Trust is defined as the belief by one party (the *trustor*) that another party (the *trustee*) will act in such a way as to further the trustor's interests, even where the trustor is unable to monitor or enforce such a course of action (Gambetta, 1988).¹¹ Hence, in a situation of trust, there is a perceived risk that one's expectations will be disappointed, but one freely chooses to trust anyway, thus making oneself vulnerable. Conversely, a situation of confidence is characterised by the lack of perceived risk and vulnerability. The person is confident that their expectations will not be disappointed (even if they could actually be).

Institutions and extitutions exhibit a radically different relationship to trust and confidence. Institutions facilitate coordination amongst a group of

¹¹ For Gambetta (1998: 217), trust is the 'subjective probability with which one agent assesses that another agent [...] will perform a particular action [...] independently of his capacity to monitor it, in a context that affects his own action.'

individuals by promoting confidence and predictability in the way they may or may not interact with one another. The rules of an institution are intended to create stable equilibria of predictable behaviours that will persist over time. For instance, many companies implement a series of rules and procedures to prevent or to reduce the likelihood of conflicts of interests, by creating oversight structures and sanctions for those violating these rules. Because rules are enforced by the institutions, people do not need to trust each other when they interact with one another, they can be confident that people will act as expected. Cooperation is thus achieved through assured reliance, by limiting, constraining, guiding or informing the realm of action available to individuals.

Because extitutions mostly rely on personal relationships, they require trust to operate. Since there are no rules to prevent conflict of interests, there can be no confidence of equitable action. Participants must trust each other that none of them will attempt to leverage their personal relationships for personal gains. Yet, extitutions also promote cooperation amongst a group of people by reinforcing the relationships of trust within that group (Govier, 1997; Granovetter, 1985). As such, trust enables individuals to rely on each other, even in situations of uncertainty, because it reduces the sense of risk and vulnerability inherent in every relationship of (inter)dependence (Luhmann, 2000), while increasing the perceived probability of having individual expectations met. Hence, trust facilitates cooperation within a group by fostering a shared belief that others will act in the best interest of the group.¹²

¹² The role of trust for cooperation is analysed by Granovetter (1985: 490), who looked at how ‘individuals in a burning theater panic and stampede to the door.’ While this might be seen as ‘prototypically irrational behavior, [...] each stampeder is actually being quite rational given the absence of a guarantee that anyone else will walk out calmly, even though all would be better off if everyone did so.’ He notes, however, that in the case of burning houses ‘we never hear that [...] family members trampled one another. In the family, there is no Prisoner’s Dilemma because each is confident that the others can be counted on.’

Interplay between institutions and extitutions

Having described the distinctive features of institutions and extitutions, we can now investigate the interplay that subsists amongst them. In this section, we outline the process by which institutional and extitutional dynamics interact and influence each other, leading to a constant process of coevolution where the extitutions require and inform the development of the institutions, and the institutions determine the operations and evolutionary aspects of the extitutions.

Indeed, as illustrated above, social interactions do not operate in a vacuum; they are shaped by a multiplicity of social bonds and cultural forces, and by a series of endogenous or exogenous influences that determine an individual's freedom of action. It is only by combining both the *institutional lens*, characterised by codified rules and roles, and the *extitutional lens*, characterised by the *relational infrastructure* of a particular social group, that it becomes possible to understand the multiplicity of interactions at play within that group. Together, these forces contribute to shaping the environment in which individuals can express their *agency* – defined as the set of actions informed from the recognition, mobilisation and combination of both the culture and the structure of a social group (Lazega, 2020).

Institutions and extitutions are in a process of constant interaction and co-determination. The roles and rules of an institution evolve as a result of extitutional forces that require or encourage the institution to modify its own structural components to better accommodate, support, or – conversely – counteract some of these external dynamics. At the same time, the relational infrastructure of an extitution is constantly affected by the institutional rules and roles that directly or indirectly affect the individuals concerned. It is through a process of constant negotiation between institutional and extitutional dynamics that social structures establish and constantly reformulate their stable equilibrium (Hodgson, 2006). We analyse below the interplay between institutional and extitutional dynamics, with a view to better understand how their combined forces affect individual agency.

Schematic representation of the interplay between social dynamics viewed under the institutional and extitutional lenses. Individuals are linked through

multiple types of interactions (link colours) represented by a multiplex network, and associated with a variety of *roles* (related to specific rules) and *identities*. Roles and rules constitute the normatively codified institutional framework, while identities and the relationships that emerge from and contain them (see Figure 2) constitute the experientially induced extitutional infrastructure.

