

# The new challenges of universities in a regional entrepreneurial ecosystem

*Les nouveaux défis des universités  
dans l'écosystème entrepreneurial*

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## ABSTRACT

The University is emerging as a key contributor to the entrepreneurial ecosystem, on the one hand as a result of pressure exerted through public policies to change their status and injunctions to introduce entrepreneurship into the academic programs available to students. On the other hand, due to the need for University to become more involved in regional dynamics with a view to boosting the employability of its graduates.

This article examines the ways in which proximities can be managed by universities in order to establish their role as mediators between the academic sphere and the actors involved in the regional economic development. What can be done to facilitate greater proximity and interaction between universities, research laboratories and support structures in order to generate value for their local area?

The results of a qualitative study among the actors of the entrepreneurial accompaniment in Languedoc Roussillon show that the involvement of universities in creating an organized proximity is a key expectation among stakeholders in the region's entrepreneurial ecosystem, who face a lack of institutional proximity, or even limited geographical proximity to university resources. The creation of organized proximity requires then cooperation and partnerships which are today far from being the norm.

## Key-words

*Universities, Entrepreneurial ecosystem, Proximity, Territory, Stakeholders*

## RÉSUMÉ

L'Université émerge comme un acteur clé de l'écosystème entrepreneurial, d'une part sous la pression des politiques publiques à travers le changement de son statut et des injonctions à introduire l'entrepreneuriat dans les programmes de formation des étudiants. D'autre part, elle est tenue de s'impliquer davantage dans les dynamiques territoriales pour favoriser l'insertion professionnelle de ses lauréats.

Cet article interroge les modes de gestion des proximités que les universités peuvent instaurer pour asseoir leur rôle de médiation entre le milieu académique et les acteurs du développement économique du territoire. Comment faciliter les proximités et les interfaces entre les universités et les laboratoires de recherche, et les structures

d'accompagnement pour créer de la valeur pour un territoire ?

Les résultats d'une étude qualitative auprès des acteurs de l'accompagnement entrepreneurial en Languedoc Roussillon montrent que l'implication des universités dans la construction d'une proximité organisée est une attente forte des parties prenantes de l'écosystème entrepreneurial territorial, qui sont confrontées à un déficit de proximité institutionnelle, voire à une faible proximité géographique avec les ressources universitaires. La construction d'une proximité organisée suppose alors des coopérations et des partenariats qui sont aujourd'hui loin de constituer la règle.

### Mots-clés

Universités, Écosystème entrepreneurial, Proximité, Territoire, Parties prenantes

## INTRODUCTION

Changes in French public policies on higher education and research over the last past 20 years have seen universities called upon to become more involved in their regional entrepreneurial ecosystem in two main ways:

- by facilitating the transfer of technology between research laboratories and companies;
- by developing entrepreneurship among students, considered to be a positive factor for employability.

These changes have been backed up by the 2007 law on the autonomy and responsibilities of universities (LRU<sup>1</sup>) and the 2013 law on higher education and research (ESR<sup>2</sup>), which redefined their place within the territories and changed their modes of organization.

Against this new backdrop, universities are gradually emerging as key contributors to the entrepreneurial ecosystem, which Spilling (1996: 91) defines as “*the complexity and diversity of actors, roles and environmental factors that interact to determine the entrepreneurial performance of a region*”. According to Isenberg (2011), an entrepreneurial ecosystem can be represented as a cultural and institutional context that favours entrepreneurship. The institutions that make up the educational, professional and academic system are an integral part of this context and contribute to the formation of human capital (Becker, 1975), in particular by raising awareness of entrepreneurship among students, by building career paths for entrepreneurs or by co-incubating business creation projects carried by students. The proximity and interaction generated between universities, incubators and local research laboratories can be seen as factors that favour the creation of innovative companies at a regional level.

<sup>1</sup> Loi n°2007-1199 du 10 août 2007 relative aux Libertés et Responsabilités des Universités.

<sup>2</sup> Loi n°2013-660 du 22 juillet 2013 relative à l'Enseignement Supérieur et à la Recherche.

The central issue addressed by this paper is how universities can help reinforce the links between project holders, research laboratories and support structures in order to create value for his local area and its actors. In other words, what is the best way to encourage proximity and manage the interaction between students who wish to develop a project, university research laboratories and support structures?

The hypothesis we put forward is that the management of the proximities and the reinforcement of the place of the universities within the entrepreneurial ecosystem can make it a key actor in the process of business creation on the territory.

