



**Network formation:
the case of a technological district in an
institutional entrepreneurship perspective**

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Introduction

The goal of this paper is to analyse the processes of inter-organizational network formation adopting an institutionalist perspective, and in particular, the institutional entrepreneurship framework. Institutional entrepreneurship deals with the activities of creation of new institutions or transformation of existing ones (Maguire et al. 2004).

Recent developments in the literature on inter-organizational networks have highlighted the need to focus on network dynamics, since theoretical and empirical reflections on these phenomena have been quite limited. In particular, whereas there is an extensive body of knowledge on how network structures contribute to the creation of outcomes at different levels of analysis (individuals, groups, organizations, and populations of organizations), much less attention has been devoted to understanding how and why networks emerge, evolve, and change (Soda, Zaheer, 2009).

Within this dynamic perspective a special attention should be reserved to the trade-off between inertial constraints and change opportunities, both originating from network ties' structure and node properties. In other words, as highlighted by previous research on networks, past ties predict future ties, and, thus, structural persistence shapes the evolution of network organization (Gulati, Gargiulo, 1999); this limits the ability to change of the actor that participates to the network, by embedding it in a web of relationships. It is therefore interesting to examine under which circumstances the actors perceive the need and the opportunity for change, whether the constraints can be

removed and how actors are able to change their patterns of embeddedness, modifying existing network structures or creating new ones.

Institutional entrepreneurship perspective may be helpful in answering these questions. As highlighted by Owen-Smith and Powell (2007) a number of linkages exist between the subfields of research on networks and institutions. “Canonical works in neo-institutional theory rely explicitly on network imagery and mechanisms, while exemplary empirical pieces demonstrate that networks are central to explanations of institutional phenomena” (Owen-Smith, Powell 2007: 603). For example, network categories of embeddedness and social capital are central concepts in institutional arguments. More generally, on the one hand networks are carriers of institutional practices and forms emerge from networks and on the other hand institutionalized categories and conventions shape the structure and effects of networks (for example, network mechanisms of coordination and control can be seen as institutions).

The reciprocal influence between networks and institutions is particularly interesting if we assume a dynamic perspective of network evolution: we quote again Owen-Smith and Powell to highlight that “networks shape institutions but institutions sculpt networks and direct their growth. Genesis and change, not just context, are at stake in the merger of structural and cultural approaches to complex social systems” (p. 603).

Relevant in these perspectives are the ideas of embedded agency and the contributions of the actor-network theory. The idea of “embedded agency” refers to the ability of the actors to envision and enact changes to the context in which they are embedded, overcoming the “taken-for-granted” institutional prescriptions (Greenwood, Suddaby, 2006). This concept is at the core of the process of “institutional work” and may be understood also through the insights of the actor-network theory (Latour, 1987).

According to this perspective, the stable elements of institutions are a relational effect that masks an ongoing and dynamic struggle between competing actor-networks. Instead of studying the outcome of institutions (norms, taken for granted behaviours), actor-network theory focuses on the interactions that produce and challenge those outcomes (Lawrence, Suddaby 2006).

In this paper we apply these theoretical perspectives to the process of formation and evolution of an interorganizational network, namely a biotechnology industrial district. Indeed, industrial districts have been identified as a form of interorganizational network structured through social mechanisms of coordination and control. We pose that a new district comes into existence simultaneously with the diffusion of the culture of a district. This process can be seen as a process of institutional entrepreneurship: the culture of the district coincides with the set of norms, rules and beliefs (institutional arrangement) of an organizational field and the genesis of a district is the structuration of a new organizational field through the activities of an institutional entrepreneur.

The paper is structured as follows: in the first section we highlight the main theoretical points of institutional entrepreneurship framework, in the second section we discuss the method of our research; the third section presents the results, the fourth discusses the findings and concludes.

Theoretical framework

Since the late 1970s, biotechnology has been an attractive object of study for social scientists (Latour 1987), and “as university laboratories, new science-based companies and established pharmaceutical and chemical companies have all been shaped by biotechnology’s emergence” (Ebers, Powell 2007).

Indubitably regional technology clusters are important source of economic development but, in particular: if successful clusters have been analyzed in literature with reference to innovation capability, knowledge or technology transfer experience, and existence of social ties linking individuals and teams across innovative companies; very little attention has been paid to mechanisms by which such networks emerge or, in this case, to capture the genesis of a specific organizational field in terms of process of institutionalization (Colyvas, Powell 2006; Battilana et al. 2009).