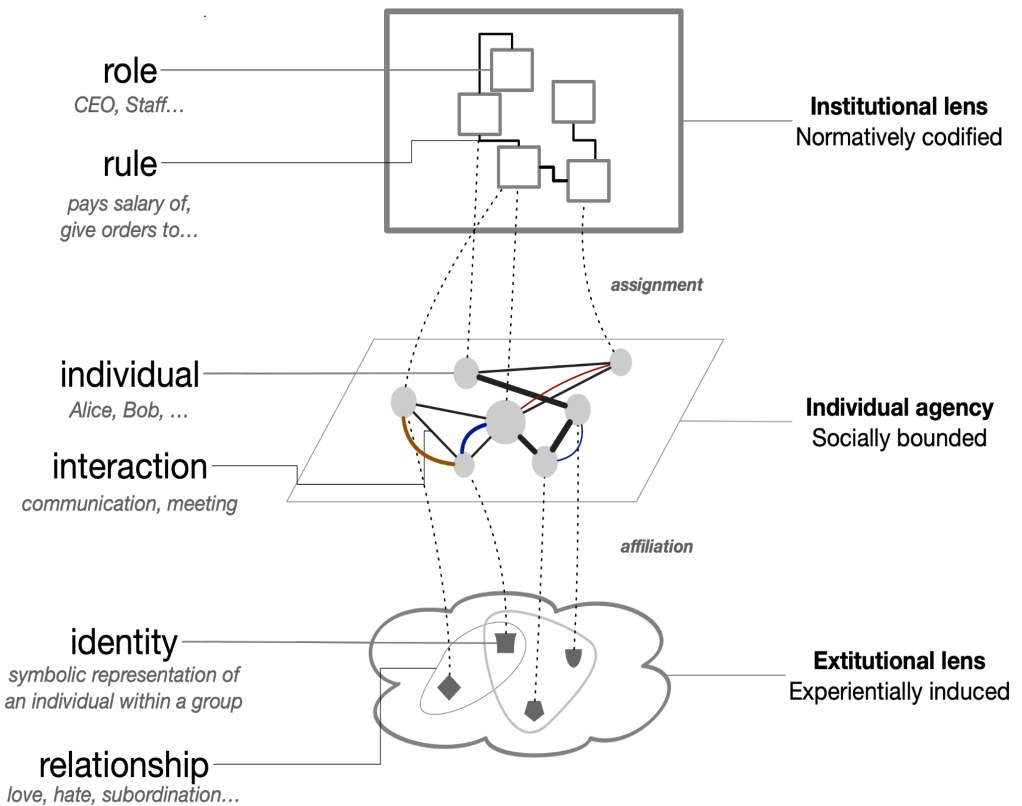


Figure 1: Social structures as multilayer institutional and extitutional networks.

Institutions affecting extitutions

Institutions are designed as a framework to support, guide, influence, limit or constrain social dynamics, by shaping the extitutions that influence them. There are three different levers available to institutions to affect and account

for the underlying extitutional dynamics: changing roles, changing rules, and/or changing the individuals associated with existing roles.

First, institutions can influence the operations of an extitution, by creating roles or rules that will modify the nature or intensity of specific relationships, generating new expectations that will potentially affect extitutional dynamics. For instance, an institution with strong rules against sexual harassment can contribute to both maintaining a safe space within the work environment, and discouraging the expression or establishment of intimate relationships between individuals. Second, institutions can generate new or support existing relationships to promote or reinforce specific extitutional dynamics. For instance, an institution might decide to establish a policy requiring people to come to the office during working hours, in order to encourage individuals to meet and network. Finally, institutions can establish rules or roles intended to mitigate the impact or prevent the emergence of undesirable extitutional dynamics. For instance, institutions often implement a formalised separation of powers to avoid abuse of dominant position by overly influential actors, transparency requirements to avoid corruption, etc.