We aim to address these questions by presenting results of a research study conducted by the “Entreprendre” laboratory of excellence (Université de Montpellier) on support structures for innovative start-ups in the Languedoc-Roussillon region. This research, conducted by four researchers, is part of an inter-organizational methodological approach involving stakeholders in entrepreneurship. This article is organized as follows. First, we will present the theoretical framework for the research (1). The following section will describe the methodology used (2). We will then develop and discuss our findings (3).

## 1. THEORETICAL FRAMEWORK

The analysis of the institutional context highlights the regional polarization of the French universities (1.1.) which thus become part of a collective approach of the entrepreneurship whereby entrepreneurial support is understood in terms of coproduction (1.2.). This means that universities are more involved in their regional entrepreneurial ecosystem (1.3.), something that is strongly encouraged by public authorities.

### 1.1. An institutional context that emphasizes the territorial polarization of universities

This last decade is characterized by a broad reform movement of the French universities, like a number of others universities of the OECD member countries.

Legislation passed in 2007 (LRU) introduced far-reaching reforms to French universities by giving them both greater responsibilities and new tasks. This legislation is underpinned by the principles of New Public Management (NPM), which encourages public bodies to look for greater efficiencies in the way they are run; these bodies are given more autonomy in return for their acceptance of contractual objectives (upstream) and evaluations of their performance (downstream). This evaluation is based within the universities on the deployment of management and measurement tools (Chatelain-Ponroy *et al.*, 2013), which have contributed in establishing a management control framework (Petitjean *et al.*, 2014).

The performance of the universities is notably measured by their capacity to satisfy social demand (Côme, 2011) due in particular to their social responsibility (Chatelain-Ponroy and Morin-Delerm, 2012). Moreover, the LRU served to accentuate regional polarization of universities in the context created by decentralisation. Thereby universities are now under greater pressure to contribute more heavily to their region. To achieve this, universities are not only being charged with the responsibility to educate through their traditional teaching and training missions (Mailhot and Scheffer, 2009). They have now become regional actors in their own right, as their increasing autonomy is undeniably marked by

a reinforcement of their regional identity and social integration within the socioeconomic sphere. This is an indicator of the effectiveness of their training offer, following the report “Small and medium sized universities” (October 2016) of the General Inspectorate of the French Ministry of Education and Research. This requires the complex activation of the resources of the territory based on the capability of the universities for mobilizing the potential of the geographical and organized proximities (Torre and Rallet, 2005). This new reality encourages analysis of the place of universities within the new regional structure, the main features of which are as follows:

- a regional presence in the new structures put in place by the public authorities since the beginning of the 2000s: centres for research and higher education (PRES), theme-specific networks for advanced research (RTRA), theme-specific networks for research and care (RTRS), and competitiveness clusters. All of these structures are run in a way that emphasises proximity and cross-cutting capabilities;
- financial support for higher education from regional authorities;
- emergence of the regional dimension in the way in which higher education, research and innovation policies are devised.

France’s “academic sphere” and “regional spaces” now face the same questions but at times also face questions that diverge, as some focus on promoting academia while for others the focus is on regional advancement. The issue of building on and ensuring the transfer of university-level research, first raised in 1999 in the context of the law on innovation and research<sup>3</sup> designed to facilitate technology transfers from public research bodies into the economy for the creation of innovative start-ups, therefore continues to be relevant today.

More recently, the ESR legislation passed in 2013 brought important reforms to French universities both in terms of their missions and regional cooperation. Article 6, for example, stipulates that as a public service higher education contributes to “*the attractiveness and reputation of our territories at local, regional and national levels*”.

In the same way, institutional changes relating to French local authorities (2014 and 2015) have changed their competencies and scope of action. Considering those territorial issues, the Conference of University Presidents (CPU) has signed in February 2017<sup>4</sup> a framework cooperation agreement with the Association of the French Regions for defining new lines of work, while strengthening their links.

We have schematized the evolving institutional context of the universities (see Figure 1 below).

