

TOME CULTURF **ASAFACTORFOR ECONOMIC AND SOCIAL INNOVATION**





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Notice

Sostenuto, which brought together seven partners of a very different nature, aimed to encourage reflection on social and economic innovation in the Med space. It enabled the experimentation, modeling and dissemination of new management and organizational models in the cultural sector.

With the intent of making a significant contribution and participating in the ongoing mutations, all the partners made consistent efforts to open the debate, confronting opinions, widening the thematic and geographical scope and taking a stance. The recent crises have only reinforced the need for public discussion and alternative views on development.

The publication that puts the final note to the Sostenuto project, based on two complementary volumes, was also written from this perspective.

This first volume, elaborated by the Cultural Economics Research Unit (Econcult) - University of Valencia (Spain), proposes an economic analysis of the relationships between culture, innovation and development in Europe and particularly in the Med space.

The results of Econcult's research are put into perspective in the second volume: "Culture & Innovation(s), Europe seen from the South", coordinated by Relais Culture Europe.

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CHAPTER 01 INTRODUCTION

» Culture as a factor for economic and social innovation: A very current topic

The aim of this paper is to deepen our understanding of the relationships between culture and the evolution of communities in Europe. It stems from a theoretical need to develop and reflect upon a plausible model that defines the effects and relationships between culture and the other dimensions of a the socio-economic reality of a given region but also responds to a more practical need to classify the specific actions of the cultural agents that have been participating for the last three years in the European project Sostenuto while running their daily activities and trying to cope with all the financial, administrative and management difficulties associated to their own projects.

The research conclusions and reflections presented here result from the monitoring of an emerging and lively debate that is currently installing itself in the academic arena and among the think tanks, but also from the interactions with specific projects and organizations, dialogue, forums and conversations with cultural agents. In the framework of the project, those spaces for interaction were established in Paris, Marseille, Valencia, Tuscany, Liguria and Kotor (Montenegro) and adopted various formats, including professional meetings, academic discussions, open forums, seminars, work meetings and interviews.

Our mission was to "modelize", that is, to find a model that demonstrated the significant role that culture plays in economic and social innovation processes. When the project began, in spring 2009, the forest of related publications, articles and reports was not as dense as it is today. A significant portion of the materials included in the bibliographic references were produced in the last three years and some of them are even dated next year. Given this sudden flurry of published works, some of the research objectives established at the start of the project were soon surpassed by the findings presented in various articles and reports. Therefore, we were forced to constantly redefine these objectives.

Initially, we focused on capturing with greater precision delicate concepts like creativity and innovation and understanding what form these processes and attributes take within cultural organizations. The emphasis lay on conceptual analysis and the research was mostly oriented towards the microanalysis of cultural organizations on the basis of questionnaires. However, very recent works published by NESTA (UK) and YProductions (Spain) and various reports produced by KEA European Affairs, the EU, the OECD or the UNCTAD have clarified some of the issues that were being studied. These contributions, complemented by the more academic projects carried out by Xavier Greffe and Jason Potts, were incorporated into chapters 2 and 3.

In light of these new approaches, we reoriented our research in a bid to bring greater added value to the field and concentrated on exploring the macroeconomic relationships between employment in cultural and creative activities and the growth potential of European regions. We decided to follow this research path in view of the surprising correlations evidenced in the works of Power and Nielsen from the European Cluster Observatory. Their studies led us to a group of researchers who were beginning to look into these issues, including Luciana Lazzeretti, Rafael Boix, Antonio Russo, Miguel Hervás, Blanca de Miguel and Pier Luigi Sacco. Some of them have collaborated in this paper, particularly in Chapter 4. During the research and writing process, we also paid special attention to the conferences held by the Regional Science Association International (RSAI) and the Association for Cultural Economics International (ACEI) to stay informed about the latest contributions related to this macroeconomic dimension.

Another contextual topic that we tried to cover in this paper was the role of collective European action within the area of culture. What began as a thorough and painstaking search for European policies related to culture in some way was significantly facilitated by reports such as the Study on the Contribution of Culture to Local and Regional Development – Evidence from the Structural Funds, published by the Centre for Strategy and Evaluation Service and ERICarts. After an exhaustive analysis of Europe's perception about cultural policies, we have concluded that we agree with Christopher Gordon (2010) when he says that "despite the increasing ambition evident in the 'Agenda for Culture', the EU's traditionally tactical and incremental approach has not so far matched the Commission's rhetoric concerning cultural policy as the vital issue it wishes to promote as increasingly important to the economy and prosperity of the EU as a whole".

» The centrality of "cultural and creative activities"

The symbolic structure of a community has always played a relevant role in the configuration of the socio-economic space. However, this influence has become stronger over the past two decades. As the EU indicated in its Green Paper "Unlocking the potential of cultural and creative industries" (2010), factory floors are progressively being replaced by creative communities whose raw material is their ability to imagine, create and innovate. All formulations of the Knowledge or Information Society highlight the increasing importance and centrality of the symbolic dimension in social and economic relationships. However, this perception has become a cliché that lacks the complete and definitive evidence necessary to clearly explain the causes, the variables, the relationships between said variables and their consequences.

In this paper, we hope to move past the conceptual and ideological debate over the terms "cultural industries" and "creative industries", since many authors have already dedicated great efforts to define the precise scope of these terms in the last few months (Potts, 2001; Cunningham, 2011; Garnham, 2011; Zallo, 2011). In our case, we will opt for the expression "cultural and creative activities" to stress that we are not only interested in activities developed in market-mediated spaces but also in all those activities in which human beings, moved by motivations that go beyond the mere occupation of the leisure time and driven by their expressive, communicative and emotional needs, interact creatively or passively with flows of symbolic information, pursuing a certain aesthetic, expressive, cognitive, emotional or spiritual impact on themselves or on others. These interactions can materialize in the form of one-off events or social spaces, and can be channelled through formal, regulated exchange systems (companies, organizations or institutions) or informal, unstructured systems that appear as a natural consequence of social interaction.

