Chapter 2
Theoretical Sources of EGT

Abstract In this chapter we outline the main theoretical sources of EGT-social systems theory, new institutional economics, development economics, and post-structuralism in different versions.

2.1 Biological Theories of Evolution

Evolution in EGT perspective is a process of creating and weeding out variations. It is a process of creating new variations out of older ones, of gradual emergence and hardening of structure out of flow, and of gradual transformation of that structure in continued evolution (cf. Stichweh 2000; Luhmann 1997). We describe EGT as a radically evolutionary perspective since we consider everything a product of evolution, both elements and structures, their interaction and the rules of transformation. Thus, in governance, we consider rules (institutions), roles (actors) and organizations (embodying roles), their interactions and their transformation rules as the result of evolution. They are impossible to comprehend without reference to evolution. Yet, not everything can be explained by reference to evolutions internal to governance.

EGT is indebted at an elementary level to biological evolutionary theory, more specifically to the version developed by Francisco Varela and Humberto Maturana, two biologists (Maturana and Varela 1987). They conceived the idea of *autopoiesis*, wherein everything in an biological system is the product of the evolution of that system. One cannot logically refer to the environment to explain observed features. What is present in a cell for example, the elements of a cell, the biochemical processes, the system of reproduction, has to be explained as the result of the process of reproduction of the cell, using the existing elements and procedures. If the cell would be open to direct interference from the environment, it would dissolve into separate elements. Its reproduction would come to a halt and it could no longer be called a cell. For Varela and Maturana, autopoiesis therefore entails

operational closure: the reproduction of the cell rests on a set of operations that is entirely internal to the cell. The environment has *influence* in various ways, e.g. by generating inputs for processes in the cell, but what counts as input and how it is processed, is defined in and by the cell alone. Environments are always interpreted in and by the system, never dictate adaptation in a certain manner. The schemes of interpretation are themselves a product of evolution.

2.2 Social Systems Theory

Niklas Luhmann, the father of social systems theory, borrowed the concepts of autopoiesis and operational closure from Varela and Maturana (Luhmann 1989; Maturana and Varela 1987). Over three decades he built a theory of society that can be considered the most important foundation of EGT (Luhmann 1995, 2000, 2004). Varela and Maturana had tried to modify their theory into a theory of society, but it was Luhmann's stroke of genius to identify neither people nor actions as the elements of an autopoietic theory of society, but *communications* (Luhmann 1989). Social systems (according to Luhmann) are nothing else than on-going processes of interpretation and reinterpretation of internal and external environments.

Luhmann sees society as a population of social systems that is becoming ever more abundant. He distinguishes three categories of social systems. Firstly, *interactions* (conversations), these are fleeting systems with a limited capacity to process environmental complexity. Secondly, *organizations*, these are social systems with clear boundaries reproducing themselves by means of decisions. Thirdly, *function systems*, *these* are systems that are not delineated by membership but by the specificity of their perspective. Law, economy, politics, religion, science and education are examples of function systems that each play a role in the reproduction of society as the encompassing social system. A function system reproduces itself by applying distinct codes, thereby maintaining a boundary vis-à-vis other function systems. Law sees reality according to schemes grounded in the distinction legal/illegal, science deploys the distinction true/untrue, economy calculates in terms of value/no value, while politics operates by means of the distinction power/powerless.

All social systems are self-referential. Each social system internally produces a construction of itself and the outside world, that is, other social systems and the world at large, in terms of unique basic distinctions, concepts and procedures and it recursively produces its communications from the network of its communications (Teubner 1989). Each social system reproduces itself by means of internal elements, by means of and in reference to earlier concepts, distinctions, and procedures. Therewith social systems theory offers a theoretical framework to analyse the communicative processes that shape historically contingent social practices of discourse (social systems) that produce the criteria for their own transformation (Luhmann 1995, 2004; Teubner 1988).

Luhmann himself did not appreciate the term post-modernism, but leans for his epistemology on a tradition of German radical constructivists for whom 'reality' is

a by-product of observation (Glasersfeld 1995). *Hetero-reference* is possible, and necessary for society to function as more than a set of unrelated subsystems, yet it is always grounded in self- reference. Each object, subject, action, narrative, perceived in the environment is perceived and interpreted according to the schemes of the system. The environment includes other social systems, other function systems, organizations and interactions.

