

Regional Development Platform based on ‘Related Variety’: Some Evidences from Tuscany

Luciana Lazzeretti, Francesco Capone, Tommaso Cinti

Luciana Lazzeretti, Dept. of Business Economics, University of Florence
luciana.lazzeretti@unifi.it

Francesco Capone, Dept. of Business Economics, University of Florence
francesco.capone@unifi.it

Tommaso Cinti, Dept. of Business Economics, University of Florence
tommaso.cinti@unifi.it

Keywords:

Platform, Regional and Local development, Related Variety, Agro-food industries, Tuscany.

JEL Codes:

R58, L66, L83

Regional Development Platform based on ‘Related Variety’: Some Evidences from Tuscany

A recent contribution to regional/local development is the Regional Development Platform (RDP), a tool of local policy and governance meant for the planning and implementation of a regional innovation system with a sustainable and long-lasting competitive advantage.

The aim of the present work is to contribute to the debate on local economic development through platforms of regional development, offering some specific cases in which the RDP model is developed not only as a top-down policy tool in support to innovation, but also as a bottom-up governance tool for the relationships among cognitively-related industries. Finally, we also introduce the idea of the platform as ‘a public space’ able to foster ideas and innovations through cross-fertilisation according to a Related-variety approach.

Plataforma Regional de Desarrollo basada en “Variedad Relacionada”: algunas evidencias de la Toscana

Una contribución reciente al desarrollo local/regional es la Plataforma Regional de Desarrollo (RDP), una herramienta de política y gobernanza local diseñada para planear e implantar un sistema regional de innovación con una ventaja competitiva sustentable y duradera.

El objetivo de este trabajo es contribuir al debate sobre desarrollo económico local mediante plataformas de desarrollo regional, ofreciendo casos específicos en los que el modelo RDP se desarrolla no sólo como una herramienta de apoyo a la innovación de arriba hacia abajo, sino también como una herramienta de gobernanza de abajo hacia arriba para las relaciones entre industrias que están vinculadas de modo cognitivo. Por último presentamos también la idea de la plataforma como un “espacio público” capaz de impulsar ideas e innovaciones a través de fertilización mutua según un enfoque de variedad relacionada.

“Erlazionatutako aniztasunean” oinarritutako Garapeneko Eskualdeko Plataforma: Toskana eskualdeko zenbait adibide

Tokiko/eskualdeko garapenari orain dela gutxi beste ekarpen bat egin zaio, Garapeneko Eskualdeko Plataforma (RDP), tokiko politikako eta gobernantzako lanabesa, lehiatzeko abantaila iraunkorra eskainiko duen berrikuntzako eskualdeko sistema planifikatzeko eta ezartzeko diseinatua.

Lan honen helburua da eskualdeko garapeneko plataformen bidez tokiko garapen ekonomikoaren eztabaidari ekarpena egitea. Horretarako, RDP ereduaren erabilerako hainbat kasu aurkeztu dira. Adibide horietan, RDP eredia berrikuntzari laguntzeko goitik beherako lanabesa da, baina baita behetik gorako gobernantzako lanabesa ere, industrien arteko harremanak modu kognitiboan elkarri lotuta egon daitezzen. Azkenik, plataforma “gune publikoa” izateko ideia ere aurkezten da, ideiak eta berrikuntzak bultzatzeko gai izango dela, elkarrekiko ongarritzearen bidez, erlazionatutako aniztasunaren ikuspegiaren arabera.

1. INTRODUCTION

Literature on industrial agglomerations shows that a concentration of firms, together with institutional actors and societies, promotes the innovative capacity of firms and the overall territorial innovation dynamics. When talking about innovative processes and regional development, many scholars refer to the contributions of the Regional Innovation System (RIS) (Cooke and Morgan 1998; Cooke 2001), which can be considered as an infrastructure supporting innovation within the regional boundaries. The systemic dimension of the regional innovation system partly derives from the associational nature of the regional innovation networks.

Recently, Cooke (2007) underlined how a necessary step to build up a competitive advantage within the RIS is to promote 'related variety' into local economic activities. This concept implies the existence of cognitive relationships among different industries and *filières*. The main advantage for 'related industries' is the higher capacity to absorb innovations from neighbouring sectors through cross-fertilisation.

The concept of 'related variety' is drawn from the studies of the evolutionary economic geography and a 'related variety' industry is defined in terms of industrial sectors that are related because of shared or complementary competences in a cognitive-based definition (Boschma and Iammarino 2007). In other words, a certain degree of cognitive proximity (Nooteboom 2000) gives place to effective communication and interacting learning among different industries.

Then, 'related variety' means that there exists a relationship among industrial sectors and economic activities in terms of (effective and potential) competences, innovations and transfers of knowledge.

The growing importance of the 'related-variety' approach is underlined in some empirical works, such as Frenken and Boschma (2003), who analyse the Dutch metropolitan areas, and find that concentrated firms with a high related variety present a larger growth in terms of GDP for the years 1998-2006; Gulcan and Akgungor (2008) analyze three regions with three cluster initiatives in Turkey – textile and fashion cluster in Istanbul; towel, bathrobe and home textile cluster in Denizli; textile cluster in Gaziantep – highlighting different

growth dynamics between related and unrelated industries from 1990 to 2005 using four digits employment data. Cantwell and Iammarino (2003) demonstrate that the most competitive Italian regions have related-variety economies.

One of the most interesting input for the issue of 'related variety' and regional innovation systems is offered by the concept of Regional Development Platform (RDP) (Härnäs, 2006). RDP is a tool of local policy and governance meant for the planning and implementation of a regional innovation system with a sustainable and long-lasting competitive advantage.

The establishment of a technology platform as the foundation of a policy of regional development is thought in terms of industrial sectors with 'related variety' and defined according to the basic local know-how and competences. Therefore, a regional competitive advantage is founded on the potential businesses made by actors in the technology platform, and on the vision they express at a system level.

In this context, the aim of the present work is to contribute to the debate on local economic development and platforms of regional development, defining at first a hypothesis of Art and food platform for the Tuscany Region which, even with reference to our previous researches (Lazzeretti 2007a; 2007b), we believe might constitute an interesting case to follow according to the related-variety approach. The platform is identified on the basis of the resources and sectors liable of being included in it. Afterwards, the hypothesis is discussed through an analysis of some bottom-up and top-down cases, showing that, at all events, cross-fertilisation among related sectors is effective, and takes place both spontaneously and under the incentive by the action interventions of local bodies. Consequently, the analysis goes on and sets up our platform hypothesis within the recent regional action, which counts the recognition of platforms – among them the ICT for the Made in Italy – in which our hypothesis might partly be included and discussed.

On the whole, we can say this is a topical issue on which a scant literature exists, and empirical cases of platform and related variety are only a few. From our point of view, it is interesting to notice how recent contributions contemplate some instances of rural creativity (Rushton 2008; Capone 2008), and this is why we were encouraged to elaborate on the case of Maremma and the Tuscan art-food system.

The paper is divided into four sections: the first introduces the concept of 'related variety', and illustrates its role for economic development; the second discusses the concept of platform in terms of regional development, and underlines its main characteristics; the third presents the Art and food platform as a bottom-up governance tool for the relationships of cognitively-close industries, and a project financed by Tuscany Region, seen as a top-down policy tool in support to innovation. The final section offers some conclusive remarks and future implications for the concept of platform as a public space.