Cultural and creative activities could be viewed as opening up the hitherto ossified relation between economics and culture; a relationship no longer to be limited to questions of the arts and market failure (cultural economics), or of rationales for cultural regulation. Instead, there is a focus on the role of media, culture and communications in generating change and growth in what Schumpeter called the capitalist 'engine'. (Cunningham, 2011)

Individuals engage in cultural experiences as a consequence of their expressive, communicative, recreational or spiritual needs. These experiences take place in spaces of cultural exchange through interaction with other individuals in a given social environment, or else manifest themselves as personal experiences. Although the majority of them take place in "non-market" environments, an increasing number of them are developed in market environments in which people essentially create, produce, distribute and/or consume a cultural good or service in exchange for a price, a salary or a capital income.

Despite this conceptual and terminological difficulty, this perspective matches the formulation of the European Union's Lisbon Agenda¹, since cultural and creative activities can contribute to the objectives of "long-lasting economic growth accompanied by a quantitative and qualitative improvement of employment".

The importance of aspects related to the models of creation, production, distribution and consumption of cultural goods and services is closely linked to the growing economic dimension of the market exchange of said goods and services.

Classifications and dimensions

Since the beginning of the 21st century, increasing efforts have been made to produce quantitative data to define the economic dimension of cultural activities and the creative industries. One such investigation revealed that the cultural and creative industries sector in Europe accounts for 2.6% of GDP, generates over 5 million jobs and features high growth indexes, thus being one

^{1.&}quot;To become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion".

of the most dynamic (KEA, 2006). This study uses a classification of activities based on a concentric circles model. This model radiates out from a central core of creative activities (cultural heritage, scenic arts), around which emerge the cultural industries (cinema, music, television), the creative industries (fashion, design, marketing) and related sectors (support, audio and video, etc) in subsequent levels.

However, there is no definitive consensus regarding the definition of the sector. Santagata (2009: 50-55) identifies other five different classification models for cultural and creative industries: the WIPO model, based on intellectual property rights; the cultural industries model, mainly applied in France on the basis of the conceptualization of social research in culture; the DCMS or "Creative Industries" model, which refers to economic activities with creative inputs and intellectual property outputs; UNCTAD (2010), which proposes four activity groups: heritage, arts, media and functional creations; and, finally, the Italian "white paper" model, resulting from the crossing between sectors (material culture, content industry, heritage) and activities of the creative value chain (conception, production and marketing).

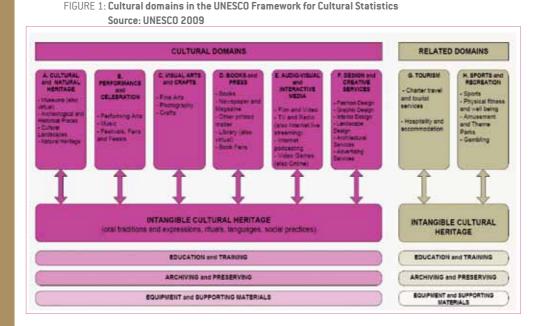
The UNCTAD definition of the creative sector and its related industries is probably the most comprehensive, since it combines aspects related to culture, technology and the creative industries. UNCTAD (2010, p. 8) states that creative industries "(a) are cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs; (b) constitute a set of knowledge-based activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property rights; (c) comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives; (d) stand at the crossroads of the artisan, services and industrial sectors; and (e) constitute a new dynamic sector in world trade".

Each model leads to different figures regarding the sector's contribution to the economy, which oscillates between 3 and 9% of GDP and between 1 and 11% of the total employment. However, all the models agree on the characteristics of the sector's configuration and growth.

The latest UNESCO Framework for Cultural Statistics 2009, which reflects a paradigm shift in the perceptions and functionality of culture, is proof that the institutional vision of the concept of "culture" has become considerably broader.

TABLE 1: Different approaches to Creative Industries

	DCMS 2009 (UK)	WIPO copyright industries (2003)	LEG Eurostat (2000)	KEA European Affairs (2006)	UNCTAD (2010)
Printing		Х			Х
Publishing	х	Х	х	Х	х
Advertising & related services	х	Х	Х	Х	х
Architecture	Х	Х	Х	Х	Х
Arts and antique markets/trade	х	Х			х
Crafts	х	Х	х	Х	х
Design / Specialized design services	х	Х	Х	Х	Х
Designer fashion	Х	Х			Х
Film / Motion picture & video industries	х	х	Х	х	Х
Music / Sound recording industries	х	Х	х	Х	х
Performing arts (theatre, dance, opera, circus, festivals, live entertainment)/ Independent artists, writers & performers	х	х	х	х	х
Photography	Х	Х	х	Х	Х
Radio and television (Broadcasting)	Х	Х	х	Х	Х
Software, computer games and electronic publishing	х	Х	х	х	Х
Heritage / Cultural sites (Libraries and archives, museums, historical and heritage sites, other heritage institutions)			х	х	х
Interactive media			х	Х	
Other visual arts (painting, sculpture)			Х		Х
Copyright collecting societies				Х	
Cultural tourism / recreational services				х	Х
Creative R&D					Х



The increasing centrality of the cultural dimension has led to a certain degree of terminological standardisation and methodological convergence. However, there is still a long way to go before these processes reach maturity.

The conventional approach

There is a conventional explanation for the growth of the creative economy above the average of the economy and for the increasing contribution of cultural and creative activities to the overall GDP of European countries. This increasing contribution comes as a consequence of a paradigm shift within the economy:

- > Tertiarization of the economy: in more developed economies, services, including cultural and creative activities, have experienced a strong growth.
- > Restructuring of the value chain in many economic sectors: certain cultural and creative activities, along with other knowledge-intensive services, have come to play a key role as service providers for all companies (design, communications, etc.).
- > Globalization of economic activity: cultural and creative activities constitute one of the main drivers of this process and have proven effects on attractiveness and international projection.
- Digital technology revolution, which impacts upon the structure of the economy as a whole and in which cultural and creative activities are the main protagonists, along with other sectors. This revolution is having startling, far-reaching

effects, not only in terms of the products and services available on the market, with a significant reduction in the production of symbolic goods, but also in terms of demand, with the potential for new modes of consumption².