The introduction and change of practices, organizational forms, organizational fields and in general of institutions are central issues in institutional entrepreneurship literature. Institutional entrepreneurs are those actors that have an interest in particular institutional arrangements and leverage resources to create new institutions or to transform existing ones.

An organizational field is composed by “those organizations that, in the aggregate, constitute an area of institutional life; key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products” (DiMaggio, Powell 1983: 148). A field exists when it is institutionally defined (process of structuration). The notion of structuration suggests a process of gradual specification of roles, behaviors and interactions of organizational communities (Greenwood et al. 2002).

There are consensus about the question on how a process of institutional entrepreneurship initiates. Scholars agree on the existence of *ex-ante* enabling conditions that affect the possibility that an institutional entrepreneurship project emerges. The enabling conditions can be at a field level: crisis or jolts (Greenwood et al. 2002); the presence of acute problems that might precipitate crisis (Fligstein, Mara-

Drita 1996); as well as the characteristics of the field (Sewell 1992). But also individual attributes can force actors to initiate a project as institutional entrepreneur (Mutch 2007).

The institutional entrepreneur's work consists in two main activities: the implementation of a vision of change and the mobilization of allies. These activities involve the use of discourses (Lawrence, Phillips 2004), as well as the mobilization of resources (Lawrence, Suddaby 2006; Levy, Scully 2007).

Method

This pilot study took place in the recent context of a bio-technology district (BTD): the new technology of genetic, protein, and cell and tissue engineering, that constitute biotechnology significant advances in human and veterinary health, agriculture, industrial processes and other application areas, have found in the Italian region of Friuli Venezia Giulia (FVG) a new “public and private space”, such as a “protected”, semi-closed environment, embedded in a well defined geographical district.

The BTD was established in 2004 thanks to a framework agreement signed and financed by the Ministry of Education, University and Research (MIUR) and the FVG Region. This agreement stated the boundary of the district: it is made up by all firms that belong to the biomedical industry and located in the Region. An outstanding role in the process of establishment was played by the Centre of Molecular Biomedicine (CBM) that was founded in 2004 with the mission of coordinating the district by acting as a bridge between Research and Industry (Compagno et al. 2007).

At the moment, BTD has about 60 firms with some leading firms of the industry (i.e. Bracco Imaging, Eurospital). Moreover, there are some excellence in the public

research: three public universities (Udine, Trieste and SISSA), two science parks (Area Science Park and Friuli Innovazione), and their incubators (Innovation Factory and TechnoSeed) and some research centers (i.e. CRO in Aviano, ICGEB, Sincrotrone Elettra).

In this perspective, we consider CBM as the organizational context in which analyze spatial clustering of the industry and institutionalization processes. This stream of work has specifically focused on how inter-firm networks and regional agglomeration shape innovation, firm growth or organizational performance: while research on biotechnology attends to the contingencies of this sector (its origins, its relational structure or the outputs produced by biotechnology firms), we are interested to expand the issues and theories connected with the origins of the organizational field of BTD in FVG.

New institutionalism research perspectives presents a strong connection between epistemology, a “scientific style” to make theory, methodological practices as research tools, and empirical evidence (DiMaggio, Powell 1991). As Barbara Czarniawska (1998) points out, it is impossible to understand human conduct by ignoring its intentions, and it is impossible to understand human intentions by ignoring the settings in which they make sense (Latour 2005): “such settings may be institutions, sets of practices, or some other contexts created by humans and nonhumans – contexts that have a history, that have been organized as narratives themselves” (Czarniawska 1998: p. 4). According to naturalistic inquiry in organization studies, social order (or “order in symbolic systems” in Garfinkel’s terms) “does not derive automatically from shared patterns of evaluation and social roles, but is constituted, as practical activity, in the course of everyday interaction” (DiMaggio, Powell 1991: 20).