Extitutions affecting institutions

In turn, the extitutional fabric of a social group can also impact its institutional scaffold. Most of the time, the activities of an extitution occur outside the institutional ruleset, and are therefore unlikely to modify the institutional structure. For example, the act of taking a coffee with a colleague does not impact nor depart from the institutional rules of a company. However, in some cases, extitutional activities might either explicitly violate institutional rules, and therefore push towards the *degeneration* of these rules (e.g., if employees always arrive late at work, the institution might delay the starting time of meetings), or they will push towards the *generation* of a new rule if they do not violate any existing institutional rule (e.g., if too many employees smoke inside the facilities even if it's not forbidden, it might trigger the establishment of a new rule against smoking). As a result, extitutions might impact the structure of an institution in three different ways:

First, some extitutional dynamics might lead to a change in the roles assigned to specific individuals. For instance, the emergence of strong relationships between individuals might lead to ‘nepotism’, where certain types of relationships promote privileged access to a particular role, or ‘discrimination’, where other types of relationships prevent access to that role.

Second, strong and repeated extitutional dynamics will eventually be recognized by the institution, which may adapt to accommodate these dynamics through the establishment of new rules or roles. This includes changing a company’s organigram, shifting people’s roles, or introducing new rules to endorse extitutional rituals. At the same time, undesirable extitutional dynamics might also trigger a process of further institutionalisation in order to prevent or reduce the force of these dynamics. For instance, to mitigate nepotism, an institution might introduce a ‘hiring committee’ replacing the single HR manager.

Finally, some extitutional dynamics might influence the extent to which existing roles and rules will be enforced. For example, by establishing a good relationship with an influential individual within a group, one might expect more lenience on the enforcement of the rules and roles attributed to that individual.

Formalisation of the proposed theoretical framework

Network analyses can help identify relational infrastructures to better understand collective agency among peers (Lazega, 2001). As pointed out by Lazega (2020), coupling group-level interactions (at the institutional or extitutional level) with individual relationships in the study of organised collective action requires using *multiplex* and *multilevel* network analyses. In addition, Lazega (*ibid.*) distinguishes between the *ex-ante* normative nature of impersonal (institutional) structures, and the *ex-post* inductive nature of personal (extitutional) relationships:

Networks of impersonal interactions are often analyzed by identifying predefined groups of members based on ex ante attributes derived from formal hierarchy or division of work and working on their global attitudes

towards each other. Networks of personalized relationships tend to start with inductively defined clusters of members based on a combination of dyadic, triadic and higher-order relational substructures, until the analysis reaches relational infrastructures at the morphological level [...] which are then ex post interpreted in terms of attributes. (Lazega 2020: 20)

Following these insights, we formalise the interplay between institutions and extitutions as a means to understand the social dynamics within a social group (Figure 1). In this framework, we first identify a particular group of individuals and their interactions, which constitute the network of observable social dynamics (*middle layer*). The institutional layer (*upper layer*) and extitutional layer (*lower layer*) are two *cognitive representations* that simultaneously stem from and impact these social dynamics.

The *institutional layer* comprises roles, associated to individuals, and rules dictating the interaction between these individuals. It is not a perfect representation of actual social dynamics (*i.e.*, individual interactions), but rather a codification of behaviour through the establishment of a particular set of affordances and constraints which are intended to affect social dynamics within the social group. The *extitutional layer* comprises identities (*i.e.*, symbolic representations of individuals within a group) and their relationships, embedded within the experientially induced culture of the extitution. It constitutes the relational infrastructure of the social group, supporting certain types of interactions amongst individuals by virtue of shared mental models and cultural affiliations. Yet, just like the institutional layer, the extitutional layer is not a direct description of individual interactions, but rather a symbolic representation of a particular set of relationships that are cognitively established and assessed, in an on-going manner, by all the individuals involved in the social group. *As such, both the institutional and extitutional layer are not merely descriptive models, they also have a normative and performative function.*

This multi-layered representation provides a series of advantages to study the institutional and extitutional forces responsible for the evolution of social dynamics within a group. These are, *inter alia*: (1) a *new vocabulary* to describe the underlying forces underpinning the establishment and evolution of social dynamics beyond the individual and institutional level; (2) a disentangled yet

tightly coupled representation of social dynamics, relying on a *multi-layer network formalisation* that renders more explicit the interplay between the institutional structure and extitutional culture of a social group (Figure 1); (3) a *dynamic modelling of institution evolution*, accounting for the continuous feedback loop manifested in the upward and downward causation occurring within a particular relational infrastructure (Figure 2).