In Europe, this shift can be seen as a defensive response of a production system being squeezed by the greater scientific and technological power of the United States and some parts of Asia and the pressure exerted by the emerging economies through the use of medium technologies in production processes. To some extent, culture is therefore becoming a refuge sector in which it is still possible to maintain certain levels of competitiveness on the global market.

However, it is necessary to acknowledge that this group of activities is unlike any other and does not exist in isolation from the rest of the economy and other social fields. Creativity, artistic expression, symbolic production and communication interact with the whole of the socio-economic network. The impact of this sector goes beyond its mere consideration as an economic activity and cultural and creative activities should be valued for their capacity to activate, stimulate, modify and transform the foundations of the socio-economic competitiveness of a given space.

The legitimation of cultural policies

One issue that is often overlooked is that like all public policies, cultural policies are aimed at citizenship, not the cultural industry, the creators, or even culture itself. Thus, the subjects of this kind of policy are the citizens, and while the health of the creative sector is a reasonable requirement, it still remains a means to an end.

The original justification for cultural policies was based on culture's intrinsic capacity to maximize our well-being. This capacity does not derive from the maxim "art for art's sake" or from the artistic value of the work created, but rather from the capacity of creativity, art and culture to affect us cognitively, aesthetically or spiritually and to transform our social, civil, economic or political dimension, stimulating our sense of belonging and identity, building social capital, nurturing the knowledge that gives us autonomy, shaping our sensibilities and the ability to find usefulness in aesthetic enjoyment and amplifying our expressive and communicative abilities. It is what Amartya Sen understands by development, because these are the steps we take in the process by which we improve individual and social control of our symbolic universe – culture–, increasing our capacity to choose between alternative actions.

This conceptual justification of cultural policy as a central component in the deepening of communities' development does not legitimize the policies that

^{2.} From a technical point of view, digitization unifies the system of signs, symbols and images, homogenizes the treatment of signals, exponentially increases the speed at which information is circulated and passed on, and enables the connectivity of technological systems, as well as the mobility that characterizes our techno-economic time and the network society. From a systematic point of view, digitization facilitates qualitative developments such as interoperability, transversality of formats and contents, interactivity, accessibility, trans-formats, ubiquity and multiple access points, compatibility between the fragmentation of communication processes and their open reconstitution, the merging of the micro and the global, etc. [Zallo, R., 2011]

are currently being implemented in European countries, but rather the opposite. In fact, current cultural policies are, for the most part ineffective (they do not achieve the goals they say to pursue), inefficient (even when they do meet their objectives, these could have been achieved through a better use of productive resources) and tremendously unjust (the citizens who bear their costs have lower levels of income and education, while those who benefit from them tend to have higher levels of both).

However, it is also evident that culture is a broad-spectrum vaccine that enables the realization of other development dimensions, including the economic dimension. Our research shows that the size of the cultural sector is the most decisive variable in the differences between European regions in terms of income per capita and that there is a bidirectional causal relationship between culture and wealth. We also know that the centrality of creativity and innovation is changing the role of economic organizations and human resource management models, leading at the same time to the emergence of a liquid labour market that combines liberating trends that enable the workers to live enriching personal development experiences and realities tending towards extreme precarization and self-exploitation. What is more, we now know for a fact that the concentration of cultural and creative activities in a given territory changes the logic and inner workings of its economic dynamics in a much deeper and more complex way than we previously thought as a result of the tendency towards innovation that characterizes these activities. Moreover, the values exported by the "cultural field" to the other socio-economic fields entail an ethical repositioning and are more compatible with the concept of sustainable development. Clearly, the symbolic and creative content of a community, particularly within Europe, no longer exclusively represents its cosmetic dimension. Somehow, it also contains the central pillars of the possibility frontiers of its socio-economic competitiveness and determines its degree of development. However, none of these dynamics are dissociated from individual and collective decisions. Knowledge about the relationship between community and culture, together with greater levels of governance, should allow us to reinforce the social control over these processes in order to maximize culture's push towards models of development that increase our levels of freedom - by satisfying our cultural rights, securing economic growth or achieving other social objectives - and limit or control the risks inherent to market logics, interest groups, inertias or mere incompetence or ignorance. In addition, we must strive to overcome the clichés that speak of the generic goodness of culture and distance ourselves from paranoid conspiracy theories involving big corporations and the logics of globalization. Undoubtedly, culture has the potential to expand the possibility frontiers of our future. Given the current situation in Europe, it would be irresponsible not to make an intelligent use of this potential.

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CHAPTER 02 INNOVATION, CREATIVITY AND CULTURE: DEEPENING AND BROADENING THEIR SCHEME OF RELATIONS

In the past five or six years, countless academic publications, reports and statistics elaborated by European and international organizations have discussed the role of innovation, culture or creativity in development processes. According to UNCTAD¹, "a new development paradigm is emerging from the connections between economy and culture, touching on the economic, cultural, technological and social aspects of development both on a macro and micro level". On its part, the EU highlights that Cultural and Creative Industries² breathe new life into declining local economies and spawn new economic activities, thereby creating new sustainable jobs and making the regions and cities of Europe more attractive. The OECD also stresses the role of the cultural and creative industries as a lever for social and personal development. Such industries generate economic growth and constitute the core of the definition of "glocal competitiveness"³. This is not a phenomenon specific to the European and Western world, but rather a discourse that has taken root in various geographical areas. The Organization of Iberoamerican States underlines in its Cultural Charter⁴ the strategic value of culture in the economy and its fundamental contribution to economic, social and sustainable development in the region. Furthermore, the Agenda 21 for Culture⁵, approved by the World Forum of United Cities and Local Governments in 2004, states that while cultural goods and services should not be seen as mere merchandise, "it is necessary to emphasize the importance of culture as a factor generating wealth and economic development."