In the study we test the use of the ethnographic data collection (Van Maanen 1988; Marcus, Fischer 1999) and we identify analysis procedures that we planned to use in the field of IE research. The analysis proposes an IE reading of this phenomenon, the study of paths to institutionalization process in the organizational field of BTD, articulating it in the constituent parts of what we have identified as meaning dimension that can lead to institutionalization, its constituent components (taken-for-grantedness and legitimacy) and discursive strategies of CBM (figure 1) (Colyvas, Powell 2006). In our study IEs are actors who leverage resources to create new or transform existing institutions: “new institutions arise when organized actors with sufficient resources (IE) see in them an opportunity to realize interests that they value highly” (DiMaggio 1988: 14).

Figure 1 – about here

Ethnographically, “legitimacy” and “taken-for-grantedness” concepts articulate a model of interpretation-construction that situates organizational routines, practices, norms and experiences as data in a multi-layered representation of institutionalization phenomena. *Legitimacy* is defined as one of the most central concept in institutional research and it is a crucial concept to various lines of work in organizational theory more generally. We use Colyvas and Powell’s (2006) definition of legitimacy, a construct connected with the idea of institution as a system of rules, norms and organizations that can jointly generate a regularity of behavior in a social situation: thus a key feature of legitimacy is

its self-reproduction, reflected in the conception of a practice, belief, or rule as desirable, appropriate, and comprehensible.

Skill, effort, and practice are necessary elements in the process by which an activity or convention becomes taken-for granted. Colyvas and Powell (2006) evoke *taken-for-grantedness* concept referring to a central idea in sociological institutionalism (DiMaggio, Powell 1991).

Typically, ethnographic research demands sufficient data: i) to identify the themes that summarize informants' emic experience and understandings ("native cultural categories"); and ii) to substantiate an etic representation ("theorized constructs") that provides theoretical accounts of informants' representations and behaviours and culturally significant disjuncture between them.

Data collection and analysis were guided by emergent design: six audit items introduced above as constitutive parts of IE literature and used in the following section of ethnographic findings constitute the conjectural elements or descriptive constructs by which we report the data collection of our research.

Figure 2 describe the process of building ethnographic interpretations in an organizational context using "multilevel" and "multivocal" field data.

The six sources of institutionalized meanings reported in line in figure 1 appear again in figure 2 but here they are codified behaviors and become constructs of an emergent ethnographic design. Figure 2 comes complete with general theories in use, and the associated ethnographic themes that structure a part of "Result section" (the dimensions that perpetuating institutionalization processes).

To represent the iterative process of interpretive coding and data analysis, the institutional-oriented ethnographer build interpretation during data collection, refining into constructs the identified codes as we move across behaviours and episodes (B_n).

Figure 2 – about here

Figure 2 shows the way that institutional-ethnographer proceeds with interpretation building, further refining the codes (related to legitimacy and taken-for-grantedness) into constructs by moving across and within episodes, vignettes, organizational behaviours. Comparing different constructs to identify symbolic linkages is known as “troping” (Marcus, Cushman 1982): the ethnographer constructs tropes by assessing the symbolic applicability of the meanings represented by codes across behaviours. Troping refines the codes so that they can be referred to as constructs than then form identifiable themes in the interpretation (horizontal part of the scheme in figure 1). These constructs are connected with two categories of enabling conditions that constitute different phases for the process of institutional entrepreneurship: field characteristics and actors’ social position (Battilana et al. 2009).

The ethnographic interpretation forms three different modes of representation: *thick description*, *transcription* and *inscription* (Garfinkel 1967; Geertz 1973; Van Maanen 1988). The result of interpretation is a realistic ethnography of CBM organizational context and a representation of culturally constituted quality space from which enactments of BTM members are generated.

Ethnographic Findings

Legitimacy

Legitimacy is a central concept in organization studies (Hannan, Freeman 1989) and in institutional research (Suchman 1995, DiMaggio, Powell 1983). Notwithstanding this importance, less attention is given to the analysis of the concept, its constituent elements and understanding how legitimacy is acquired and replicated (Colyvas, Powell 2006).

Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman 1995: 574).

We begin with a discussion of legitimacy, using the correspondence to illustrate how the culture of a district become accepted and diffused among actors of a new organizational field.

Standards. Probably the clearest indicator of a heightened legitimacy is the standardization of practices. When a practice is repeated and become a routine, then it is spread among actors and become accepted. As Suchman (1995) suggests, the activity become unsurprising.