A second consequence of Luhmann's choice for communications as the elements of social systems is that communication loses its transparency that was so important to political philosophers since enlightenment and that grounded so many theories of politics and governance, from Locke and Montesquieu to Habermas and the proponents of participation (King and Tornhill 2006). Social systems for Luhmann are cognitively open yet operationally closed; they continuously learn from their environment, yet under their own conditions. The post-enlightenment assumption of communication as a potentially transparent connection between two individuals, and by extension, a fabric unifying the political community and enabling fair decision-making, is shattered in a social systems perspective. People participate in communication. If they want to talk to other people, if they want to share something of their experience, this is only possible by uttering something that will always mean something else for the other party because of the operational closure of communication, an autopoietic middle ground hovering in between two autopoietically closed minds (Luhmann 1995). The same applies to social systems: they cannot communicate directly to each other. Whatever happens in their environment, will be interpreted in terms of their own autopoietic identity, resting on a unique set of basic distinctions, interpretive procedures and semantics. Everything is interpretation, constant reinterpretation.

From a social systems point of view, it is important to stress that people as individuals exist in two ways, as ascriptions of this or that social system (where individual X in role Y is recognized) and as psychic systems, able to process meaning, that are part of the environment of social systems. People and social systems co-evolved, as each other's preferred and necessary environment. People and systems always remain partly opaque to each other and will respond to steering attempts in ways that are not entirely predictable. This, for Luhmann, is not a problem, but a precondition for the development and functioning of complex societies (King and Thornhill 2003; Luhmann 1997).

2.3   Post-structuralism

Post-structuralism means many things to many people. We understand it as a constructivist epistemology, a manifest for analysis of governance as a meeting ground of different worlds. Governance appears as a process wherein worlds collide, fight for pre-eminence, mutate, transform, and recombine. Governance absorbs, reflects, and creates realities. The post-structuralist works by Michel Foucault, Roland Barthes (Barthes 1957; Foucault 1972, 1994) Jacques Lacan (Lacan and Fink 2006;

Haute 2002), Jacques Derrida (Derrida 1967, 1972, 1973), Bruno Latour (Latour and Woolgar 1986; Latour 1999) and Gilles Deleuze (Deleuze and Guattari 1987, 1994; Deleuze and Howard 2000) have much to offer for the understanding of governance, and will be selectively mined in the following chapters. For each of these theorists, a substantial literature has developed in various disciplines, with different accents and biases, and different degrees of closure to other disciplines and theorists. We cannot highlight each version of Foucault or any of the other authors on the market, but will indicate which one is on our shelf and why.

Foucault, among the post-structuralists, is most important for the construction of EGT. We will adopt several Foucaultian concepts and insights into our conceptual framework. First of all, *discourse*. In line with Foucault, we consider a discourse a structured set of concepts that enables access to a certain part or aspect of reality, while simultaneously veiling other parts or aspects (Foucault 1972, 1994; cf. Howarth 2000). Reality as a whole and reality as an ultimate ground cannot be known. Foucault never denied the existence of something outside discourse, but as soon as we reason, observe or communicate, we are within discourse. What we do, is also structured by discourse. Actions, movements, in their observation but also in their execution are never free of structuring linked to discursive structures.

Discourses develop and deploy structure at different levels. Discourses develop concepts, objects and subjects, which can lead autonomous lives, gain prominence, migrate, return and modify broader discursive contexts. They can have narrative structures, including characters, events, episodes, heroes and villains, lulls and dramatic climaxes. Narratives can be embedded in ideologies, explaining the world at large, ways to organize a polity and way to live in it. Ideologies can revolve around metaphors, shedding a new light on the world, and metaphors can be nested in other metaphors, using a similar angle of observation.

Discourses, in an EGT perspective, are self-referential, just as with Luhmann, in the sense that they construct the world by means of references to their own elements, and in the sense that new structures are always grounded in prior ones. Discourses evolve. They transform in the on-going processes by which they recursively reproduce themselves, but this transformation is governed by its self-referentiality. One can therefore speak of operational closure and of autopoiesis (Teubner 1989). At this level discourse theory is compatible with social systems theory. One can draw the parallel with systems theory further, and point out that, for Foucault, but also e.g. Lacan, everything said about the discursive world at large can be mirrored at the smaller scale of one discourse, and that moving between discourses requires crossing gaps that cannot be closed discursively (Haute 2002). The discursive mechanisms analysed by the other post-structuralists, and many of the concepts they developed for that purpose, can then be imported in the developing frame of EGT. We will see that Roland Barthes' insights on discursive migration, on metaphor and ideology (Barthes 1957), can acquire a new productivity within an EGT frame, and we will resort to Jacques Lacan for the analysis of open concepts (Kooij et al. 2013), very generic concepts enabling the reproduction of governance by glossing over differences between world-construction of between discourses.