This ferment of ideas indicates that the knowledge community – from the world of Academia to think thanks and policy-makers -is growing more aware of culture's increasing centrality in development processes. It should also be noted that this multiplicity of approaches is leading, albeit not without difficulty, to a certain conceptual consensus. Even though culture, innovation, creativity and knowledge have already become key words, there is still quite a long way to go before we understand all the lines of relation and causalities between these concepts and development.

In the next few pages, we will focus on the historical evolution of innovation production, outlining the progressive expansion and democratization of the innovation sources and describing the change from an isolated individual production model (characterized by the figure of the Schumpeterian entrepreneur) to a social, regional and serialized production model where social capital, knowledge, creativity and culture play a key role.

Such dynamics materialize in the gradual diversification of innovation typologies and the growing importance of non-technological innovation linked to

^{1.} UNCTAD (2010): Creative Economy Report 2010.

^{2.} EUROPEAN COMMISSION (2010): GREEN PAPER. Unlocking the potential of cultural and creative industries.

^{3.} OECD(2005): Culture and Local Development.

^{4.} OAS (2006): Ibero-American Cultural Charter.

^{5.} UNITED CITIES AND LOCAL GOVERNMENTS (2004): Agenda 21 for Culture.

the service sector. These two phenomena have been described in works like Hidden Innovation (NESTA, 2007), Consumer-Led Innovation (Georghiou, 2007) and Social Innovation (Mulgan et al, 2007).

The economic nature of innovation interacts with the progressive socialization of its production sources. The third edition of the Oslo Manual (OECD, 2005) raises the need to establish systems of indicators that reflect in a systemic manner the complex nature of innovation processes in the current context of the Knowledge Society. Innovation plays a decisive role in the Europe 2020 Strategy, which aims to promote growth on the basis of environmental sustainability, the fight against social exclusion and the Knowledge Economy.

Technological, social and productive changes entail a greater degree of knowledge "democratization". According to Wagensberg (2002), globalization and global warming impose the need to integrate the different forms of knowledge (scientific, artistic, revealed knowledge) in order to manage the complexity of the new development paradigm and foster good governance. The diversification of innovation sources confers a new role to cultural stakeholders, who acquire a special importance in this context thanks to their creative skills. The ability to innovate within the cultural sector in key issues like experiential goods and services, audience expansion and diversification, collective creation and experimentation, digital developments or new financing and management methods is thus driven by the challenges facing the Europe 2020 Strategy, as we shall see at the end of this chapter in the section devoted to the regulatory framework of the Agenda 21 for Culture.

The impact and interaction of culture on innovation in other productive sectors also constitute a core issue. Keeping in line with the concept of "culturebased creativity" (KEA, 2009), there is a growing recognition of the key role that the combination of personal, cultural and creative skills, technical abilities and social relations can play in stimulating research and development, optimizing human resources management within companies and inspiring society as a whole.

» Some notes on creativity and development

Even though this report does not focus on creativity, this concept is still relevant for our discourse, since it concerns the link between culture and economics. Until nearly four decades ago, the concept of development was limited to the vector of economic growth. The "productivism" development strategy consisted in trying to maximize production in quantitative terms. However, technology proved to be less miraculous than expected and the constraints on natural resources and the environmental risks involved soon came to light. The 1980s saw a greater use of the concept of "sustainable development", which basically meant focusing on the socio-economic processes that made it possible to meet people's needs without compromising the capacity of future generations to satisfy their own needs. From then on, the needs addressed by a specific development model became the result of a social construction process. This process is closely related to the cultural dimension of any given community, which captures the collective dreams, desires and wishes. In his work Development as freedom, Amartya Sen defines development as a process that expands individuals' freedom and increases their autonomy by enhancing their skills and competences. On his part, Jon Hawkes (2001) identifies culture as the fourth pillar of sustainable development, together with the social, economic and environmental dimension. Therefore, it could be said that the definition of development has a "cultural slant".

However, including the cultural dimension in the definition of a community's needs implies a return to the economic sphere, since, as the Council of Europe itself recognizes, culture and creativity are closely interwoven. Creativity is at the very heart of culture, and this in turn creates an environment that allows creativity to blossom. Creativity is also at the heart of innovation – understood as the successful exploitation of new ideas, expressions and forms and as a process that develops new products, new services, new business models and new ways of responding to social needs. Therefore, creativity is paramount to foster the innovation capacity of citizens, organizations, companies and societies. Culture, creativity and innovation are crucial for the competitiveness and growth of our economies and for our societies, even more so in times of rapid change and serious challenges.

Thus, moving away from the purely economic concept of development leads us to culture, which has the ability to harness innovation and set in motion processes of economic growth (and hence, development). In addition, cultural creativity also has an influence on other spheres of cognitive production, affecting scientific, technological, economic and social innovation.

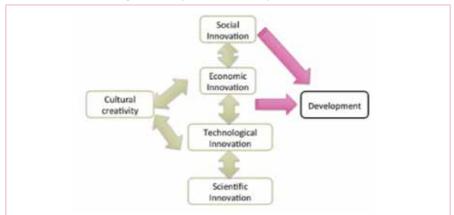


FIGURE 2: Cultural creativity and development. Source: Adapted KEA 2009

All these approaches are faced with the difficulty of defining creativity without determining whether it is an attribute or a process. Creativity is a word with a great many definitions, referring intuitvely to the skill not only of being able to create something new, but also of re-inventing, diluting traditional paradigms, joining up seemingly unrelated dots, and by doing so, offering ways to solve both old and new problems. In economic terms, creativity is a renewable fuel, constantly enhanced and replenished with use. The "competition" between creative stakeholders, rather than saturating the market, attracts and stimulates the participation of new producers (Fonseca, A. 2008).