The unsurprised practice in the case of CBM refers to the development of shared symbols and languages, routines as a grammar of social action (Feldman, Pentland 2003; Becker 2008): the sequential structure of work processes in a specific task unit (the CBM grant office and funding rules), whose work involves high numbers of exceptions and low analyzability of search in the connection between research in laboratory, technology transfer in high-tech firms and CBM public financial resources.

The conversation with an employee exemplifies this concept: *“In the agreement there are about 11 million Euro available: about 1,5 million is addressed to section 11, about 3,5 million to section 12 and 6 million to section 13”*.

In order to explain the composition of an announcement and the distribution of funds among existing firms, new firms or researchers, the person did not refer directly to the receivers of the facilities. The implicit mention to the sections but not to the Ministerial Decree (593/2000¹) or to the receivers, indicates the familiarity that the person has with these regulations. Probably, in his conversations with other employees, there is no need to specify every time the decree the section refers to, because people get exactly the meaning of the sentences. In this way, we argue that there is an institutional vocabulary (Suddaby, Greenwood 2005) developed inside the CBM.

Norms of appropriateness. Institutionalized elements in organizations create a contagion effect of legitimacy (DiMaggio, Powell 1991): institutional elements are transmitted to newcomers (i.e.: new firms involved in a research project; new laboratories in charge of a specific research stream - such as nanotechnologies program) and arise from small group or organization-level processes. In the first steps of development of the district (years 2004/2005), CBM used to organize monthly meetings. These meetings had the goal to discuss about the district, and about the main topics the district should lead to. Several actors were involved in that phase: researchers (even renowned at an international level), firms, delegates of the Region Friuli Venezia Giulia and CBM employees. The result of these meetings was the identification of some topics to lead investments for the future development of the district: for instance, new

¹ The Ministerial Decree 593/2000 regulate the grant of facilities as provided in the Legislative Decree 297/99

research laboratories. CBM expressly wanted all the actors to collaborate in this phase because all the decision taken in this way were shared, appropriate and proper.

Then, another element of legitimacy concerns the identification of norms of appropriateness and values among actors (Colyvas, Powell 2006). As the legitimacy heightens, the presence of norms and values became more wider. The spread of norms of appropriateness become clear in the early stage of development of the district when CBM started to organized meetings. In this case, CBM worked to defined some topics in a collective way: this is the norms and values they wanted to spread and share.

Boundaries. The interplay of actors, agency, and institutions occupied a relevant place in institutional studies of organizations. Recently a strong emphasis in placed on the cultural process through which institutions affected organizational practices and structures and actors affect the institutional arrangements within they operate (Lawrence et al. 2009). In this perspective, one more indicators of legitimation involves the dissolutions and formations of new boundaries.

As Gideon Kunda argued in his study of “Tech’s organizational culture” (2006), research and industry are traditionally separated: BTD’s management structure reflects complex organizational structure in terms of “organization of work”, various “social categories” within BTD’s organizational population, and the physical and social “work environment” in such organizational entity (“managers” vs. “engineers/researchers”). The “strategy and marketing groups” are responsible for the “business perspective”: examining market needs (also in terms of research project), evaluating profitability, and managing customer contacts, press relations, and so forth. The “product development groups” are involved in the “glamorous”, “attractive” or “exciting” work of creation (such as the scientific process, the essence of creative engineering or developing new

products). Both have their common set of practices, representing the same institutional field. When the legitimacy of practices, as collaboration activities or frequent interactions, grow, then the boundaries of the systems become blur, and the cross-traffics are accepted and sometimes supported (Colyvas, Powell 2006).

Before the collaborations between CBM and firm [***] became regular and unsurprising, several exchanges occurred, but in an informal way.

*“I often meet CBM director at the canteen² and we talk about researches and projects. This is the first kind of relationships that firm [***] has with CMB. Then, we had regularly employees exchanges or tools exchanges. Sometimes there is an indirect contact: when client ask me to performance a research that we are not able to do, we ask to CBM to match the request with other firms or laboratories in the district. But what we want is to shift the informal relationships more formal, in the way that collaborations become not spot”.* (conversation with the managing director of firm [***])

Thus, the cross-traffic between systems were accepted, but they required approval on a case-by-case basis. When the collaborations grew, it emerged the need to establish more formal relationships in order to render the cross-traffic systematic, without approval needs. The dissolution of boundaries, that leads at the end of the process to the formation of new boundaries reshaped around a community with common interest, is a trace of legitimation of practices.