2.4 Institutional and Development Economics

Social systems theory and post-structuralism can thus be combined in the development of an evolutionary perspective on governance since each theory is starting from a world that consists of interpretations, a world that is in constant movement, where interpretations are competing and evolving. These theoretical worlds leave room for people, for the agency of individuals and groups. It is just that individuals and groups, in their agency, and in their observation of other groups and individuals and their agency, can never escape the power and the autonomy of communication, of discourse (Van Assche et al. 2011). A conversation between groups in a governance situation is necessarily a web of interpretations, within each group, between the groups, probably in the context of an organizational setting that further frames what happens. It will be a web that incorporates existing ascriptions of self, others, actions, goals and almost certainly transforms some of those beyond the intentionality and/or comprehension of the speakers. As soon as something is said, it is subject to the mechanics of discourse, to metaphorical sliding, to distortions by the seeping in of utopias and dystopias, to entanglements with power that cannot be fully grasped.

Such assertions of the autonomy and the structured character of the discursive, of the autopoiesis and the operational closing of communication do not preclude that individual action can be structured and have effects. If we are interested in a theory of governance that is evolutionary and capable of envisioning a variety of alternatives in the relations between market and politics, we ought to add a perspective that can articulate economic and political agency in a way that accepts contingency and evolution, and allows for multiple realities and rationalities. Such theory exists, we believe, and we locate it in the fields of institutional economics and development economics.

We use the work of North (2005), Seabright (2010), Greif (2006), Eggertsson (2005), Acemoglu (2012), Easterly (2006) and Ostrom (2005) under this flag of institutional economics and development economics, while recognizing individual differences between them. We want to emphasize some highly interesting changes in these branches of economics, in the last decade, which makes them more interesting for the construction of EGT. *First of all*, a full articulation of a radically evolutionary perspective with many of these authors. For some, as for the late North, but also Greif and Seabright, this goes as far as acknowledging the co-evolution of rules (institutions), roles and organizations, the emergence of formal institutions out of informality, and the continued importance of informal institutions in the functioning of formal institutions. *Secondly*, these authors acknowledge the importance of politics and law for the structure and functioning of markets, beyond a mere nod to the 'rule of law', assumed to be a unitary condition. Markets are embedded in other institutions, and have effects because of them. *Thirdly*, in this new approach the diversity of market arrangements and coordination mechanisms becomes observable as more than deviations from, or steps towards a 'free' market. Different market forms, linked to different forms of political and legal organization, are interpreted as results of different evolutions (within the economic domain) and co-evolutions (with law and politics).

Fourthly, gradually, North, Greif, Seabright and Eggertsson discovered that, since both value and transaction costs are culturally constructed and the relation between formal and informal coordination differs per culture and community, *what appears as rational and real* is not a unified construct.

These economists do not engage with post-structuralism or social systems theory. Their investigations often started with small-scale observations or historical studies of interactions on early or less developed markets. In their investigations they figured out, as some others did in geography, anthropology, public administration and policy studies, that structure and agency are indeed in a dialectical relation, mutually shaping each other. More importantly they observed that structuring of action results from both discourse and previous action, and that no logic of action (e.g. of rational market behaviour) can be distilled independent of discourse. Furthermore they show that discourses in non-economic domains, as well as the organizational structure of these domains (such as law and politics), influence both action and discourse in the economic domain. These insights make it possible to combine this branch of economics with social systems theory and post- structuralism in the construction of EGT.

Social systems theory, developed in the 1980s and 1990s, post-structuralism, from the 1970s and 1980s, but applied in governance studies more recently, and the institutional economics that appeared after 2000, enable us to present a picture of evolving governance. The concepts introduced are not enough to spell out the possible permutations of elements stemming from these theories. And they are not EGT itself. What has been said allows us to grasp however, that this can be a basis on which to build a perspective that allows us to see governance as radically evolutionary, as driven by actions and ideas, as acting on images of self, environment, past and future, that are evolving themselves.

In the following chapters, we will dwell less on these three foundational theories and focus on the construction of EGT. Additional elements derived from the foundational theories will be incorporated, often modified, and their provenance will be mentioned. Many other concepts and insights are new, as is the structure of EGT itself. Yet other ideas have still different origins, ranging from Aristotle over Machiavelli to landscape ecology, planning theory and semiotics. We gradually work towards a clarification of the emergent order of EGT, as an autonomous theory incorporating elements of various origin (Chap. 9). The next step (Chap. 3) stays recognizably rooted in systems theory and institutional economics. We discuss functional and organizational differentiation, formal, informal and dead institutions, and recombine these old and new concepts in a new manner to give more detail to our concept of evolution. This more developed concept will then allow us in Chap. 4 to analyse governance paths.

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