2. THE REGIONAL DEVELOPMENT PLATFORM AND THE RELATED-VARIETY APPROACH

2.1. The Related-variety approach

When thinking of the innovative process and regional development, many scholars refer to the contribution of Cooke and Morgan (1998) on the regional innovation system, which can be seen as an infrastructure supporting innovation within the regional boundaries. According to the authors, the systemic dimension of a regional system of innovation partly derives from the associative characteristics of innovation regional networks. Going into details, Asheim and Isaksen (2002) presented a taxonomy of three possible regional systems of innovation, introducing the concept of 'learning region'.

The first model is the 'territorially-embedded regional innovation system', which draws on the concepts of industrial district, territorially-rooted tacit knowledge and local atmosphere. An example given by the author is that of Italian industrial districts, because they represent a model in which innovations are mainly *market-driven* and are not independently and organically led by the system.

The second model is the 'regionally-networked innovation system', which is a further development of the previous system, in which public support to innovation and institutional infrastructures has a central role. Usually, this model is typical of big R&D institutions (such as Max Planck, and the like) and displays consistent performances at world level. A few examples of it may be traced in Germany, Austria, and the Scandinavian countries (Rutten and Boekema 2007).

This model is the typical result of policies in support to innovation which result in augmented collaborative ability among territorial actors.

The third model is called 'regionalised national innovation system'. The main innovation activities are carried out outside the region, and the region itself acts as a centre connected to the national or international innovation system. In this model, innovation is developed in a more traditional way, by big enterprises and public or private research centres. The most well-known example of this case is that of the French Technopoles and Science parks.

Independently from the kind of regional systems taken into account, most of the current contributions underline how the building up of a competitive advantage in the regional system requires the promotion of 'related variety' among local economic activities (Cooke 2007; Kitigawa et al. 2008). This concept implies the existence of effective cognitive relationships among different industries and *filières*. The main benefit for 'related industries' is a greater ease of absorbing innovation from nearby sectors by means of innovations and cross-fertilisation.

In this context, some authors (Frenken et al. 2007) pointed out that while some contributions are better disposed towards localisation economies, arguing that sectoral specialisation in a region is a positive factor in the development and innovation process, other works reveal that diversification¹ of a (regional) economy is what better promotes the diffusion of knowledge, since firms develop new ideas through the interrelations with local firms of different industries (that is, through cross-fertilisation). Instead of going into the debate over localisation and diversification economies, we wish to focus on a new approach, whose ambition is to make the most of the positive points existing in both theories: the approach of 'related variety'.

Boschma and Iammarino (2007) underline how literature on agglomerations does not take into account the intersectoral relationship existing among industries, which results in an underestimation of the 'variety' effect that possibly arises in a region through extraregional channels or as the outcome of cross-fertilisation.

¹ Here, we refer to economies *à la* Jacobs.

The new concept of 'related variety' has taken on increasing importance as a possible solution to this debate (Frenken et al. 2004; Cooke and Lazzeretti 2008), even within the framework of specific policies in support to innovation (Harmaakorpi and Melkas 2005).

'Related variety' is an evolutionary concept, derived from evolutionary economic geography: "*industrial sectors that are related in terms of shared or complementary competences (cognitive-based definition). In other words, there is some degree of cognitive proximity required to ensure that effective communication and interactive learning take place, though not too extreme, in order to avoid cognitive lock-in*" (Boschma and Iammarino 2007: 8).

In other words, there is a certain degree of cognitive proximity (Nooteboom 2000), which allows for effective communication and interactive learning (Lundvall 1992). In fact, where such cognitive proximity between industrial sectors is too wide, there is a difficulty of relationships with other subjects, whereas if it is too tight there may be a cognitive 'lock-in' (Nooteboom 2006)².

'Related variety' therefore means that there is a *relatedness* (Lazzeretti, 2008) between economic activities in terms of shared competences and effective knowledge transfer, of (potential and non potential) competences, innovations and transfers of knowledge. The idea of 'absorptive capacity' (Cohen and Levinthal 1989) is extended to a new concept of 'lateral absorptive capacity', according to which in a region or in a cluster, knowledge spillovers from neighbouring industries or business activities can enable a novel process or product innovation to diffuse rapidly among one or more firms or industries (Boschma 2005). The examples of 'related variety' we can think of are the Silicon Valley industry of microprocessors, semiconductors and search engines, or the industries of printing, advanced mechanics and electronics in Southern Germany (Cooke 2007).

2.2. The Regional Development Platform

In this context, one of the most interesting inputs that may be associated with related variety and regional innovation systems is the new concept of

² Martin and Sunley (2006) underline how in regional innovation systems there are not so much cognitive lock-ins based on path-dependence, but place-dependant lock-ins.

Regional Development Platform (RDP). Specifically, the technology platform is a tool of policy for innovation aiming at the planning and implementation of a regional system of innovation able to generate a sustainable and long-lasting (regional) competitive advantage. The foundation of a RDP as a regional development policy is laid on the 'related-variety' industrial sectors and is defined on the basis of the locally-shared knowledge and competences (Asheim et al. 2007).

The main contribution on RDP comes from Harmaakorpi (2006: 1089) who gives this definition of technology platform: *"a regional resource configuration based on the past development trajectories but presenting the future potential to produce competitive advantage existing in the defined resource configurations"*.

The regional competitive advantage is then established on the potential businesses of the actors taking part in the platform and on the vision they convey at systemic level. Therefore, the actors networking in the platform are firms, technological centres, service and research centres and institutions, who all contribute to the definition and progress of the platform itself. A technology platform is often centred on a specific technology, field of knowledge, or combination of the two, thus overcoming the concept of industrial sector, as it makes use of transversal cognitive connections among sectors and cross-fertilisation.

For example, a technology platform was created for the Lathi region in Finland, which was organised around the intersection of the plastic and furniture industries and design, mechatronics and nanotechnologies (Harmaakorpi and Melkas, 2005); a technology platform was also set up in Belgium, with six technological axes: mechatronics, e-security, telematics, microelectronics and nanotechnologies, life sciences and agro industry (Asheim et al. 2007).

The creation of a platform is based on the theory of related variety. The industrial sectors belonging to the platform should be cognitively close and capable of allowing interrelation among actors. Also, the platform aims at supplying a path of development for regional-like, dynamic competences which should be incessantly renewing themselves and self-fuelling so as to create the proper 'regional dynamic competences' and thus renovate completely the configuration of resources over time (Harmaakorpi, 2006). What must be particularly underlined is the ability to build up:

- *learning capability*, which can be defined as the systemic ability to produce and master knowledge in interactive, cumulative and collective learning processes, in order to arrive at the definition of new resources, competences and skills;
- *networking capability*, meant as the ability of interactive networks to involve a specific social capital able to set in motion those successful processes of re-patterning of the internal network resources;
- *leadership capability*, that is the ability of putting into effect leadership actions so as to improve the existing resources and, at the same time, avoid the dangerous events of lock-ins;
- *visionary capability*, which is the ability of describing achievable trajectories of development centred, on the one hand on the already-followed paths, and on the other hand on the exploitation of the opportunities rising from the new socio-techno-economic paradigms.