² CBM and firm [***] are settled in the same building, which host also other firms and research laboratories. Moreover, there are a canteen and a coffee bar in common

Taken-for-grantedness

A critical component of legitimacy is taken-for-grantedness. It is a micro-level process that complete the legitimation process, and together foster the institutionalization. A practice becomes taken-for-granted when it evolves into routines or habitualized action and is replicated with relative ease (Colyvas, Powell 2006). The key element of taken-for-grantedness is the development of shared activities and conventions that define the way things are or should be done.

We turn to the discussion of the development of taken-for-granted activities in the institutionalization of the district. Specifically, we argue that the taken-for-grantedness occurs in practices, roles and categories.

Practices. Practices are activities that become routines and the process occurs when the activities moves from a state of ambiguity to a highly routinized, prescribed and well-understood (Colyvas, Powell 2006).

The development of practices shared by the world of research and industry in the case of the district is clear in a particular event. It refers to the announcements for financial facilities that both firms and researchers can apply for. CBM develops a standard of presentation.

For example, a representative of a firm, who was part of one of the meetings that CBM organized to inform firms and researchers about new financial facilities available for the district, describe the meeting as follows:

“There were representatives from CBM and other firms. We was informed about the new financial facility: they described the announcement, the requirement for the application, the way to apply to the announcement. Then we were asked to propose a

project we were interested to develop, in order to find a match with other partners and develop the project together.”

Similarly, the slide presentation used to another meetings has the same structure.

This vignette reflects how important is a “social theory of practice” to examining what Lawrence et al. (2009) called “institutional work”: i.e., the communication policy of CBM about new announcements for facilities, as practice, is became a routine; similarly, also the way to apply for the announcement is routinized and well-understood from actors. This activities moves from be idiosyncratic and developed case-by-case, to be consolidated, prescribed and routinized.

Roles. Roles in the new organizational field become even more defined and clear. The explication of the role of CBM in the field is an example. This occurs first of all in a normative way, because when district was formally establish, the Minister of Education and University (MIUR) imposed the nomination of a organization in charge of the coordination of the district.

This role is performed by CBM in several activities: for example, when it worked to define the specialization of the district³, or in its activity of observatory of the district.

CBM is has an Economic Observatory (EO), which has to monitor the district; for example, it has to analyze the composition in terms of active firms, the new firm established in the district. One of the results of the EO was the publication of a book about the new district. In general, discursive dynamics of institutional maintenance and maintaining the symbolic institutional order are possible as a result of institutional meta-narratives into organizations and the lives of their members (Czarniawska 1998): i.e., carried into the organization by members; selected through organizational practices

³ See above in “Norm of appropriateness”

(e.g.: recruitment or research projects selection); edited by organizational elite (e.g.: Presidents or Directors of CBM). Organizational version of institutional meta-narratives (e.g. organizational identity stories) are socialized through organizational practices (e.g. training course, routines) or edited by all members (individual or collective) (Kunda 2006; Lawrence et al. 2009).

By designing of the EO, CBM made explicit its role in the district. Then, an indicator of taken-for-grantedness is the definition of roles in the organizational field. The institutionalization of an organizational field occurs simultaneously with the specification of the roles of actors in it: first, roles are ambiguous, then they are defined and steeped with expectations about how roles are performed (Colyvas, Powell 2006).

Categories. The more an organizational field is institutionalized, the more the categories are clear and settled; and pluralism arises from presence of divergent interest groups, each of which has sufficient power to ensure that their interests remain legitimate. Thus, institutional pluralism represents an organizational challenges: in this sense, last key concept of taken-for-grantedness is the categorization. A organizational field with high level of taken-for-grantedness is characterized by the presence of categories that are settled and infused with values (Colyvas, Powell 2006).

In the early stage of structuration of the new field, the classifications of firms that are part of the district and whose are not was vague and arbitrary; a clearer classification emerges only in a second stage, at a medium stage of institutionalization. In the case of the district, we argue that it is shifting from a low to medium level of institutionalization. This was clear to us when we sent some request to firms of the districts, in order to ask for interviews. We sent an e-mail to each firms that are part of the district, as defined by the specialization and location of firms.