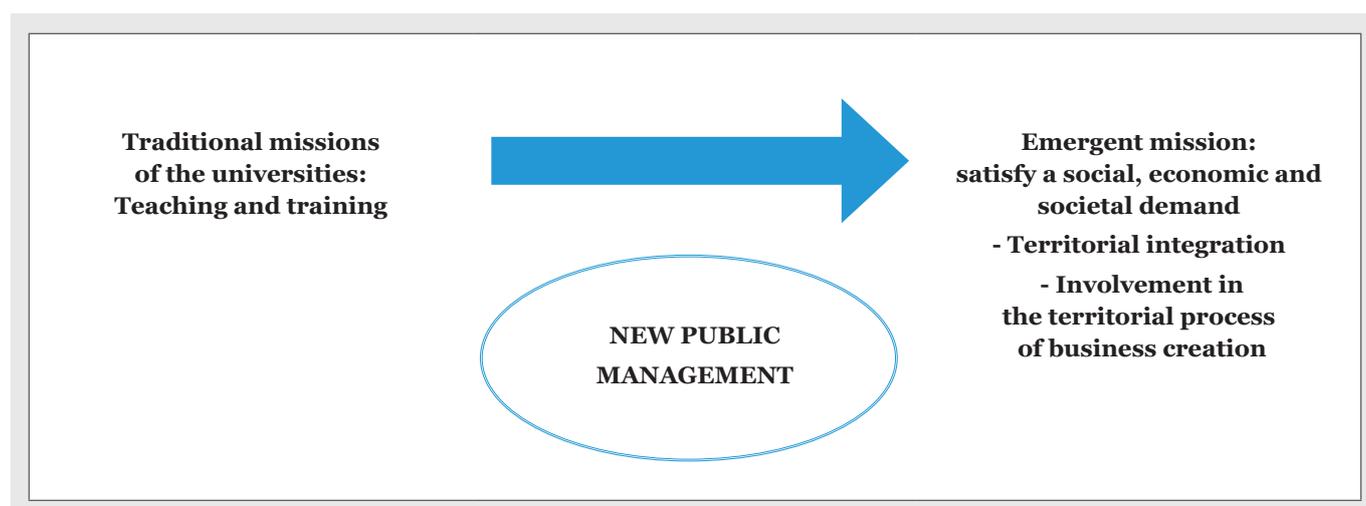


Figure 1 – The evolving institutional context of the universities

Source: authors

<sup>3</sup> Loi n°99-587 du 12 juillet 1999 sur l’innovation et la recherche.

<sup>4</sup> Colloque annuel de la Conférence des Présidents d’Université, 28 février 2017.

This institutional context positions the Higher Education and Research as key actors of the strategies to enhance the attractiveness and the development of the territories and serves to reinforce the the combined role of University and territory, especially by facilitating the transfer of research to the socio-economic sphere. The adding value is not limited to this transfer but covers up different activities as collaborations between public and private spheres, or the support for start-up entrepreneurship (Schieb-Bienfait and Boldrini, 2016). In addition, the changes introduced by the ESR legislation include the support offered by universities for entrepreneurship through various measures such as the following:

- the creation at a regional level of PEPITES (student centres for innovation, knowledge transfer and entrepreneurship) to develop start-up entrepreneurship among students;
- strengthened cooperation at a regional level between incubators and SATTs (companies whose role is to accelerate the transfer of technology);
- and the availability of courses on entrepreneurship and the management of innovative projects in all higher education programmes.

As they are gradually rolled out, these measures help involve universities in the entrepreneurial process and develop a collective dimension of entrepreneurship at a regional level.

## **1.2. The entrepreneurial support: a coproduction at territorial level**

Our understanding of entrepreneurship has shifted from an activity seen as the result of an individual project to a more collective approach; it is now considered to be “*an initiative launched by an individual (or several individuals who come together) to construct or seize a business opportunity, the benefits of which are not necessarily financial in nature, through the impetus of an organisation that may give rise to one or several entities thereby creating value for the stakeholders targeted by the project*” (Verstraete and Fayolle, 2005). Julien and Cadieux (2010) highlight the need to contextualise entrepreneurship by taking

into account “*the influence of one’s environment in encouraging the development of companies by providing resources and conventions that have a greater or lesser stimulative effect*”. This collective entrepreneurial approach is therefore based on the direct and indirect mobilisation of strategic resources and skills (Penrose, 1959; Wernerfelt, 1984; Barney, 1991; Amit and Schoemaker, 1993; Aldrich and Martinez, 2001; Hansen, 1995; Khelil, 2012).

Piloting such collective action requires a regulatory system to be put in place that is capable of sustainably governing the resulting plurality by ensuring the compatibility, complementarity and convergence of those involved in collective projects (Fort *et al.*, 2013). From this perspective, the support for entrepreneurship generally can be seen as an effort of coproduction involving transfers, exchanges, appropriation and learning (Fayolle, 2004).

At a regional level, a collective approach of the entrepreneurial support requires the intervention and interaction of various actors:

- Local public authorities, as represented by the institutional political figures elected to oversee economic development, and institutional experts, most of whom are regional civil servants and provide the appropriate structures with technical expertise;
- support structures responsible for piloting the support process;
- project initiators responsible for channelling the attention of other stakeholders;
- financial backers without whom projects would never become a reality;
- and universities and research laboratories whose role is to develop the entrepreneurial aptitude of students and facilitate their access to support structures.

Considering entrepreneurial support as a form of coproduction that takes place at a regional level requires reflection on the interaction between infrastructure and public institutions, including universities, with a view to developing effective entrepreneurial ecosystems.