The conceptual novelty introduced in Figure 2 is that cultural creativity also affects innovation processes, which constitute development processes in themselves if they are regarded as mechanisms for the accumulation of human, social, and relational capital (Sacco, P.L, & Segre, G., 2009).

» The economic concept of innovation

The concept of innovation draws considerably on the work of Josep A. Schumpeter (1883-1950), who defined its guiding principles and characterized it as the driving force for economic development in the capitalist system, in a feedback process that he called "creative destruction". Schumpeter opposed the neoclassical idea of the natural balance and stationary state of the market. According to this author, the economy is built up on closed production and demand cycles with a tendency to stagnate. Only innovations have the ability to upset the balance and trigger phases of growth and development. These cyclical, rupturist and structural dynamics stand out in circumstances such as those of the current crisis, characterized by the need to look for new referents and lifestyles, visualize future scenarios and build alternative employment and development models. The third edition of the Oslo Manual (2005)⁶ broadens the definition of innovation by identifying various typologies other than the one based on technology, which focuses on the primary and secondary productive sectors. In fact, this broader view on innovation is nothing new, since it had already been articulated ten years earlier in the European Commission's Green Paper on Innovation (1995). This document went even further, stressing the active role of society as a whole in the development of innovation. However, the manual did not identify methods to transfer or evaluate the innovation potential of social creativity and the cultural sector.

This document defines innovation as the introduction of a new and significantly improved product (goods or services), process, marketing or organizational method in fields like internal business practice, workplace organization and the relationship between the organizations and their environment (marketing).

- 1> A product innovation entails the introduction of an article or service that is new or significantly improved in terms of its characteristics or the use to which it is put. The improvements can refer to technical specifications, components and materials, embedded computing, user-friendliness or any other functional feature.
- 2> Process innovation means introducing a new or significantly improved production and distribution procedure. This involves significant changes in techniques, materials and/or computer programs.
- 3> A marketing innovation is the implementation of a new commercialization method involving significant alterations in the design or the packaging of a product, its positioning in the market, its promotion or its pricing.
- 4> An organizational innovation happens when a new organizational method is introduced in the practices, the organization of the workplace or the external relations of the company.

This typology confirms the diverse, complex and interactive nature of innovation processes and shows that they involve much more than purely technological and productive aspects, leading in cultural matters in two broad dimensions: knowledge management (dominant values, aesthetic enjoyment, creativity, imagination...) and organizational strategies (open approach and network cooperation). Knowledge and organization interact with each other and are both essential for managing complex processes, as illustrated by the paradigm of governance, based on the principles of anticipation and consensus (Abeledo Sanchis, 2010). As we shall see below, culture plays an important role by providing connections between the two fields of action.

All these forms of innovation need to meet a series of requirements to be considered as such. Firstly, an innovation does not guarantee by itself a real competitive advantage: it needs to go through a process of dissemination and maturation on the market in order to re-educate the consumers and change

^{6.} Nowadays, the Oslo Manual is one of the main protocols used to define, promote and measure innovation-related processes and activities.

their old consumption habits. The second key requirement is that the innovation should prove capable of producing financial benefits to offset the costs of the investment in terms of time, effort and resources.

This latter requirement implies that what matters is not only the innovation itself, but also what is done with it. Therefore, the business models, the administration and the management of innovation are also strategically important. This is where Schumpeter (1934) brings in the decisive figure of the entrepreneur and his role in the promotion of innovation. He argues that "a distinction should be made between economic leadership and mere invention. If they are not successful on the market, in economic terms inventions are irrelevant". That is to say, an invention that cannot be propagated and socialized and does not have a positive impact on the market cannot be considered an innovation. Innovations that "turn out to be successful will be recognized as entrepreneurial benefits".

In addition, Schumpeter refers to non-technological innovations: "The innovations entrepreneurs need to implement do not necessarily have to be inventions". Innovations can also be the result of an original, creative mix of business models, social changes, consumer trends, etc. The key point is that they should be capable of successfully penetrating the market, generating profits, upsetting the existing economic balance and thus favouring a breakup and the subsequent development.

The functions of the entrepreneur were well defined by Schumpeter (1942): "We have seen that the entrepreneur's duties involve reforming or completely overhauling a certain production system, exploiting an invention or a previously untried technical possibility to create a new product". However, he admits that "putting these innovations into practice is hard and constitutes a unique economic function. [...] The entrepreneur's essential role is not inventing something or changing the way the company operates. It is achieving outcomes".

Given the complexity of experimental processes and their cost, the risks involved in the investments linked to the quest for innovations cannot be overlooked. This justifies the importance of implementing industrial property protection measures that guarantee that the company will have a monopoly in the exploitation of the innovation for the length of time required to amortize the investment. Later on, we will examine the significance of these issues for innovation in the cultural sector in terms of access to credit, funding and intellectual property rights.

Regarding innovation management, Schumpeter established two broad theoretical models largely defined by the markets' degree of maturity: Mark I and Mark II. As Malerba and Orsenigo (1994) explain, Mark I is characterized by a less mature goods and services market in which the innovation production system has no structure and is exposed to risk. In this model, the figure of the brilliant, individual entrepreneur is particularly important. It is a young market where new rival companies can easily incorporate technological improvements, progress, leading to a constant erosion of the competitive and technological advantage of well-established firms.

In the Mark II model, the market is more mature and implementing significant innovations is more costly and difficult. The few consolidated companies that prevail are constantly innovating by accumulating technological capabilities with considerable financial outlay. This is a systematic and continuous innovation production model actively promoted through the plans drawn up by the company's R+D+I departments and laboratories.