The theoretical basis for RDPs can be traced back to the paradigms of evolutionary theories, to the dynamics of systemic learning (Ludvall 1992), to the rootedness of epistemic knowledge and meanings, in their codified as well as in their tacit and contextual forms ((Nonaka and Takeuchi 1995).

The systemic evolution of knowledge territories and places, the specific public goods existing at regional level and a complexified social capital, increased by the multiplication of socio-cognitive links, constitute the groundwork for the implementation of RDPs.

Harmaarkorpi has particularly evidenced some of the peculiar characteristics of a RDP (2006). What seems of particular importance is the existence of a tie to past experiences and that the subjects belonging to a platform should have some elements of affinity and coherence with past technological trajectories; however, what should be stressed is that the concept of platform is primarily assigned to lead future development scenarios.

The factors on which there is a sharing of codified and contextual contents and significances take on a particular value; the involvement with past trajectories ensure that there is a sharing of socio-cognitive values and links, which are not necessarily based on the territory, but still find in it those identities, contents and excellences that can be possibly conveyed into the relational dynamics of platforms.

The RDP is a sort of starting point for dialogue and a ground place from which to project the future local and extralocal technological trajectories that can increase techno-scientific excellences and territorial specificities and identities. A policy for the establishment of a technological RDP should follow eight specific steps (Harmaakorpi 2006):

- 1) analysis of the 'in-evolution' technological, social and economic paradigms;
- 2) analysis of the industries and excellence areas within the industries;
- 3) interviews to experts on the possible scenarios;
- 4) evaluation of possible scenarios;
- 5) definition of the potential RDPs;
- 6) conceptualisation of the RDP;
- 7) definition of the central processes in the RDP;
- 8) definition of the process of knowledge creation and of the management body.

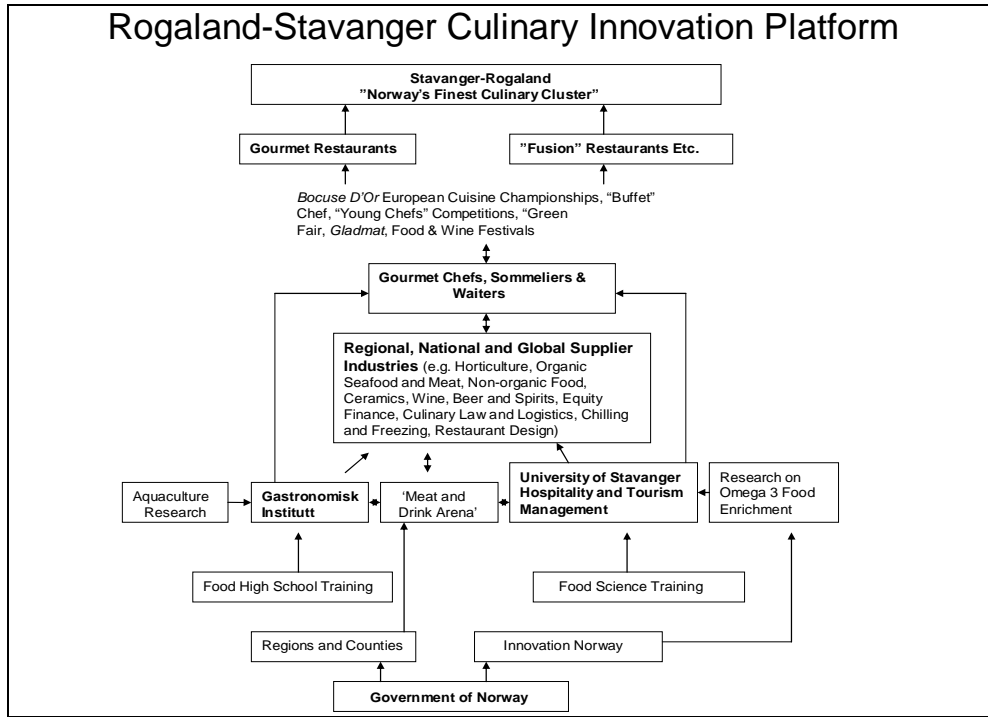
The technological RDP has been applied in a rather detailed manner for the case of the Finland region of Lathi, where it was developed for 'Clean Technology' and biomedical equipments (Harmaakorpi and Melkas, 2005). Instead, in Belgian Flanders six 'related variety' clusters were developed by the University of Leuven, which combine in a regional platform mechatronics, e-security, telematics, microelectronics and nanotechnologies, life sciences and agro industry (Asheim et al. 2007).

The technology platform was adopted not only in high-tech industries, but also in non manufacturing firms, like in the case of the 'Culinary Innovation Platform' (Cooke and Westgaard 2007), which comprises all the actors involved in the development of the agro-food industry in the Norwegian region of Rogaland-Stavager (see Figure 1), or that of the 'Preseli Platform', meant to advance art-food, ceramics and textile design for the Cardiff region in the UK (Cooke 2006), and finally, the 'Art and food platform' designed to analyse the potentials of a regional policy for these two sectors in Tuscany (Lazzeretti 2007a; 2007b).

We can find other minor examples of technology platforms in the cities of Cambridge, Massachusetts, and Cambridge, UK, or in Rehovot in Israel, where technological excellences in the ICT and biotechnologies are put side by side

with world-level research centres and institutes, such as Harvard, the MIT, Cambridge University or the Weizmann Institute (Cooke 2007).

Figure 1 – The Rogaland, Norway Regional Culinary Innovation Platform

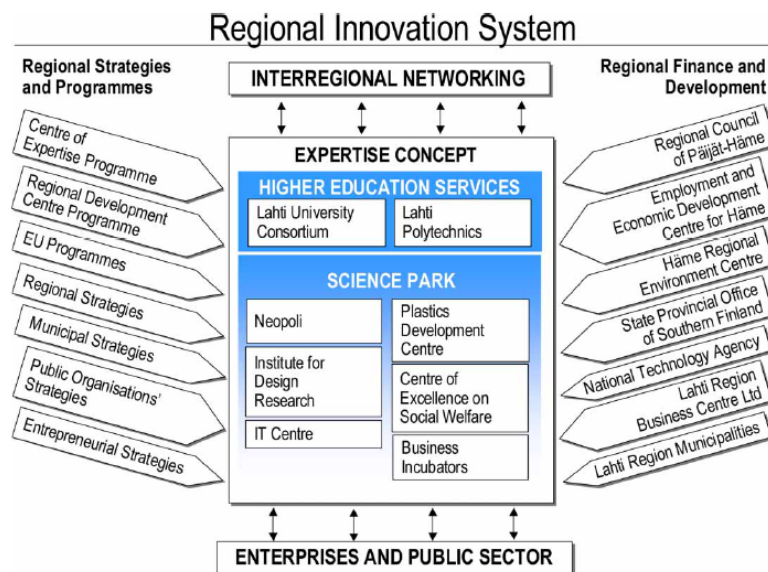


Source: Cooke and Westgaard (2007).

These stages for the platform development necessarily involve all the main actors of the innovation system, so as to build up a vision and shared goals for the future³ (see Figure 2).

³ Further details on this can obviously be found in the contribution by Harmaarkorpi (2006) and Harmaarkorpi and Melkas (2005).