### 1.3. The involvement of the universities in the territorial entrepreneurial ecosystem

The concept of an ecosystem was defined by Moore (1993) as “an economic community supported by a foundation of interacting organizations and individuals”. The notion of an entrepreneurial ecosystem gradually emerged in the literature on the basis of this definition. The review of literature proposed by Hannachi and Chabaud (2013) shows that the literature agreed that these ecosystems are composed of interconnected actors in a given territory and encompass at least the following elements linked in a dynamic and open-ended manner:

- universities and research and development institutes;
- qualified human resources;
- formal and informal networks;
- government;
- business angels and venture capitalists;
- professional service providers.

Suresh and Ramraj (2012) identify different actors in an entrepreneurial ecosystem as a range of stakeholders (Freeman, 1984) with varying objectives and expectations. The relationship between the University and its stakeholders is essentially based on its choice of taking into account their expectations and satisfaction and the effects of its activity on them. The support structures created on the territories represent then a relevant place for cooperation between the various stakeholders as part of a system of governance. In line with Leloup *et al.* (2005) and Le Galès (2006), we understand governance as a process of coordination between the regional actors involved in entrepreneurship support with a view to structuring this activity effectively. This process functions on the strength of the geographic and organised proximity between these contributors.

The analysis of the interaction between the stakeholders refers to the analysis of proximities linked to mechanisms promoting exchange, cooperation and adaptation of activities between territorial actors through collective actions. Regional entrepreneurial dynamics can be seen as a process of co-construction and resource activation; this activation is facilitated in a context of multiple proximities between the regional

contributors involved (Zimmermann, 2008), both geographic and organised. These proximities favour, via interactions, learning and innovation (Boschma, 2004). Geographic proximity refers to the objective and perceived distance between two individuals or two units (Torre and Rallet, 2005). Organised proximity requires a relational dimension based on the capacity for interaction, whereby the organisation – or any other system – facilitates such interaction (Zimmerman, 2008). The organised proximity on which the emergence of a region hinges is related to organisational proximity, which is based on a logic of belonging (agents recognise one another in respect of their positions on particular projects), and institutional proximity, which is underpinned by a logic of similarity (agents share codes, rules and representations by which they anticipate one another’s behaviour). Geographic proximity can help to strengthen the logic of belonging and similarity that characterises organised proximity (Angeon *et al.*, 2006). In order to produce interaction, geographic proximity must be structured and activated by organised proximity (Torre and Rallet, 2005). Organised proximity facilitates interaction between the various parties involved in regional schemes. Actors from diverse institutions can therefore become involved in the project and shared sense of belonging.

The research on the entrepreneurial ecosystem studied the issues of this relationship. Benneworth *et al.* (2017), for example, showed that the interactions between the universities and the territorial actors could contribute to the territorial innovation through exchanges of knowledge. According to Harrison and Leitch (2010), the input of technological innovations and entrepreneurs by the research laboratories is one feature of this ecosystem. Thus the entrepreneurial ecosystem contributes to a dynamic of construction of material and immaterial resources linked with an organized territory. These resources are based on the capacity of the actors of developing inter-organizational relationships from which they construct or renew the local resources (Mendez and Mercier, 2006).

The territorial anchorage is founded on relations of proximity with its stakeholders. But in spite of the obvious interest for universities of developing links and increasing exchanges with the actors of the entrepreneurial ecosystem in order to enrich each other, such cooperation is far from being the norm (Bécard *et al.*, 2008).

This brings us to the challenges of involving universities in regional entrepreneurial ecosystems: how best to establish and build on proximities in these ecosystems in order to encourage the development and dissemination of practices that are adapted to the expectations, resources and constraints of the various stakeholders involved?

## 2. RESEARCH METHODOLOGY

We will start by outlining the reasons for choosing an exploratory, analytical and qualitative action research (2.1.), Then the research protocol will be submitted (2.2.).

### 2.1. An exploratory, analytical and qualitative research action

We implement a qualitative design for our research. This choice, infrequent for the research in the field of entrepreneurship, lets us to approach the various aspects of this field (Hlady-Rispal and Jouison Lafitte, 2015) and to analyze the perceptions of the actors (Aldebert and Rouziès, 2011), to contextualize them, to evaluate the relationships, and to analyze the processes. Thus, we can explain complex phenomena. This is the positioning of our research which aims to best understand the interactions between the universities and the actors of the territorial entrepreneurial process.

This research covers all of the structures set up to support the creation and development of new businesses in the Languedoc-Roussillon. Our research methodology is based on in-depth case studies using a qualitative methodology involving individual semi-structured interviews. We start with a descriptive process, identifying the various stakeholders involved in the support structures and specifying their expectations. As part of a more analytical process, we then set out to understand how these expectations are taken into account in order to favour the proximities between the universities and the research laboratories, and the support structures.