In the first case, the individual entrepreneurs play a decisive role. In the second, they are ousted by "entrepreneurial organizations" or business structures that can assume the risks inherent to research and the implementation of innovations in the market. These two categories are not exclusive but complementary. Together, they can help us better understand the ways in which innovation is generated and managed. As we shall see throughout this chapter, the historical evolution has brought a third element, related to the new knowledge-based technologies: "the entrepreneurial society". In this kind of society, the configuring role of culture boosts its centrality in socio-economic development processes through elements like territorial identity, historical memory, values and lifestyles.

» Systematizing the production of innovation: From knowledge as a resource to corporate management

According to the analyses conducted by YProductions (2008, 2009), two of the economic expansion and development models that prevailed in the twentieth century – the Japanese and the US model – were an update of Schumpeter's Mark I and Mark II. The Toyota model, which originated in the Japanese economy, focuses on the notion of knowledge as an innovation-generating resource. On the other hand, the American model puts the emphasis on the corporate management of innovation, maximizing the routine in the innovation production process and thus minimizing the risks and uncertainties involved. In both cases, the cultural dimension acquires great importance in the systematization, diversification, combination and socialization of the innovation production processes.

The Toyota Model

The economic development that took place in Japan in the early 1980s was the result of a model based on the continuous generation of innovation similar to Mark II. This period was characterized by a series of changes in business models, management structures and work systems. The ultimate aim was to put knowledge, understood in its broadest sense, at the service of the productive process. As we shall see below, culture was essential to achieve this goal, due to its influence in aspects like the promotion of creativity, the language uses, research and education. The work of Nonaka and Takeuchi (1995) highlights that "knowledge has gone from being a resource to being the resource", indispensable for industrial companies like car manufacturers to produce innovations and thus gain competitive advantage. One of the keys of this line of thought is based on the idea of transforming knowledge, previously regarded as non-integrated and useless element, into an economic asset for the company. As Nonaka and Takeuchi (1995) put it, "to explain how Japanese companies produce new knowledge, we must understand the translation of implicit knowledge into explicit knowledge". This translation process is particularly useful to understand the potential of culture as an innovation factor, given the value acquired by certain forms of knowledge and the role of culture and the arts in their production and management.

It is from this perspective that aspects like creativity, the unconscious, the emotional, the imagination, the abstraction capacity, the symbolic and patrimonial resources, the disruptive capacity, the diverging thought or the aesthetic values acquire a new light, as noted in the report "The Impact of Culture on Creativity" (KEA, 2009).

According to Nonaka and Takeuchi (1995), as opposed to the concept of explicit knowledge, which "can be expressed in words and figures and is easily communicable as pure data, kynetic formulae", implicit knowledge comprises a whole series of concepts, belief systems, intuitions, abilities and an endless list of elements that have not been codified and that are learnt through social participation, experience or tradition. The translation of this implicit knowledge into useful knowledge generates an important source of information and a wide field of potential competitive advantages for the company.

This reconceptualization towards comprehensive forms of knowledge has some very interesting implications in organizational terms. Firstly, significant boundaries are redefined, questioning both the internal divisions (between departments) and the external permeability (with society). Secondly, cooperative action becomes the structure par excellence for the fulfilment of the integration function. In the words of Wagensberg (2002), the network is the architecture of complexity.

Hierarchical organizational forms are replaced by heterarchies based on the cooperation between the producers of the different kinds of knowledge. In this scenario, human resources management is seen as essential.

Communication and language are the cornerstones of this organizational strategy oriented towards a comprehensive production of knowledge. Nonaka and Takeuchi describe how "members of different teams establish new points of view through dialogue and discussion [...]. This type of interaction dynamics favours the transformation of personal knowledge into corporate knowledge". Thus, "no department or group of experts has the exclusive responsibility of producing new knowledge".

The overcoming of communication barriers and the dialogue between different languages and disciplines (like the scientific-technical and the artistic disci-

plines, for example) represent a particularly interesting challenge. The report The Impact of Culture on Creativity (KEA, 2009) highlights two features associated with artists and creators that point in this direction⁷.

Knowledge is now produced by all employees without distinction, so it is imperative to have a strong corporate culture, that is, a set of common ideas and values that enhance the employees' identification with the company. To ensure that the employees are loyal to the company and show a high level of engagement with its mission and vision, it is essential to design cultural strategies that take into account emotional, symbolic, aesthetic and communicative aspects.

It is also necessary to create environments and spaces where the employees can participate and be stimulated and provide them with recreational and entertainment facilities in order to foster their creativity and get them involved in the innovation process⁹. Cultural and recreational activities favour socialization among employees, promote team spirit, foster the development of their creative skills and abilities, increase their self-esteem and motivation and their levels of identification with the company and promote ways of thinking that are critical, imaginative and disruptive with rules and routine with excellent business results. Thus, this kind of activities become particularly valuable in a business strategy focused on knowledge as a resource.

The use of figurative language activates imagination and communication, making it easier for the teams to collaborate. In these strategies, intuition is no longer downplayed as a second-rate form of knowledge and it is understood as a key element of the new epistemological paradigm. This shift opens the door to artists or individuals that promote diverging thought and articulate cognitive processes belittled by the traditional doctrine.

The boundaries between company and society also become a new focus of interest. The permeability of these boundaries and the ability to capture the knowledge that lies beyond academic circles – in social processes, personal experiences or cultural differences – can be valuable assets for the company. From this perspective, the role of culture as a promoter of creative environments rich in social capital^g acquires a strategic dimension.

^{7.} These features are also related to the appearance of two new kinds of players: the interlopers and the polymaths. Fabrice Hybert characterizes artists as interlopers to indicate that they have the ability to assimilate external competences efficiently and act as catalysts for solutions by fusing knowledge and technology (physics, psychology, craftwork, astronomy). On the other hand, "Polymath" refers to a person with a profound knowledge of science and the arts.