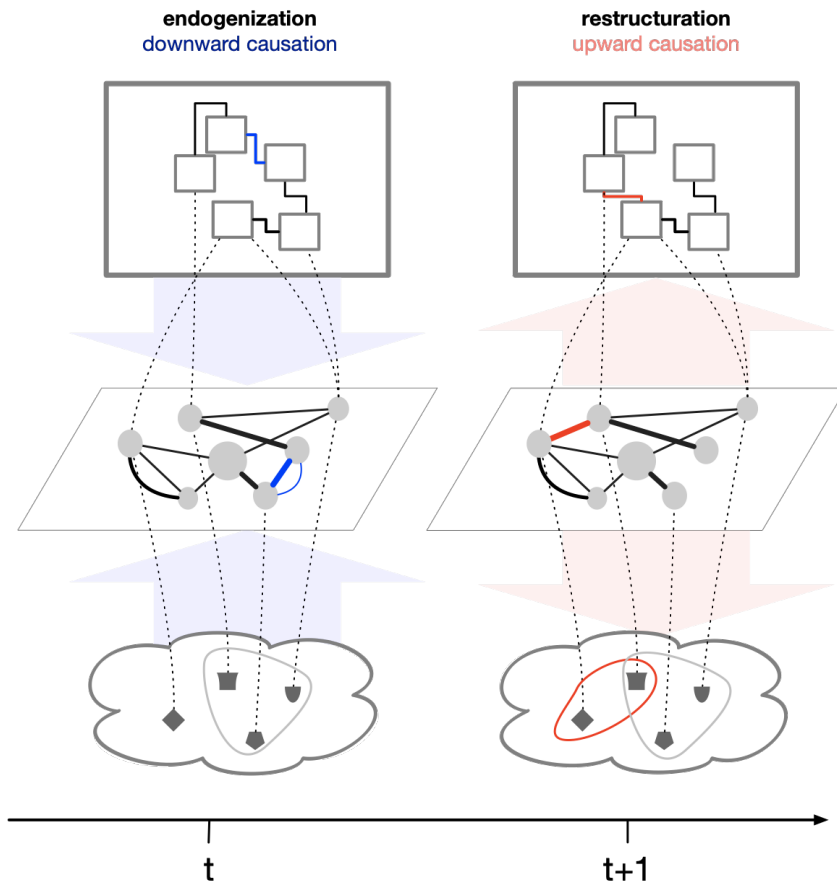


Figure 2: Social structured dynamics through downward and upward causation.

Schematic representation of the *downward* process, whereby new social interactions (*blue links*) are triggered by the establishment of new rules within the institutional structure or the emergence of new social relationships at the

extitutional layer; and the *upward* process, whereby repeated interactions in a social group (*red links*) may generate new rules at the institutional level, and new relationships at the extitutional layer.

With regard to vocabulary, the extitutional framework encompasses a broad variety of concepts and notions from multiple disciplines, including sociology, anthropology, psychology, cognitive sciences, business management, etc. We aim to bring these different conceptualisations together under a unique and comprehensive theoretical framework aimed towards the formalisation of the relational infrastructure underpinning structured social interactions. By decoupling and distinguishing the driving forces associated with institutional structure from those associated with the more relational and cultural aspects of social dynamics, it becomes possible to more explicitly focus on one rather than the other. We hope that the focus on the extitutional lens will foster more research and data collection to support the analysis of extitutional dynamics underpinning social interactions – an endeavour which is in line with the current developments in the field of neo-structural sociology, as illustrated by the work of Lazega on *bureaucracy* and *collegiality* (2020). In the words of Lazega:

The difference between bureaucracy and collegiality is important for a sociological understanding of interactional and relational infrastructures that are necessary for organized collective action and management of this cooperation. To capture the difference between the two ideal types requires developing the toolkit of organizational sociology – in particular, multilevel social network analysis focusing on networks of impersonal interactions in bureaucracy and networks of personalized relationships in collegiality, and the socially organized mix of both. (Lazega 2020: 29)

Disentangling the institutional and extitutional dynamics of social groups enables us to engage into a deeper analysis of the interplay between institutional and extitutional forces, as the driver of social organisations. Adopting a dynamic approach enables us to underline the continuous feedback loop that characterises the evolution of social organisations. While institutions cannot directly affect extitutions, and vice versa, changes in the institutional or extitutional structure of a social group will likely influence the social interactions between the individuals in the group, through a process of

downward causation (Hodgson, 2006). Over time, these changes in social interactions will likely trigger a restructuring of both the institutional and extitutional layers through a mechanism of upward causation (Figure 2).