“Dear Mrs. ..., I’d like to help you. But I think that I can not give you relevant information, because our company does not have any relationship with the District of Biomedical Medicine”; *“Thank you for your interest, but our company is not part of the District”*; *“ Dear Mrs..., I’m glad to help you, but the products we produce and sell do not fit with the District”*. These are some examples of the reply to our request: they show the difficulties for the firms to understand the classifications.

On the other hand, other firms of the organizational field seem to understand and recognized the classification. This show that there are different levels of taken-for-grantedness among the field.

Results

The process of institutionalization of the BTM is still in progress, then it is not possible to verify if the institutional change occurred. But what we know is that the process of institutionalization was characterized by the presence of an actor that worked as institutional entrepreneur. We can say that because we identify the enabling conditions for institutional entrepreneurship from the empirical field and we recognize some characteristic of a process of institutional entrepreneurship.

Enabling conditions for institutional entrepreneurship. Starting from the agent, we find that CBM has some of the attributes that identify it as an institutional entrepreneur (for a review about attributes see Battilana et al. 2009). For example, when CBM organized the meetings in order to define the specialization of the district, as well as when it worked with firm [***] to set formal agreements of cooperation, it showed its ability in inducing cooperation in others, but also its ability in networking, bargaining and interest mediation. Finally, it showed the ability in framing issues by referencing broader

values, building into specific normative attitudes and creating common identities. These attributes refer to social, political and cultural skills (Battilana et al. 2009).

CBM's position in the field can be also considered as an enabling condition, because thanks to its central position in the structure of the network CBM was able to collect resources and to communicate to all actors of the new organizational field. CBM, for example, was in charge of the definition of the topics in the announcement for financial facilities and in the identification of the specialization of the district; all these activities are examples of how CBM acted as a central actor. In the literature, it is shown that peripheral actors are more likely to act as institutional entrepreneurs (Leblibici, et al. 1991), but there is no consensus in it. We argue that, for constituent organizational fields, central agent has more impact on their access to the resources.

Focusing on the field level enabling condition, the field was characterized by the presence of conditions that trigger the change. For example, the announcement of financial facilities was the trigger event that stimulated the collaborations of firms and the emergence of new practices (Greenwood et al. 2002), as well as a general composition of the territory (several research organizations, science park, some large firms) that enabled the formation of the district.

Divergent change implementation. An institutional entrepreneur is in charge of the creation of a vision for divergent change and the mobilization of allies behind the vision (Battilana et al. 2009). These activities involve the implementation of change by dislodging existing practices, introducing new ones and then ensuring that these become widely adopted and taken for granted by other actors in the field (Hardy, Maguire 2008). Therefore, it is rare that an institutional entrepreneur is able to these activities

without support: the mobilization of allies and resources are important activities as well (Greenwood et al 2002).

All these activities were performed by CBM though discursive and rhetorical strategies (Fairclough 1995). These strategies share the interest in the role of language in structuring social action, but while discursive strategy develops the vision for change, rhetorical strategies have the aim to communicate this vision. The identification of an institutional vocabulary used by CBM's employees for example indicate that CBM designed strategies and communicated to its allies. The communication to actors through structured meetings and the formalization of practices of collaboration instead indicates that CBM create a vision for change and communicate it through boarder interpretative schemas (Creed et al. 2002) that resonate with shared beliefs.

Conclusion

In this paper we applied the theoretical perspectives of the institutional entrepreneurship to analyze the process of formation and evolution of an interorganizational network, namely a biotechnological district. Indeed, industrial districts have been identified as a form of interorganizational network structured through social mechanisms of coordination and control.

Institutional entrepreneurship has been an instrument to bridge the agency question into institutional theory again (DiMaggio 1988; Battilana et al. 2009). In this ethnographic study, we have used the correspondence of the Bio-Technological District to analyze how an institutional entrepreneur emerges, namely CBM. In particular, we focused on how an institutional entrepreneur acts to diffuse legitimated and taken-for-granted

practices: legitimacy and taken-for-grantedness are core concepts connected with the idea of institution as a system of rules, norms and organizations that can jointly generate a regularity of behavior in a social situation. Thus legitimacy reflects the self-reproduction institutional feature and taken-for-grantedness reflects shared activities and conventions that define the way things are or should be done.