Figure 2 – The Regional Development Platform in Lathi, Finland



Source: Harmaakorpi (2006: 1097).

3. THE ART AND FOOD PLATFORM IN TUSCANY

In this section, we illustrate the case of Tuscany, so as to highlight some of the basics on which the above-described concepts of RDP and related variety are established. In perspective, we think that the case of ‘art and food’ can constitute a good example of the potentialities a territory reveals rather than an already planned and implemented platform. So, what we examine is not a proper RDP, but a configuration of regional resources based on the development of earlier technological trajectories. In prospect, it is possible to build up on it the foundations and systematize the actors, resources and activities liable to renovate these configurations following new trajectories.

At first, we present the multifaceted background of resources and actors in the art-food system so as to catch the potentialities the territory offers (§ 3.1); secondly, we offer some specific cases in which the related-variety model is developed as a bottom-up governance tool for the relationships of cognitively-close industries (§ 3.2) and as a top-down policy tool in support to innovation in the case of a project financed by Tuscany Region (§ 3.3).

3.1 The Tuscan Art-food system

Tuscany is recognised as a creative region of Italy (Lazzeretti et al. 2008), being characterised by a relevant cultural, artistic and environmental heritage, many creative local systems and a significant agro-food industry⁴.

As regards the *agro-food industry*, data from the most recent ISTAT census (2001) show that Tuscany places itself in a sixth position at the national level for exports – with 1,245 millions euros (83% of alimentary products and 17% of agricultural products) – which are mainly directed to areas in North America, Japan and the NICs. The Tuscan market excels for the quality of products, and finds a first-place position in terms of *traditional products* as defined by D.Lgs. 173/99 (for the most part, agricultural goods and, for a minor part, gastronomic goods); it also ranks second in terms of the number of quality assurance labels for high-quality wines (Denominations of origins – DOC); and has a forth-place position for DOP and IGP labels. What's more, the whole aggregate within the 'certified quality' sets Tuscany at a first position with 457 traditional agro-food products (ORT 2005).

One of the most relevant sectors in this field is certainly the *wine industry*. Leaving aside the vineyard and winery production, which is renowned all over the world, we wish to underline some peculiarities of this territory in terms of associations of firms (e.g. 'Chianti DOCG', Consortiums 'Gallo Nero', 'Morellino di Scansano'), wine bars (the so-called *enoteche*), enotourist trails (Antonioli Corigliano, 1999) (there are sixteen *Strade del vino* created by the Tuscany Region) and wine cellars planned by architects, like Renzo Piano and Mario Botta (the so-called 'wine temples').

The high quality of the food and wine sectors also has a positive effect on the Tuscan *restaurant industry*, which according to the classification drawn by the *Gambero Rosso* – one of the most authoritative Italy restaurant guides – includes a restaurant and a wine bar (respectively at the first and fourth

⁴ The traditional food industry has recognised an increasing relevance also at European level (Jordana, 2000).

position) among the chief twenty-five Italian restaurants extracted from a total of 1,804.⁵

Moreover, this territory showed a marked preference for a well-established association, 'Slow Food'. Without going into the philosophy that lays behind this association, what we are concerned about is the peculiar attention given to the protection of food traditions, to the support to small high-quality productions at risk, and to the enhancement of territories by the rejuvenation of old occupations and traditional food workmanship and the preservation of native, ancient varieties of vegetables and fruits (Zanni and Nosi 2004). Tuscany accounts for thirty-five Slow Food local associations and twenty Slow Food presidia (aimed at the preservation of excellence products at risk of 'extinction'), so it qualifies itself as the third 'Slow Food' Italian region, after Sicily and Piedmont.

The *hospitality industry* represents the obvious complement of the above-described jigsaw picture. Tuscany is a land of agrotourisms, which represent a hotel structure recalling peasant and rural traditions and accounts for a 32% share of the Tuscany accommodation facilities, compared to the 8.4% it ranks for the whole of Italy (ISTAT 2003). Another consideration deserving notice is the generation of tourism trademarks. These initiatives can be led at a local level, like in the case of the 'Costa degli Etruschi' – a coastline area offering an integrated organization of enogastronomic itineraries, seaside tourism, archaeological parks, WWF oases, and so on; or, at a wider level, like for 'Benvenuti in Toscana' – the brand name which identifies and marks the Tuscan tourism facilities with the aim of developing a high-quality and transparent offer –, a project promoted by the Tuscany Region, local bodies, professional associations for tourism, consumers associations, trade-unions, the Italian Touring Club, the Association for parks and protected areas, the National Union of Pro Loco, the ARPAT (Agency for the Environmental Protection in Tuscany) and ACI (the Italian Automobile Club).

At the source of this system, we find a solid foundation in the activity of *training*. The training system ranges from schools of general preparation to hotel management or cooking schools, to professional and specialization

⁵ The classification is drawn referring to the award of the so-called 'Tre Forchette' to the best Italian *chefs de cuisine*.

courses and undergraduate studies on tourism management. Besides, a widespread practice, especially in agrotourisms, is to organize courses of Tuscan cooking. There are also courses for managers of territorial development agencies.

The other fundamental component of the art-food system in Tuscany is represented by its *cultural, artistic and environmental heritage*. From this viewpoint, it is one of the richest region in the world, where the foremost expressions of its cultural roots are to be found in the Etruscan and Renaissance vestiges. Notwithstanding this, what stands out as one of the most relevant characteristics of Tuscany is its art variety, which we can appreciate in the diversity of museum forms (museums, churches, botanical gardens, aquariums and zoological gardens, archaeological sites, historical parks, and the like), through the miscellany of museum systems,⁶ and the presence of ecomuseums (aimed at the protection of rural society, with its objects of everyday life as well as landscapes, architectures, know-how, oral traditions, and so on).

Even for this case, the training activity finds territorial centres of excellence: the Institutes of art, the Academy of the Fine Arts and the 'Opificio delle Pietre Dure' in Florence, or the under- and post-graduate studies organized by some universities.