Such a dual framework is useful to the extent that it enables us to describe, understand, and guide the evolution of social dynamics, by manipulating layer-specific variables (such as encouraging trust-building relationships, or creating confidence-setting rules) to observe whether, and how these affect the attributes of the other layer. This provides a new grid of analysis to investigate the consequences of institutional changes on the extitutional fabric (or vice versa), by separating the repercussions derived from changes in the institutional structure (e.g., modification of a role or rule) with changes related to the personalised relationships (e.g. employee's turnover). Leveraging layer-specific variables quantifying the incidences of extitutional and institutional dynamics (such as the number of nodes, density of links or other structural measures within each layer) one could then situate any given social structure within a topological space representing degrees of extitutionality and institutionality (Figure 3). Assuming a certain degree of nonlinearity (as commonly observed in the physics of collective systems undergoing phase transitions), one could then distinguish quadrants (limit cases) delineated by particular transitions. The extitutional axis is marked by a transition from embryonic to communal groups characterised by an increasing density of relationships and a few, if any, roles and rules. The institutional axis, on the other hand, is marked by an increasing density of roles and rules in the institutional layer. Depending on the level of extitutionality that comes along with it, such structures can be overly bureaucratic (low extitutionality) or integrated (high extitutionality). The evolution of social organisations is then viewed as a trajectory in this topological space, allowing for longitudinal studies of the organisational development and the impact of possible interventions.

institutionality

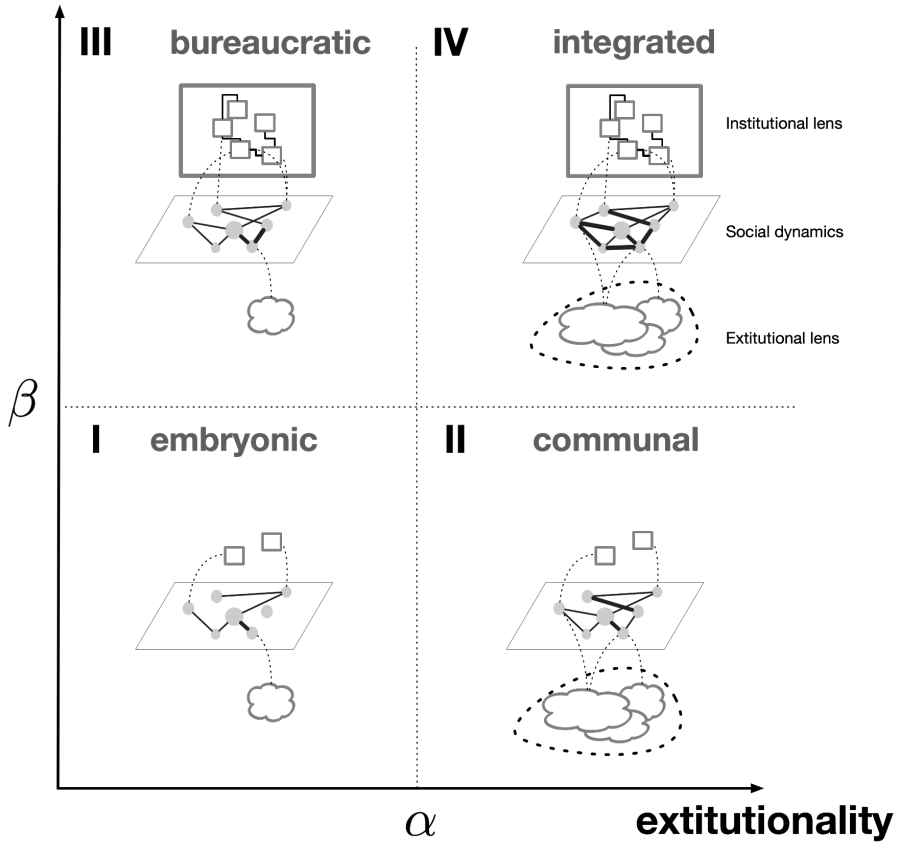


Figure 3: Mapping the space of social structures.

Schematic representation of the space of possible social structures constructed with layer-specific variables that quantify extitutional and institutional forces.