More broadly, our research objective was to identify original territorial governance practices designed in a spirit of partnership (addressing the expectations of stakeholders). These practices can contribute to on-going efforts to improve the performance of these structures and therefore of regional governance with a focus on entrepreneurship. To achieve this, we developed a qualitative methodological approach based on action research (Argyris *et al.*, 1985; David, 1998; Plane, 2000; Savall and Zardet, 2008; Cappelletti and Noguera, 2007). Action research has the appeal of being an interactive method between a team of researchers and the field. It belongs to the domain of collaborative research (Checkland, 1989; Hatchuel and Molet, 1986).

In this approach, our research simultaneously targets two knowledge-related objectives. The first is to understand the current practices of stakeholders in support structures, as well as the concepts, methods and tools used to drive these practices forward. Second, as part of a more prescriptive approach, we aim to propose new ways to coordinate relations between stakeholders with a view to supporting development projects.

As well as drawing on the literature and analysing documents, the team of researchers carried out fieldwork based on empirical and longitudinal observations. Our research reflects a desire to understand and explain possible tensions between the stakeholders of entrepreneurial support systems as part of a trans-organisational enquiry, but also to offer those involved the means to understand and act on the realities they face.

### 2.2. Research protocol

This research was conducted within a given area; it is based on an inter-organisational methodological approach insofar as it mobilises the stakeholders involved in regional entrepreneurial ecosystem.

We met with 57 individuals to conduct semi-structured interviews lasting approximately one to two hours. First, these interviews were carried out involving stakeholders in the region concerned, as well as directors and technicians from support structures with

STAKEHOLDER GROUPS	NUMBER OF INTERVIEWS
<b>Institutional actors</b>	<b>19</b>
Political actors	6
Experts	13
<b>Financial backers</b>	<b>2</b>
<b>Support structures</b>	<b>19</b>
Directors	13
Technicians, mission heads	6
<b>Project initiators</b>	<b>12</b>
<b>Lecturers</b>	<b>4</b>
Director of the regional PEPITE	1
<b>TOTAL</b>	<b>57</b>

Table 1 – Research sample

a range of legal statuses (associations or offshoots of local authorities such as units or departments of public regional bodies). The activities of these structures take place in urban, pre-urban and rural areas. Then, we interviewed institutional actors (political actors and experts), financial backers, project initiators, lecturers and the director of the regional PEPITE. Our research sample is presented in the table below.

Interviews were carried out using a nomenclature that included six themes divided into sub-themes. This nomenclature is adapted from the work of Zardet and Noguera (2009, 2014) and includes the following items: regional conditions and context (origin of the structure and operating methods, classification of stakeholders, involvement and mobilisation of contributors, etc.), how the structure is organised (role of contributors, cooperation and mutual assistance, operational efficiency, evaluation procedures for structures and projects, and interaction between the structure and the local, supra-local, regional or national network), time and project management (support duration, time management in projects, etc.), and communication and coordination (practices for exchanging information

and communication between contributors, knowledge of projects among stakeholders, etc.).

The semi-structured interviews have allowed us to identify weaknesses, dysfunctions and tensions within the given territory.

Each interview was fully transcribed and 10 to 15 representative and relevant sentences for each topic covered in the interview has been extracted. Then we classified the discourses into thematic and sub thematic areas and core ideas. So we obtained a large and rich amount of data (more than 600 verbatims). Data processing and analysis consisted of coding empirical materials. It was important to select relevant parts of interviewee's discourses (key phrase) so as to ensure that the analysis process was not the result of a random selection.

In addition to these interviews, a document-based analysis has been carried out (Angot and Josserand, in Thiétart *et al.*, 2007).

We also use the regional press (daily and economics journals) and the national press as sources of secondary

data. This analysis improves the results of the field research, makes objective the respondents' discourse and assesses the gaps between discourses and practice.

### 3. FINDINGS

The results of our research highlight the difficulties of managing proximity in entrepreneurial ecosystems. Indeed, if the geographic proximity to universities appears to be a factor in the success of entrepreneurial support (3.1.), our observation of inadequate organisational proximity (3.2.) is backed up by the high expectations of stakeholders in this ecosystem, who wish to see universities involved in constructing a form of organised proximity (3.3.).