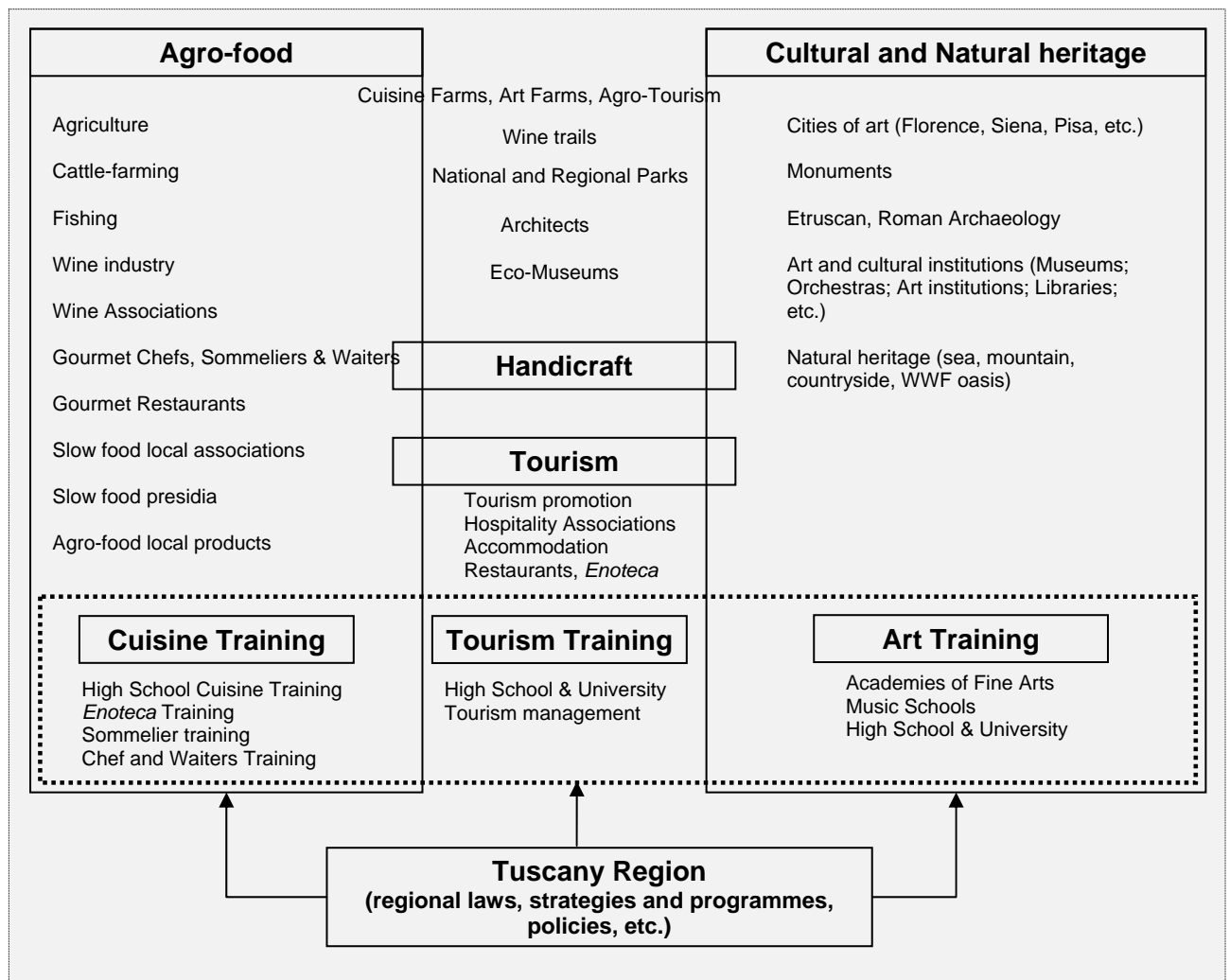
The natural heritage includes some protected areas, such as sixteen WWF Oases, the Natural National Park of 'Foreste Casentinesi, Monte Falterona, Campiglia', or the Natural Regional Park of 'Maremma'.

Finally, the Tuscany Region issued a law aiming at the protection of ancient rural trades (Regional Law n. 15 of 5 March 1997) and the promotion of actions for safeguarding, restoring, improving and popularizing those rural agricultural production processes and activities which bear a particular historical, ethnographic or cultural interest and are in danger of being abandoned and lost.

Figure 3 offers a synthetic outline of the general picture we have so far described.

⁶ A 'museum system' is a model of governance – through the sharing of human, technical, economic and organizational resources – for the coordinated and integrated management of museums and the pattern of relations they entertain, in concert with the diffuse heritage and other cultural institutions, with the area's diverse subjects, by means of inter-institutional agreements (Lazzeretti 2006). See for instance the work of Cinti (2007) for the analysis of the inter-organizational relationships among a museum cluster.

Figure 3 – The Tuscany Art-Food Platform



Source: our elaboration on Lazzeretti 2007a; 2007b.

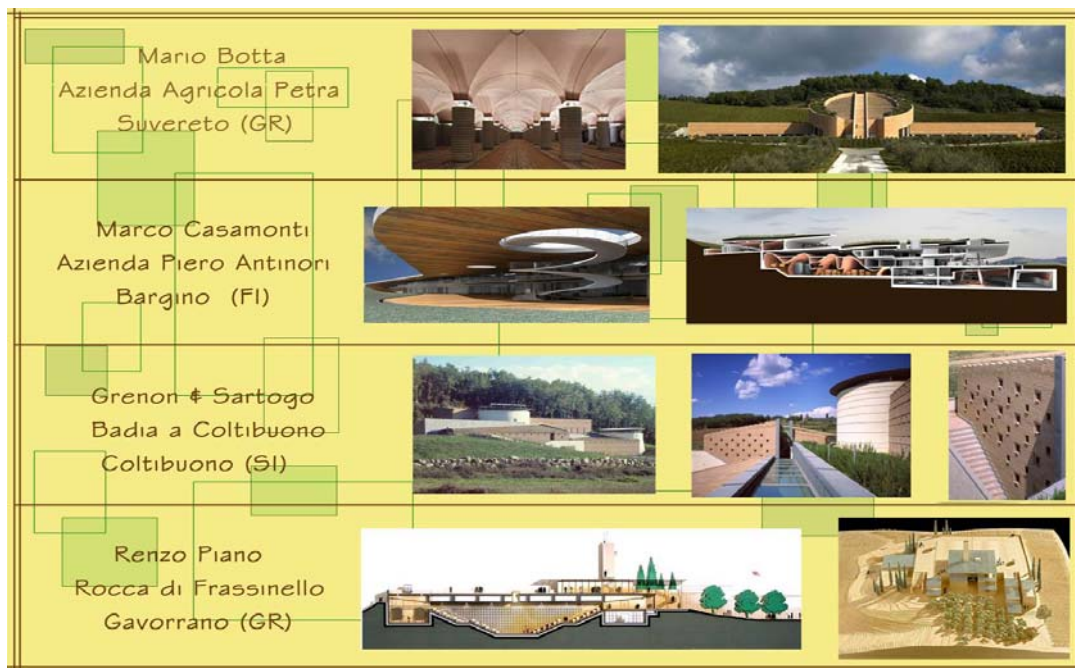
3.2 Related variety: some bottom-up evidences from a rural area (Maremma)

Referring to the ‘potential’ platform represented in Figure 3, we would like to show how Tuscany already presents a few important experiences on which a regional policy aimed at the constitution of an Art and food platform might appeal to. Opening with the examination of only a few pieces of the jigsaw composing the picture, we explore what the territory expresses from a bottom-up perspective. A necessary premise is that the cases under study are all comprised in a wide area in central-southern Tuscany, called Maremma, extending predominantly along the coast of the Tyrrhenian Sea, and comprising territories in the provinces of Livorno and Grosseto. This area, with unique

agricultural features, has been recognised as the typical kind of rural district (Pacciani 2003).

- a) A first suggestion comes from *wine and architecture*. In recent years, in fact, some vineyard and winery firms in Tuscany have commissioned to architects (among whom worldly-renowned creators, like the already-mentioned Mario Botta and Renzo Piano) the building of huge cellars. These projects – of which some are completed, and others are still in progress – managed to associate the primary function of cellars, that is vinification, wine conservation and refining process of wine, to the aesthetic or artistic value of an architectural oeuvre. In other words, wine production becomes an opportunity for enhancing the projectual creativity of architects at the same time enriching the territory with these proper *wine temples*. These, next to the search for high-quality in wine production, also define an ample re-patterning of landscape, associating the beauty and peculiarity of cellars with the quality of wine. What is more, in a few cases, these facilities are also exploited for other purpose, such as the organization of events related to the promotion of the territory.