Conclusion and future perspectives

In his 2010 paper, Spicer introduced the notion of ‘extitution’ as comprising all these elements that exceed, transcend, escape or even destabilise

institutions. He provides the example of the ‘gay’ who challenges the institution of marriage, or the ‘refugee’ who does not fit within the boundaries of any nation state. According to Spicer, institutions seek to capture these extitutional elements, by either trying to confine and domesticate them, or by trying to harness them to further their own institutional interests (Spicer, 2010).

This paper takes a slightly different take, reframing the notion of ‘extitution’ to refer not to a set of elements that exist beyond the institution, and are therefore ‘invisible’ to them, but rather as an alternative lens through which social dynamics can be analysed and understood. Hence, the same social group can be analysed through both an institutional and extitutional lens, depending on the focus of analysis. The institutional lens will put more attention on the roles, the rules, and the overall structure that guide or support specific social dynamics, whereas the extitutional lens will focus more on the relationships that emerge between individuals, and the culture that characterises these social interactions.

Extitutional theory provides an integrated theoretical framework and conceptual toolkit to investigate the interplay that subsists between the institutional and extitutional facets of a same social group, disentangling the two in order to support the analysis of their distinctive characteristics and their corresponding influences on social dynamics. The goal is to define a social structure in a dualistic approach, separating its constitutive elements according to the ordering dynamics that animate them, so as to shed more clarity on the specificities of each and the interactions between the two.

Building upon Hodgson’s definition of ‘institution’ as integrating both rules and habits (Hodgson, 2006), Granovetter’s socio-economic network theory of embeddedness of social actors in market organisations (Granovetter, 1985), and the more recent neo-structural sociology promoting network-based studies of the interplay between bureaucracy and collegiality underlying collective agency (Lazega, 2021), we elaborate an ontological framework that formalises the reciprocal interactions between institutions and extitutions.

Specifically, extitutional theory leverages insights from social sciences and combines them with a variety of concepts studied and analysed in the field of

institutional theory, in order to build an ontological framework that specifically accounts for and distinguishes between the personal (*extitutional*) and impersonal (*institutional*) aspects of social dynamics that can be observed in any social group. First and foremost, it builds on Lazega's work on bureaucracy and collegiality (2020) that distinguishes between the set of impersonal interactions which are often found in *bureaucracies* and the network of personalised relationships which are found in many *collegial groups*. Yet, the scope of extitutional theory is ultimately broader: while bureaucracy and collegiality are mainly focused on collective action and decision-making to manage shared resources and responsibilities, typically in the context of work relationships, extitutional theory is intended to apply to any organised set of social dynamics – of which bureaucratic organisations and the associated collegial pockets are only a subset. This includes, *inter alia*, family groups, clubs, intentional communities, but also language, money, etc. In addition, drawing from Hodgson (2016), extitutional theory does not draw the line between institutions and extitutions based on the *formal* versus *informal* distinction, but rather on the distinction between *codified* rules and *inferred* patterns of behaviour, and the ensuing *normative* versus *inferential* expectations. Regardless of their degree of formalisation, institutional rules will be enforced according to precise procedures, whereas deviation from any extitutional pattern of behaviour will result in the recalibration of the cognitive model based on which such pattern had been inferred.

This new ontological framework plays both a *descriptive* and *normative* function. On the one hand, from a descriptive perspective, by distinguishing between *institutional* and *extitutional* dynamics, extitutional theory proposes a new grid of analysis that highlights specific facets of social interactions which are usually combined into a single analytical framework. Extitutional theory thus allows us to focus more specifically on the different mechanisms at play within each of these two ordering logics, with a view to provide a richer and more in-depth description of their corresponding motives and idiosyncrasies. Most importantly, extitutional theory also provides a set of conceptual tools to analyse the coupling between institutional and extitutional dynamics, in order to develop a better understanding of the interplay that subsists between these two ordering logics, and analyse the way they interact with one another and influence each other. This enables us to

achieve a more comprehensive understanding of social organisations from a dynamic, multi-faceted and multi-layered standpoint. On the other hand, from a normative stance, the ontological framework of extitutional theory can be leveraged to conceptualise and design new institutional frameworks that better support and accommodate collective action. It does so by providing a new conceptual toolkit that supports and facilitates the process of *extitutionalisation* (in contrast to the process of *institutionalisation*), along with a new analytical toolkit to evaluate how these two processes can support and complement each other, rather than undermine one another. Indeed, we believe that it is through a better understanding of the ways in which institutional and extitutional dynamics affect each other (and are affected by one another) that we will be able to define and develop more balanced institutional frameworks, and prescribe novel configurations of collective action that benefit from a balanced equilibrium between extitutional and institutional forces.