^{8.} This goal has led to the emergence of methodologies specifically designed to appeal to employees and put their implicit knowledge into practice. Nonaka and Takeuchi (1995) highlight the importance of "expressing the inexpressible", placing special emphasis on "figurative or symbolic language". Phrases, images or poems are presented to all the members of the production teams in an effort to trigger a more imaginative way of thinking. Formulas like "car evolution" or "tall boy", used by Hiro Watanabe to produce new car models, are good examples of this type of strategy. At Honda, designers, engineers and publicists started working on a vision, a value or a concept rather than on a prototype. Later on, we shall see how this system has been perfected into what Piore and Lester (2004) call "interpretative innovation".

^{9.} Bourdieu (1985) defines social capital as "the sum of real or potential resources related to the property of a lasting network of mutually verified and more or less industrialized relationships". In this context, social capital is presented as a variable of unique importance for the competitiveness of the company.

Corporate Management of Innovation and the Knowledge-based Economy

As YProductions points out, the aim of the American business model is optimizing the systematic innovation processes, minimizing the investment risks and incorporating continuous improvement processes into the routine.

The development of the innovation management model is closely associated with a Drucker-style Knowledge Economy scenario in which knowledge becomes the most important factor in the production chain. "Value is now generated through productivity and innovation, both of which are ways of applying knowledge to work". (Drucker, 1993)

In the middle 1980s, the classic notion of Schumpeterian innovation started to mutate and went from being considered as an element of radical change to being regarded as a system that could be apprehended, analyzed and systematized using well-established methods and parameters. The original Schumpeterian entrepreneur, an individual capable of implementing brilliant, ingenious and risky innovations, progressively transformed into an organization that learnt how to systematize them. This description corresponds to an endogenous innovation process, designed not only to foster innovation but also to establish a continuous innovation system within the company. This can be achieved because, according to Baumol (2002), "the innovation process brings improvements in the R+D system itself, which in turn encourages future innovation. Thus, innovative activity becomes a cumulative process". The innovation systems are standardized, thereby promoting a form of innovation that is much safer and, above all, much more profitable. Innovation also becomes a cumulative element. One innovation can easily lead to another and the more work done, the better the results.

For Baumol (2002), "innovation no longer lies in the realms of the unexpected, in the free exercise of the imagination and creativity incarnated in the essence of the entrepreneur. Now it is dominated by memorandums, tight costs controls and standard procedures supervised by a well-trained 'managerial' class".

These changes are two-sided. On one hand, employees have more freedom in terms of ways of working and the design of their own workday. However, there is no room for misunderstanding: the aim is to strengthen workers' ties with the company and promote the capture of knowledge. This workplace redesigning process has "the adoption of a work culture as its predominant feature, rewarding openness, cooperation and self-management. This type of work routine had already been eliminated in pyramidal organizations".

The study Innovation in culture; A critical approach to the genealogy and uses of the concept (YProductions, 2009) shows that systems aimed at maximizing knowledge production end up monitoring the workers and subjecting their interests to those of the company, thus immersing the employee in the business environment. According to this work, the workers' loss of social capital has important consequences in terms of their resilience and their capacity to negotiate with the management.

» Broadening the sphere of innovation production to incorporate the social dimension

Broadening the sphere of innovation production means going beyond the idea that innovation is only a matter of offer and focusing on the fact that what grants value to product, process or any other type of innovation is a certain degree of social consensus that they also have economic or social use. Potts divides this innovation acceptance process in three phases: origination, adoption and retention (Potts, 2011). Furthermore, "social innovation" not only requires creative processes to be socially recognized. They also need to have a use or value that can be appropriated by a social group. Murray, Calulier-Grice and Mulgan (2010) propose several different definitions for social innovation:

- > Phills, Deiglmeier and Miller: "A novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals. A social innovation can be a product, a production process, or a technology (much like innovation in general), but it can also be a principle, an idea, a piece of legislation, a social movement, an intervention, or some combination of them."
- > NESTA: "Innovation that is explicitly for the social and public good. It is innovation inspired by the desire to meet social needs which can be neglected by traditional forms of private market provision and which have often been poorly served or unresolved by services organized by the State. Social innovation can take place inside or outside public services. It can be developed by the public, private or third sectors. But equally, some innovation developed by these sectors does not qualify as social innovation because it does not directly address major social challenges."
- > OECD Local Economic and Employment Development (LEED) Programme: "Conceptual, process or product change, organizational change and changes in financing that can be related to new relationships with stakeholders and territories. 'Social innovation' seeks new answers to social problems by a) identifying and delivering new services that improve the quality of life of individuals and communities and b) identifying and implementing new labour market integration processes, competences, jobs, and forms of participation that contribute to improve the individuals' position within the workforce."

In the study Innovation in culture; A critical approach to the genealogy and uses of the concept (YProductions 2009), Jaron Rowan describes "social creativity" as a new resource that can be appropriated by corporate players and incorporated into the dynamics of continuous innovation.

The study includes a classification of the different approaches to social creativity, summarized in the following chart: TABLE 2: Connections between the different types of innovation and the cultural sector Source: Authors' adaptation of YProductions (2009)