Figure 4 – Some examples of wine temples



Source: Lazzeretti, 2007a, b;

- b) A second relevant experience is that in which related variety finds expression in the connections between *local traditions*, *archaeology*, *cultural goods*, *environmental resources* and *tourism*. An exemplary case on this issue is constituted by the 'Parks of the Val di Cornia', a system based on the integration among territory, cultural goods and environmental resources. A joint-stock (public-private) company was created for the running of two archeological parks, four natural parks and one museum. The System of the Val di Cornia Parks was implemented thanks to a collaboration among universities, Superintendences to Archaeological, Historical and Environmental properties, Tuscany Region, related Ministries, and the European Community. This system shows a strong integration of local historical-cultural resources and natural ones, of typically-cultural and protection services with tourist-reception ones (such as catering, receptivity, commercial services). In this context, a special card, the 'pArcheoCARD' was issued in agreement with local tour operators so as to broaden the operation of territorial enhancement. This experience led to some interesting innovative results, from the point of view of territorial management (as regards both the conservation and enhancement of cultural and natural resources, and the optimization of tourist potentialities of Tuscany), and, also, in terms of the development of materials and technologies.⁷ This project was successful in turning a territory that was previously characterized by a predominantly industrial-siderurgic economy at risk to a place with a clear-cut cultural and natural orientation, thus creating new employment and fostering small entrepreneurship.
- c) A third case we believe of interest is that of the sectoral interconnections liable of been started up from *natural resources* and from *local fishing tradition*. In the area of Orbetello (at the farthest south of Tuscany), the existence of a lagoon next to the sea produced over time a fishers local community. The importance of the fishing activity for the community sustenance developed in this community a heightened sensibility with

⁷ In this respect, in 2003 Populonia and the Isle of Elba were awarded with the AMS, Historical Landmark Designation, established in 1969 'to identify permanently the many sites and events that have played a prominent part in the discovery, development and growth of metals and metalworking. In 1987, the scope of this award broadened to include all engineered materials' (<http://www.asminternational.org>).

regards to the protection of natural heritage, which was expressed in the establishment of a Regional Natural Park (in 1975), a WWF Oasis (in 1971), a Natural Reserve (around 1900). A more recent kind of valorisation of nature involving both fishing and natural heritage was the creation of an 'Aquarium of Lagoon' (established in 1998) where it is possible to appreciate next to a historical-naturalistic vision of the lagoon ecosystem, also a few fragments of fishers' life with their typical working tools. Another activity that obviously developed is cookery. The uniqueness of local cooking is mainly due to the great variety of fishes populating the lagoon which, with its 2,600 hectares of water, is marked by one of the most particular fish cultivations, that of fish egg.⁸ Its raising dates back to the fifteenth century in a typical Orbetellian tradition born from the fact this fish was used as a return on water exploitation rights. Today, fish egg is produced by only one company, the 'Orbetello Pesca Lagunare srl', to which only fishers belong; they trade fish egg mainly on a wholesale basis, leaving out only a small percentage for local market, so as to satisfy the demand from the many tourists visiting the area. From this same company was born the initiative to create a cooperative society, 'Cooperativa La Peschereccia', which runs the restaurant 'I pescatori' (The Fishers) and organises boat hiking and sport fishing. The peculiarity and rareness of fish egg caused it to be included in Slow Food 'presidia', that is among the products to protect from the risk of 'extinction'.

- d) A fourth and last synergy concerns *natural heritage* and *art*. The south of Tuscany is in fact characterised by the presences of the so-called 'artist gardens', which surely embody the concept of environmental art. These are places, usually born from the initiative of artists,⁹ in which the opportunity is offered to artists from all over the world to create their artworks and place them along a particular route in a historical garden. In this way, they can experiment their creativity, get in touch with their colleagues, and live for a certain period in the territory where their own works will find a placement. This kind of activity creates opportunities

⁸ This product is obtained by the ovarian sac of female mullets, which is pulled out, left in salt and dried.

⁹ The two most important gardens were created by two foreign artists, the Swiss Daniel Spoerri and the French Niki de Saint Phalle.

which should not be undervalued, such as the training of young artists, the research in the art field, the organization of scientific conferences and cultural events. In fact, some *ad hoc* foundations were especially created and are tightly linked to these gardens, which make available, among others, scholarships for working periods and funds devoted to the organization of events or researches.

Figure 5 – Some examples of environmental art



Source: Lazzeretti, 2007a, b;

3.3 Related variety: some top-down evidences from a SDP project (Food and Design)

After having presented some of the possibilities for the constitution of a RDP from a bottom-up standpoint, in this section we draw attention to a top-down process, reporting the case of a financed project, the one developed by the Tuscany Region in the context of the Regional project SDP action 1.7.1 2000-06 'Benchmarking and Foresight Networks for Technology Transfer and Innovation'.

Tuscany Region follows a regional innovation system approach in order to develop suitable support policies to innovation and to technological transfer, according to the industrial district/cluster approach. The territory (Tuscany) and the industrial district model, as a shared system of (social) values, constitute the connective tissue for the renewal of declining traditional sectors in the context of international competition. Tuscany Region wants to encourage economic, non economic and institutional actors to constitute a system based on the triple helix model (Etzkowitz and Leydesdorff 1997), on the one hand to sustain the manufacturing industry embedded in industrial districts and the new ways of revitalization of declining industrial districts and traditional sectors through new technologies, and on the other hand to develop the typical sectors of the new and knowledge economy.

In particular, the Regional project SDP action 1.7.1 2000-06 'Benchmarking and Foresight Networks for Technology Transfer and Innovation'¹⁰ aimed at creating and consolidating networks of firms, research centres, service centres, and public authorities for the development of technology transfer and the spread of innovation in sectors offering significant potential for industrial research and development. Its total budget amounted to € 4,5 millions, and was delivered to thirty-six networks¹¹. A 53% of project applications were made in the Tuscan traditional manufacturing industries (shoe, goldsmith, textile, shipbuilding, mechanical, etc.).

Two out of the thirty-six projects had an application in the agro-food sector. We briefly present the experience of this funding in the technological axis 'ICT for modelling, design and manufacture processing'.

The Food and Design Project focused on the link between Tuscan culture, traditions, agro-food local products, *savoir faire* and embedded know-how, and aimed at applying design techniques, ICT and formal innovation technologies to the agroindustrial sector (both for products and packaging). The network was

¹⁰ SDP stands for 'Single Programming Document', through which the Tuscany Region employs European funds for the development of the economic and productive tissue of the territory. The measure 1.7.1 is focused on fields of specialisation which represent the competitive advantage of the Tuscan system: aerospace technology, opto-electronics, digital technology in general, cultural and environmental heritage, innovative processes in the commercial sector and biotechnology.

¹¹ SDP action 1.7.1 has financed networks that presented projects in one or more of the following eight technological axes: ICT for modelling, design and manufacture processing; micrometrics and nanometrics; new materials; optoelectronics; mechanics and robotics; infomobility; telecommunication networks, data transmission, information services and applications; ICT for life sciences.

composed of twenty-six actors localized all over Tuscany – nine SMEs, eight associations, six territorial bodies, two chambers of commerce, and one university. The key actors were the project leader (Artisans Association of Pisa), which conceived the project and was charged of the interrelations among partners, the design leader (Faculty of Architecture, University of Florence), which was preferred in so far as it formulated the concept of ‘formal innovation’, and a Livornese software house, which was charged with the implementation of a special portal presenting Tuscany as a ‘digital location’.