#### 3.1. The geographic proximity to universities favours the entrepreneurial support

Geographic proximity improves the transmission of knowledge and facilitates a climate of trust (Loilier, 2010). Geographic proximity to a university body and/or research laboratory is considered to be a key factor in the emergence of a favourable environment for start-up entrepreneurship, as emphasised by this director of an incubator:

*“We wanted to create a site that combines research, through the INRA, with biotechnologies linked to anaerobic digestion, as well as teaching, through the IUT, with biotechnologies and process engineering, and entrepreneurship through the incubator. So it’s a sort of Technology Park.”* (director of an incubator).

*“For the incubator, there are already promising signals, such as the creation of a laboratory. The incubator is part of a broader project with the objective of creating collaboration with an IUT in Chemical Process Engineering, and to develop a training program within the framework of the University. A bachelor in Engineering was created in 2011 and this year, a professional bachelor in Eco-technology”* (an elected representative).

The university environment can provide a rich pool of human capital that is easy to tap into, particularly for project holders, as it is made up of human resources located nearby. But these resources are sometimes difficult to access:

*“We looked for interns in the R&D department of the IUT de B., but we didn’t get much of a response. We thought we could develop a link with this university”* (a project holder).

*“It would be good to establish a presence in a university. We are not mature enough yet for that. But it’s a very attractive gateway. The LIRMM<sup>5</sup> might lead us to a university environment. There are only two of us and we have a lot of things to do. It will happen naturally, through the LIRMM or through... We are going to have an intern between now and July on a Research and Development theme; it’s a first-year student at E., with a possible extension in the second and third years”* (a project holder).

Proximity to a university body also favours the project take-up rate by the support structure, as it can procure the following types of resources:

- technological research

*“We have to bring companies and researchers together”* (elected representative); *“we relied on the INRA for that”* (another elected representative on the development of a start-up project).

- potential project holders:

*“We would like to see the L. play a role in bringing in business”* (elected representative); *“it would be great if the area covered by B. could develop postgraduate programmes or even a few research laboratories. It is easier to raise awareness about start-up entrepreneurship among postgraduates”* (director of an incubator); *“I have experienced difficulties establishing links with the university institute”* (udirector of another incubator).

- - quality of the support:

*“We involve universities in project support”* (an elected representative).

<sup>5</sup> Laboratoire d’Informatique, de Robotique et de Microélectronique de Montpellier.

The proximity of resources – the extent to which the activities and resources of those involved are similar or complement one another (Bouba-Olga and Grossetti, 2008) – therefore appears to favour entrepreneurial support at a regional level (Brown and Mason, 2017). It's highlighted by the director of the regional PEPITE, also university professor:

*“Today, we [PEPITE-LR] are considered as a business provider through student entrepreneurship. It is clear that today, it is a target population for all ecosystem stakeholders, including academic incubators”.*

However, lecturers can have a critical approach to this proximity of resources:

*“But sometimes, it feels like being at the service of the entrepreneurial ecosystem more than anything else” (a lecturer).*

There are very real difficulties facing those in areas that are far removed from universities as they try to make themselves heard as well-organised interlocutors or members of well-identified networks.

Geographic proximity may in itself be insufficient, however. When asked about relations with the local network of those working in entrepreneurship, one manager of a centre for start-ups and business services, part of a consular body (chamber of commerce and industry), made no mention of the university structure situated in the local area.

The proximity of contributors can be seen as a framework that is conducive to inter-organisational structure by facilitating meetings, information exchanges and shared knowledge (Rallet, 2002). However, it is a form of proximity that is initially neutral and must be activated by regional contributors (Detchenique, 2013).

Geographic proximity must therefore be accompanied by a form of organised proximity that can facilitate interaction between the different parties involved in the regional entrepreneurial ecosystem.

The geographic distance from resources and university networks can result in a cultural distance.

*“Here, the entrepreneurial culture is not the same as in M., both in terms of resources and research” (the director of an incubator).*

It also generates heterogeneous entrepreneurial dynamics depending on the area's degree of entrepreneurial appeal, as suggested by one elected representative.

*“The problem is that we are not currently in a situation with a lot of choice, but instead desperately searching for project initiators. Our main concern today is to find project holders likely to come to the region and/or develop their project here” (elected representative).*

This supports the conclusions reached by Caron and Torre (2006) about the inequality of space, whereby people are placed in more or less advantageous situations depending on their location.

### 3.2. A lack of organised proximity

The organised proximity is based on the organisational and institutional proximities linked to a sense of similarity (Zimmerman, 2008).

The results of our research point to a lack of organisational proximity, particularly in respect of structures offering support for start-up entrepreneurship: the project holders interviewed emphasised the difficulties they face in developing their projects as part of a research partnership, public/private in most cases.