This research contributes to the network theory replying to those research streams asking for in-depth understanding on how and why networks emerge, evolve, and change (Soda, Zaheer 2009). A fully understanding of the process of institutionalization adds a new perspective to look at the process of network formation. As the process of institutionalization of the BTD is still in progress, we were able to describe the characteristics of it according to the enabling conditions of the empirical field and the characteristic of the process. Then, we try to contribute to the literature by providing a description of the enabling conditions that stimulate a process of network creation or transformation, by providing an identikit of the agent (person, organization or set of organizations) in charge of the activity and by explaining the process.

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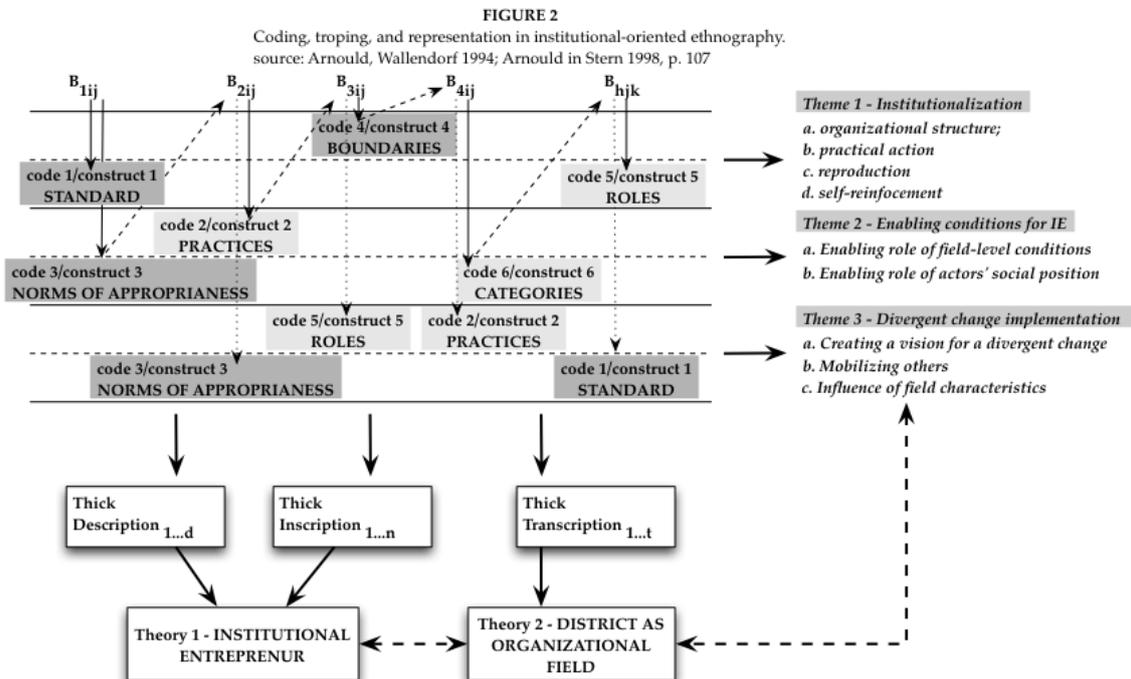
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FIGURE 1
 Meaning dimensions and discursive strategies of CBM in the organizational field of BTD
 source: our elaboration from Colyvas, Powell 2006 and Battilana et al. 2009

	<i>Institutionalization</i>	<i>Enabling conditions for IE</i>	<i>Divergent change implementation</i>
 <p><i>Elements of the Organizational Field/Processes of institutionalization</i></p>	<ul style="list-style-type: none"> - Organizational structure - Practical action - Reproduction - Self-reinforcement 	<ul style="list-style-type: none"> - Enabling role of field-level conditions - Enabling role of actors' social position 	<ul style="list-style-type: none"> - Creating a vision for a divergent change - Mobilizing others - Influence of field characteristics
<i>Audit item of the IE</i>			

<p>LEGITIMACY</p> <ul style="list-style-type: none"> - Standards - Norms of appropriateness - Boundaries <p>TAKEN-FOR-GRANTEDNESS</p> <ul style="list-style-type: none"> - Practices - Roles - Categories 	<p>CBM & Actors in BioTech District</p>
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B_{hij} , $h = 1 \dots m$, where $m =$ number of behaviors the ethnographer identifies as part of the constellation; units in the sample of behaviors ($i = 1 \dots n$);
 $j = 1 \dots x$, where $x =$ the number of ethnographic data collection methods employed.