The underlying idea was to apply *visual design* to a sector which had previously employed it only sparingly. A first attempt was made at transferring the knowledge and project know-how developed within other settings (such as the design of streetcars, undergrounds, and the like) to the agro-food sector. The result will be what architects call ‘formal innovation’: if you change the shape of a product so as to sell it in different markets and other contexts, you will create new opportunities of purchase. In this particular case, some typical products from various areas of Tuscany were re-designed. Consequently, we can say that a product is constituted of two different parts: one is its strict agro-food dimension, and the other is design. Innovation of shapes can be associated, for example, with the artistic heritage (Dome of Florence, or Etruscan Chimera statue), with literature (poets and characters, such as Dante or Pinocchio), or with natural resources (for example, marble, a material that makes the province of Massa Carrara renowned all over the world) (see Figure 6).

Communication and experience of the product are two important factors playing an essential role in international markets, so that it is mandatory to strengthen the action of promotion and reassert the distinctiveness of Italian products from both a qualitative and a value-for-money point of view. This is particularly true in a sector like the agro-food, which has already reached a stage of maturity, and in which the variable ‘price’ has become a decisive factor in consumer choices. So, having selected among the key elements for competitive success, the project choose to add to quality, putting side by side food in itself and the product design, and the latter not only in terms of the fonts and colours employed for its label and packaging, but of the product in itself. In

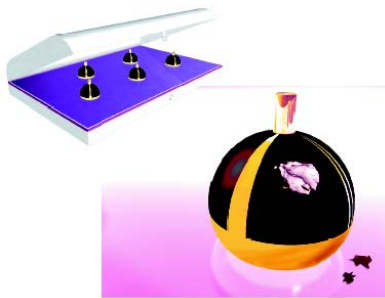
this respect, the opportunity was seized to take advantage of the high design competencies rooted in the Florence territory.

In fact, the most interesting feature of this project was the revitalisation of the sector attained with the introduction of greatly innovative elements which are rooted in the Tuscan territory, such as the formal innovation created and developed by the University of Florence. It should also be underlined how the starting point in this process is typicality, that is local identity, a 'Tuscan likeness'. In other words, the products to choose must already have the distinctive elements of the territory (the so-called 'typical local products').

Figure 6 – Some prototypes from the Food and Design Project

A) DE' BRUNELLESCHI

Chocolates inspired by the renowned Florentine dome with first-rate, jewel-like packaging.



B) CHIMEROTTI

Biscuits made of chestnut flour and almonds. The shape derives from a combination of some typical traits of the Chimera, the mythological animal of Etruscan origin.



Source: our elaboration on Regione Toscana (2006).

4. CONCLUSIONS AND PERSPECTIVES FOR FUTURE RESEARCH

The research question we started from led us to test the hypothesis of building regional development on the idea of an Art and food platform for Tuscany according to the related-variety approach. In this first study we gathered a set of positive signals, coming both from the bottom (Lundquist and Power, 2002) (see the cases of relatedness and cross-fertilisation we found for wine and architecture; archaeology, cultural goods, environmental resources and tourism; natural resources and fishing local traditions; environment and art) and from the top, that is with the regional action interventions in support to innovation networks (like the case of the project on food and design). These signals are also confirmed by a last factor, still referred to the planning action of the Tuscany Region, which counts to use the platform as a strategic tool for the promotion and support of regional development. Four platforms were identified, among which the most interesting to our ends is 'Applications for Made in Italy'¹²; in this field, in fact, our hypothesis of Art and food platform might find an useful placement.

This work was meant to give a contribution to the debate on regional development and its policy and governance tools which has started to consider as a mean of innovation and technological transfer no more only the network and the cluster (Diez 2001; De Propriis 2007), but the platform as well.

This concept has not been sufficiently explored so far by doctrine and the empirical evidences produced are relatively few. In this essay we focused on a hypothesis of development by means of revitalisation, which looks at culture as a factor capable of regenerating the traditional sectors (Lazzeretti and Cinti 2007); so that the Art and food platform was considered as a tool of revitalisation of the traditional sectors of the made in Italy, taking into account not only the urban dimension of the region (that is, the idiosyncratic value of the artistic and cultural heritage of the city of Florence and Tuscany as a whole), but its urban dimension as well. Specifically, we tried and seized the most relevant aspects of innovation (in the case of Maremma) and of technological transfer (in the case of the regional project).

¹² The other three platforms respectively concern: mechanics and mechatronics; life sciences and biotechnologies; ICT technologies. Tuscany Region, SDP Policy 1.7.1, 2007-2013.

This work constitutes only a part of a wider research project, whose object is the analysis of creative places and of the conditions liable to favour creativity and innovation. Our theoretical hypothesis for the future is to consider the platform as a *public space*, that is as a creative *milieu* for starting conversations and producing projectual ideas (Lazzeretti 2008).

In their recent work, *Innovation: The Missing Dimension*, Lester and Piore (2004), underline the importance of informal settings as public spaces liable of creating a fruitful environment for the pursuit of ideas and innovations. Speaking of this, they summon up the case of the Italian industrial districts, the universities and the communities of practice. These are the ideal places for gathering those strategic subjects who may concur to the building up and designing of platforms, through a process of experience sharing, in between path dependence and well-matched future trajectories of development.

Following this logics, the two steps we examined for the Tuscan case can then be considered as the stages of a process, where the first process stage is the identification of a platform hypothesis (see Figure 3), and the second process stage is its first validation through the research of empirical, bottom-up and top-down cases. There is still a third process stage we have not dealt with so far, that is the selection of the strategic actors to start conversation with so as to constitute the epistemic community, which will then initiate and partake the development and innovation paths for the region.

REFERENCES

- Antonioli Corigliano M., 1999, *Strade del vino ed enoturismo: distretti turistici e vie di comunicazione*, Franco Angeli, Milano.
- Asheim, B. and Isaksen, A. 2002, 'Regional Innovation Systems: The integration of local "sticky", and global "ubiquitous knowledge"', *The Journal of Technology Transfer*, 27 (1), January, 77-86.
- Asheim, B.T., R.A. Boschma & P. Cooke (2007), "Constructing regional advantage: platform policy based on related variety and differentiated knowledge bases". Utrecht University, Utrecht.
- Boschma, R. 2005, 'Proximity and innovation: a critical assessment', *Regional Studies*, 39, 61-74.
- Boschma, R. and Frenken, K. (2006), 'Why is economic geography not an evolutionary science? Towards an evolutionary economic geography', *Journal of Economic Geography* 6 (3), 273-302.
- Boschma, R. and Iammarino, S. 2007, 'Related variety and regional growth in Italy', *SPRUE Working paper* No. 162.
- Capone, F., 2008, 'Mapping and analysing creative systems in Italy (1991-2001)', in P. Cooke and L. Lazzeretti (eds), *Creative cities, Cultural Clusters and Local Economic Development*, Cheltenham (UK), Edward Elgar, pp. 338-365.
- Cantwell, J.A. and Iammarino, S. 2003, *Multinational Corporations and European Regional Systems of Innovation*, London and New York: Routledge.
- Cinti, T. 2007, *Museums and Territory. The Relationships Dynamics in the Museum Cluster of Florence*, Rome: Carocci (in Italian).
- Cohen, W. and Levinthal, D. 1989, 'Innovation and learning: the two faces of R&D', *The Economic Journal*, 99, 569-596.
- Cooke, P. 2001, 'Regional innovation systems, clusters and the knowledge economy', *Industrial and Corporate Change*, 10, 945-974.
- Cooke, P. 2006, 'Constructing advantage in Preseli, Pembrokeshire', in J. Osmond (ed.), *The Preseli Papers*, Cardiff, Institute of Welsh Affairs.
- Cooke, P. 2007, 'To construct a regional advantage from Innovation Systems First Build Policy Platforms', *European Planning Studies*, 15 (2), 179-194.