*“I was put in partnership with a research laboratory but it wasn't suitable”; “It's very hard to work with a research team, a laboratory. Research partnerships are not straightforward. I don't feel it's a success in itself, there are different skills, we don't speak the same language. There are problems relating to timescale, which isn't the same for a laboratory as it is for an entrepreneur” (a project holder).*

Second, the lack of a real institutional proximity is reflected through the mention of language and communication difficulties between academic researchers and project initiators.

*“We were disappointed with the collaboration, with the work that was done. I was hoping for a genuine exchange. There is a contract and when I asked him for accountability... In other projects that are more “engineering-focused”, communication is better. But there is still a gap to be bridged. The engineer working with us has a lot of difficulty communicating with his contact researcher.”* However, according to one expert in entrepreneurial support, *“A large majority of academics are very interested in supporting entrepreneurs and getting involved in projects. There is a clear relationship between entrepreneurs and the research centre, but the project initiators don’t realise it.”* (a project holder)..

On their side, higher education actors underline their difficulties in involving teachers in the challenges of student entrepreneurship. As the director of an engineering school says: *“It is a question of teacher motivation: how to recognize their involvement in project support? When one of the key issues is the ability to introduce research and technology into creative projects. This is the most relevant operational issue: encouraging teacher-researchers”*.

Even if, according to an expert in entrepreneurial support, *“A large majority of lecturers are very interested in helping entrepreneurs and getting involved in projects. The relationship between the holders and the research center is obvious, but the project holders do not realize it”*.

This seems to be confirmed by two lecturers: *“With the professional co-supervisor we have tried to be complementary in our contributions to the student. The professional coach was more in the very practical things, the help that can be mobilized, the different devices, the different training that the student can have. As a result, I was more involved with the student in the use of management tools, such as, how to make a questionnaire, how to build a financing plan; perhaps because of being in contact with the students on a daily basis and being used to interact with them, we have a kind of competence. So perhaps a professional coach is less able to accompany them because he is less attentive to their expectations as he is more familiar with an older audience. We, academics, are more used to students and we can adjust ourselves. Perhaps in the face of a population of young entrepreneurs, our distinctive competence is our ability to be*

*pedagogical, to be patient and more tolerant than the professional world where they are more restrictive objectives and less time to devote to learning”*.

This divergence in the representations, codes and languages used by those working in entrepreneurship at a regional level was also emphasised by the elected representatives we interviewed.

*“The various contributors to entrepreneurial support have organisational approaches, powers and scope to act that are not always straightforward.”* (an elected representative).

There is an underlying critique here of the many layers that make up a region: the overlap between the skills of those involved in entrepreneurship at a regional level undermines the transparency and close ties needed for collective entrepreneurship to work. This sheds light on the following comments by another elected representative.

*“There needs to be some umbrella oversight of initiatives for SATTs to build on research so as to avoid overlaps and reduce the number of institutions and university departments for regional and national structures.”* (an elected representative).

But these divergences could be linked to an approach of the student entrepreneurial support in terms of public service mission that is emphasized by two lecturers:

*“We are in a public institution. We’re in support for our students; otherwise, it’s not the same mission anymore. Since we do not have the same resources as the support structures, our contribution is not comparable to that of specialized structures”* (a lecturer). *“In fact, we have two objectives: to increase awareness and to provide support for emerging projects. It is really a public service mission”*. (a lecturer).

These comments require implicitly the universities to organize a proximity within the territorial entrepreneurial ecosystem for reinforcing their capacity to create value for this ecosystem, with an input of resources, as reminds it a lecturer:

*“We “create” entrepreneurs. We are also a source to the extent that we “build” project carriers. We are a breeding ground for ... I would say the entrepreneurial*

*ecosystem as a whole. Ultimately, economic value is created, albeit indirectly. Because we will put on the market of people who will be a support for entrepreneurship, institutions, entrepreneurial ecosystem” (a lecturer).*

### **3.3. The involvement of universities in building organised proximity: high expectations from stakeholders**

*“The entrepreneurship obligation in Languedoc-Roussillon”* highlighted by one of the experts in entrepreneurship in our research sample has led to high expectations among regional entrepreneurship stakeholders. In particular, these expectations relate to the need to structure the entrepreneurial ecosystem by building organised proximity, in which universities and research laboratories have a significant role to play.

This is in line with the work of Bertrand and Moquay (2004), who point out that collective action requires the activation of organised proximity with different foundations and with greater or lesser degrees of interaction between the parties: networks and formal collaborative bodies based on a sense of belonging. Indeed, the deployment of the entrepreneurship public policies could rely on a collaborative strategic management following Favoreu *et al.* (2016).

This raises the possibility of merging structures with a view to strengthening regional cohesion when it comes to entrepreneurial support.