Extitutional theory remains an emergent field of scholarship, which is still in an embryonic state. More research is necessary in order to further explore the distinctive characteristics of extitutional dynamics and their relationship with institutional forms. In particular, this work can be of interest, and nurtured by insights from a number of adjacent disciplines with similar intents yet different vocabularies. As such, it is important to draw from previous literature from different disciplinary backgrounds (including business management, complex networks, biology, anthropology, etc.) to integrate and ideally reconcile the insights of scholars who have been studying extitutional dynamics in other fields of endeavours.

For example, in the field of economics and political sciences, game theoretical models have been elaborated to map the co-dependence between culture (civic capacity) and institutions (Bednar and Page, 2018). At a smaller, micro-scale, team science as a field has probed social interaction mechanisms and role composition structure that facilitates teamwork (Guimerà et al., 2005; Mukherjee et al., 2019) and enhances collective intelligence (Woolley et al., 2010), with a view to maximise group performance into completing complex collective tasks (Hotelling and Bagrow, 2020; Klug and Bagrow, 2016). Beyond the traditional format of well-defined social groups with predetermined goals, the open-source, open science, or digital communities more generally offer

examples of agile, self-organised communities with limited institutionalisation. Examples include participatory open science (Benchoufi et al., 2018; Franzoni and Sauermann, 2014; Kokshagina, 2021; Landrain et al., 2013; Masselot et al., 2022), collaborative knowledge production on Wikipedia (Klein, Maillart and Chuang, 2015), open-source software contributions (Klug and Bagrow, 2016; Sornette, Maillart and Ghezzi, 2014), as well as large-scale social media datasets that offer experimental windows into ‘para-institutions’ (Peña-López, Congosto and Aragón, 2014). On the socio-technological side, network studies of the collective operations underlying large-scale construction projects offer insights into highly bureaucratic, predetermined rule-based activity networks and the role of structural properties in the overall performance (Ellinas, 2019; Santolini, Ellinas and Nicolaidis, 2021).

In addition to these empirical studies, network science has also been used to model social dynamics, in order to formalise social dynamics into predictive models. For instance, network science has been used to relate social network structure with complex group problem solving (Barkoczi and Galesic, 2016), as well as to provide multi-level social network insights into the collaborations and reputation systems of researchers within a research institution network (Wang et al., 2013). Beyond human systems, ecological models have provided an established toolkit to describe the stability, vulnerability, and dynamics of animal ecosystems using network approaches (Flack, 2012; Suweis et al., 2013) with applications in collective problem solving (Flack, 2013) as well as the structural evolution of firm networks (Saavedra, Reed-Tsochas and Uzzi, 2009).

Overall, the field of extitutional theory attempts to collect insights from all of these disciplines and integrate them into a common ontological framework. Future work is needed to validate this framework by means of empirical research and case studies. This includes mapping the lifecycle of social structures, and their evolution from mere informal groups to early extitutions, more formalised institutions, and eventually to full-fledged bureaucratic organisations. In addition, future studies should address the process of simplifying overly bureaucratic institutions in order to carve out more space for extitutional dynamics. For example, practitioners from the software development industry, accustomed to the agile development method

and Minimum Viable Products, have introduced the concept of ‘Minimum Viable Bureaucracy’ as a simple institutional scaffold optimising for both efficiency and creativity within an organisation (Rose, 2016; van Ommeren et al., 2016). Similarly, conceptualising and designing Minimum Viable Institutions could help balance extitutional agility and self-organisation, while allowing for long-term sustainability at the institutional level. An example of such institutions are the ‘Middle Ground’ structures in urban centres that help connect top-down city management with bottom-up citizen engagement processes, thereby catalysing the dialogue between the institutional and extitutional facets of cities (Irrman, 2022; Kirwan, 2015). Last but not least, future work should also address the possible drift of extitutions, when not properly constrained by institutional scaffoldings, and their evolution into excessively homogeneous groups or cults dominated by a few powerful or charismatic individuals. Eventually, strategies could be developed to combine institutional structures and institutional elements within a social group in order to support and promote desirable social dynamics, while limiting undesirable ones, with significant consequences for organisational design and governance.

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