- Cooke, P. and Lazzeretti, L. 2008, 'Introduction', in P. Cooke and L. Lazzeretti (eds), *Creative Cities, Cultural Clusters and Local Economic Development*, Cheltenham (UK), Edward Elgar, pp. 1-22.
- Cooke, P. and Morgan, K. 1998, *The Associational Economy: Firms, Regions and Innovation*, Oxford: Oxford University Press.
- Cooke, P. and Westgaard, H. 2007, *Local Food Networks in Norway*, unpublished ms.
- De Propriis, L., 2007, "Reconciling cohesion and competitiveness through cluster policies", EUNIP Conference, 12th-14th September, Prato
- Diez, M. 2001, "The evaluation of regional innovation and cluster studies policy: toward a participatory approach", *European Planning Studies*, vol. 9 (7): 907-923.
- Etzkowitz, H. and Leydesdorff, L. (eds.) 1997, *Universities in the Global Economy: A Triple Helix of University-Industry-Government Relations*, London: Cassell Academic.
- Frenken, K. and Boschma, R. 2003, "Evolutionary economics and industry location", *Review of Regional Research*, 23, 183-200.
- Frenken K., Van Oort F., Verburg T., Boschma, R., 2004, *Variety and regional economic growth in the Netherlands*, Research Series, Ministry of Economic Affairs, Utrecht.
- Frenken, K., Van Oort, F.G., Verburg, T., 2007, "Related variety, unrelated variety and regional economic growth", *Regional Studies*, 41(5), 685-697.
- Gulcan, Y. and Akgungor, S. 2008, 'Textile cluster initiatives and related variety in Turkey', RSA International Conference *Regions: The Dilemmas of Integration and Competition?* Prague, 27-29 May.
- Harmaakorpi, V. 2006 'Regional Development Platform Method (RDPM) as a tool for regional innovation policy', *European Planning Studies*, 14, 1085-1114.
- Harmaakorpi, V. and Melkas, H. 2005, 'Knowledge management in regional innovation networks: the case of Laths', *European Planning Studies*, 15 (5), 641-660
- ISTAT, 2001, *Census of Industry and Trade*, Rome, ISTAT.
- ISTAT, 2003, *Statistics on Tourism*, Rome, ISTAT.

- Kitigawa, F., Asheim, B., Moodysson, J. and Coenen, L. 2008, 'Constructing regional advantage: towards state of the art of Regional Innovation Policy in Europe', RSA International Conference *Regions: The Dilemmas of Integration and Competition?*, Prague, 27-29 May.
- Jordana J., 2000, "Traditional foods: challenges facing the European food industry", *Food Research International*, n. 33:147-52
- Lazzeretti, L. (ed.) 2006, *Museums Systems in Tuscany*, Firenze: Firenze University Press (in Italian).
- Lazzeretti, L. 2007a, 'The food culture systems in Tuscany', *Regional innovation in traditional industries*, DIME (Dynamics of Institutions and Markets in Europe) & Scuola Superiore Sant'Anna, Volterra, 23 June.
- Lazzeretti, L. 2007b, 'Tuscany: a regional innovation system based on art and food', 5th IRE *Plenary Conference Fostering the Knowledge Economy in Europe: Making Regional Innovation Policies more Innovative*, DG Enterprise, Lynch West County Hotel and Conference Centre Ennis, Shannon (Ireland), 23-25 May.
- Lazzeretti, L. 2008, 'The creative capacity of the culture between lateral proximity and new creative milieu', RSA International Conference *Regions: The Dilemmas of Integration and Competition?*, Prague, 27-29 May.
- Lazzeretti, L. and Cinti, T. 2007, 'Revitalizing declining industrial districts: the case of ornamental stones in Tuscany', International Conference *Regions in Focus?*, Regional Studies Association, Lisbon 2-5 April.
- Lazzeretti, L., Boix, R. and Capone, F. 2008, 'Do creative industries cluster? Mapping creative local production systems in Italy and Spain', forthcoming in *Industry and Innovation*.
- Lester, R.K. and Piore, J.M. 2004, *Innovation. The Missing Dimension*, New York: Harvard University Press.
- Ludvall, B.A. (ed.) 1992, *National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning*, London: Pinter.
- Lundquist P., Power D., 2002, "Putting Porter into practice. Practices of regional cluster building: evidence from Sweden", *European Planning Studies*, 10 (6): 685-704.
- Martin, R. and Sunley, P. 2006, 'Path dependence and regional economic evolution', *Journal of Economic Geography*, 6 (4), 395-437.

- Nonaka, I. and Takeuchi, H. 1995, *The Knowledge-Creating Company*, Oxford: Oxford University Press.
- Nooteboom, B. 2000, *Learning and Innovation in Organizations and Economies*, Oxford: Oxford University Press.
- Nooteboom, B. 2006, 'Innovation, learning and cluster dynamics', in B. Asheim, P. Cooke and R. Martin, *Cluster and Regional Development*, London: Routledge, pp. 137-163.
- ORT 2005, *Caratteri e dinamiche del settore alimentare artigianale in toscana*, Firenze: Osservatorio Regionale Toscano sull'Artigianato.
- Pacciani, A. 2003, *La maremma distretto rurale*, Editrice Il mio amico, Grosseto.
- Prahalad, C.K. and Hamel, G. 1994, *Competing for the Future*, Harvard: Harvard Business School Press.
- Regione Toscana (2006), *Progetto Taste.net*, Mis. 1.7.1 SDP 2 2000-2006, Firenze.
- Rushton, M. 2008, "The arts and economic development in rural America", ACEI International Conference, Boston 12-15 June.
- Rutten, R. and Boekema, F. 2007, 'Spatial innovation systems: theory and cases- an introduction', *European Planning Studies*, 15 (2), 171-178.
- Zanni, L., Nosi C., 2004, "Moving from typical products to food related services. The slow food case as new business paradigm", in *British Food Journal*, vol. 106, pp 779-792.

ORKESTRA

Instituto Vasco de Competitividad – Fundación Deusto

**Mundaiz, 50
20012 Donostia – San Sebastián
t. (+34) 943297327
f. (+34) 943279323**



**Instituto Vasco de
Competitividad**

Fundación Deusto

**Lehiakortasunerako
Euskal Institutua**

Deustu Fundazioa

www.orquestra.deusto.es