*“It would be possible to create a merger between the academic incubator and the regional innovation agency” (a support structure technician).*

Entrepreneurship co- support practices are based on the same mind set.

*“In research laboratories that serve as incubation sites, there is no formal support; we support one another” (a support structure technician).*

According to two others technicians, building up organised proximity also requires the development of measures to provide structure.

*“The new SATT is a good way of making the support available more professional and promoting innovation”;*

*“With the SATT, things are going to change.” (a support structure technician).*

The expectations of elected representatives relate in particular to the development of university courses that are connected to the entrepreneurship projects of students.

*“The idea of developing an entrepreneurial function within higher education is an important one”;*

*“Training for students and researchers is weak in legal and commercial skills” (two elected representatives).*

Thus, the capacity of the universities for developing external partnership (Goy, 2015) is questioned. Yet, the challenge of involving universities in efforts to build up organised proximity is made all the more important by the need to bring together project initiators and support structures,

As highlighted by Bécard *et al.* (2008), support structures sometimes struggle to access the pool of available students, and universities, which are often too focused on teaching entrepreneurship, may be deprived of the expertise offered by these structures. The objective is to enable project initiators to access financial resources and develop the crucial managerial skills they need to start their companies. Beyond this, they look to support structures for help in developing their business relations, establishing a presence in business networks and gaining legitimacy (Gartner, 1985; Messeghem and Sammut, 2010).

By relying on organised proximity to share collective rules and representations and by facilitating improved structure, organisational proximity can be seen as a substitute for geographic proximity, as suggested by Boschma (2004).

Finally, there is a need for in-depth thinking on the devices of support to this organisational proximity, namely the operational translation of the public policies (Fixari et Pallez, 2016) promoting the development of the entrepreneurship within the territory, and on the consistency between the political intention and the operational framework (Horvath et Dechamp, 2016). This leads to the question of the place of the universities in these devices.

## CONCLUSION

This research sheds light on the developmental dynamics of regional entrepreneurial ecosystems, which we consider to be dynamics of co-construction and resource activation, whereby the latter is facilitated by a context of multiple proximities. This paper contributes to existing analysis of the way in which these ecosystems are structured: support structures, which are central to the entrepreneurial process (Chabaud *et al.*, 2010), play a crucial role. It highlights the importance of interaction and coordination in entrepreneurial activities in order to improve regional cohesion.

The contribution made by universities in managing proximities in a regional entrepreneurial ecosystem appears to involve a high level of institutional action, notably to avoid any new form of regional division in terms of entrepreneurial dynamics, both in respect of technology transfers between research laboratories and companies and in respect of entrepreneurial support. Universities must be seen as vectors of development in all regions. Regulatory frameworks must therefore be created to authorise the formation of suitable research–region interface structures that are at once based on a sense of belonging and a sense of similarity.

Formalising the coordination underpinning collective entrepreneurial action requires the presence of organisational methods that can facilitate the transfer of knowledge beyond existing geographic proximities (Freel, 2002).

Contractual procedures, more or less explicit, linking universities to stakeholders in the regional entrepreneurial ecosystem can be used to support this formalisation process. These procedures, via a formal reciprocal commitment, have to detail the commitment in terms of inputs and creation of added value for the stakeholders (Hill and Jones, 1992) could support this formalisation. The objective, mainly through public/private partnerships, is to “contractualise” the organised proximity that structures this ecosystem and results in the emergence of a collective entrepreneurial project that favours interaction and coordination between a heterogeneous set of regional actors. We support the view of Bouba-Olga and Grossetti (2008: 13), for whom “*relational proximity can only be*

*constructed by defining the relations between organisations*”. These relations may be based on a formal and reciprocal commitment such as a contract. Universities are therefore in a position to facilitate greater cohesion in the representations of regional stakeholders by generating a cognitive framework. The aim is to develop a regional social capital, as understood by Plociniczak (2003: 456): “*the sum of current or potential, tangible and intangible resources embedded within, available across and derived from the network of relations at the disposal of an individual or collective actor, whereby access to these resources must have positive consequences for action*”.

This is the challenge inherent in the role of universities in France’s new regional structure. Beyond this, universities are clearly the locus of interconnections between several networks, meaning they have a role to play in assembling the resources and skills needed to allow regional ecosystems to generate value.

This analysis reveals difficulties related to the variations and crossroads of action spaces and political games (Bories-Azeau and Loubès, 2013). These problems are also linked to strategic choices made by universities that are not clearly explained (Goy, 2015) and hinder the clarity of their positioning in the entrepreneurial ecosystem. But this framework for action can also be part of territorial policies that promote the cooperation of territorial actors in entrepreneurship and the emergence of a collective project within a “constructed” logic (Horvath and Dechamp, 2016).

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