Innovation typologies (authors)	Description and adaptation to the cultural sector
Creative basins (Corsani, Lazzarato, Negri, 1996)	Creativity basins are made up of subjects, ideas, values, knowledge items, forms of communication and sociability. These basins have a creative potential that goes far beyond the capacity of factories and businesses, emerging as a new resource. Immaterial nature of cultural production. Organizational models typical of networking setups. Overlap between lifestyles and productive activity.
Creative classes (Florida, 2002)	This concept refers to the key role played by creative people as innovation producers and to three attributes that characterize the professionals operating in the sector: technology, talent and tolerance.
Mass creativity and innovation; hidden innovation (NESTA, 2007) (Miles, Green, 2008) (Leadbeater, 2006)	These terms refer to a situation where knowledge research and production processes happen within society. The influence of cultural organizations affects three main areas: promotion of social dialogue (through the critical and transformative will that defines the mission of cultural organizations), widespread use of new technologies (promotion through creative content) and the need to rethink the educational model (inclusion of artistic abilities and creative skills). All these kinds of innovation cannot be captured by traditional indicators due to their reduced size and multiplicity. Open and shared production models, the Hacker ethic and the Pro-Am figure are three referents specific to the cultural and creative organizations associated with hidden innovation.
Consumer- led innovation (Georghiou, 2007)	The interaction between production and consumption is a prominent trait of cultural organizations from several points of view: their role as avantgarde users with alternative lifestyles, their investigative and experimental disposition and the importance of cultural consumption for production.
Social innovation (Mulgan, Ali, Halkett, Sanders, 2007)	"Social innovation understood as the development and implementation of new ideas (products, services and models) that aim to cover society's shortfalls" As opposed to the other productive sectors, the vision and mission of cultural organizations tend to be more slanted towards social goals and the critical dialogue with reality. Usually, these organizations have closer ties with the territories where they operate (local development) and their set of values is integrated in the social change dynamics that feed this kind of innovation.
Institutional innovation (Abeledo, 2010)	The role of culture in the promotion of institutional innovation is reflected in international movements like the Agenda 21 for Culture and specific activities aimed at modernizing public services. Culture is presented as a resource for local development and its management and planning procedures.

In many of these different conceptualizations, "social creativity" is regarded as a resource that can be used for political and economic purposes. This generates a wide range of sets of values through which the potential of these new cultural and social forms can be measured and understood. Part of this "social creativity" is appropriated by economic stakeholders capable of turning these innovation processes into direct economic value. Thus, social creativity is effective in terms of innovation when it is put at the service of communication or promotion campaigns for a specific territory through the commercialization of a certain practice or the transfer of knowledge to the private sector. Innovation happens at the points where the different sectors access this creativity and turn it into an economic asset for their production function. Both the business and financial sectors strive to find ways to access this new resource understood as a huge R+D department that complements traditional spaces for the production of knowledge like universities and research centres.

Nevertheless, the resource of "social creativity" is also available for the technological, the social, the cultural or the political sphere, which leads to a double process: in addition to being producers of "social creativity", these spheres can at the same time benefit from its externalities, generating a dual cycle of production and active consumption exemplified in the figure of the prosumer (Web 2.0) and the free peer-to-peer (P2P) exchanges. This also explains the erosion of older disciplines and economic spheres: the porosity of the limits increases and it is more difficult to differentiate between the social and the cultural, the social and the economic, the commercial and the civilian sphere. In its study, YProductions stresses the fact that in order to turn this creativity into a source for innovation, it is imperative to open up avenues of access. These channels can adopt very different forms, from cultural incubators to specific public policies, programmes that promote the outreach to business, crowdsourcing, etc. Ultimately, we are talking about a profound rethinking of the appropriation rights of the values generated by knowledge-based social interaction. This rethinking entails a review of the very notion of intellectual property.

What is absolutely clear is that the concept of innovation has broadened to include not only the processes that harness creativity to generate economic value but also those that generate social, aesthetic, cognitive or political values that can be appropriated by economic units and social communities. As YProductions indicates, it is imperative to foster the notion of creativity not only as an economic stimulus, but also as a real driving force for social innovation. Bearing that in mind, the Vienna Declaration (2011)¹⁰ foresees that social innovation will become increasingly important not only in terms of social integration and equal opportunities but also in terms of the preservation and increase of the innovative capacity of companies and society as a whole.

Potts and Morrison (2009) suggest that if innovation is changing, the crea-

^{10.} www.socialinnovation2011.eu/wp-content/uploads/2011/09/Vienna-Declaration final 10Nov2011.pdf

tive sector has the capability to help companies adapt to the new situation by correcting the "flaws in their economic performance" and their "aversion to risk, resistance to change and shortsightedness". The services provided by the creative industries can help Small and Medium Enterprises (SMEs from now on) keep up with the complex and increasingly rapid innovation processes, "creating close connections with consumers through mediatized identities and communities, using the social network dynamics and generally guiding the lack of imagination". (Potts, J., Morrison, K., 2009).

» Institutional and political innovation: The Agenda 21 for Culture

The proposal of Agenda 21 for Culture (A21) is an interesting example of innovation applied to institutional environments. Public authorities, like companies, need to set new goals, improve their planning efficiency and create new combinations of policies and public services in the context of globalization and the increasingly complex challenges posed by regional development in terms of environmental quality, social services, etc. Local governments are particularly sensitive to the modernization of public services and the introduction of innovation in the design of public policies because of their close proximity with the general public. This proximity implies that local administrations have the capacity and the responsibility to directly address citizens' needs and demands, altered by the economic and social challenges of globalization and environmental issues.

The municipal initiative A21 was launched in 2004 during the IV Porto Alegre Local Authorities Forum. The programme was based on the UN's Local Agenda 21, aimed at fostering sustainable development throughout the world. The A21, promoted by the international association United Cities and Local Governments (UCLG), proposes an innovative regulatory framework for public action to respond to the major challenges faced by cultural policies in the 21st Century: globalization, environmental sustainability and the knowledge society.

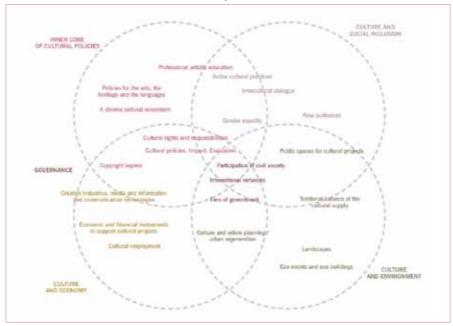
One of the main features of the A21 initiative is that it promotes the key role that cultural policies play in regional development. This constitutes an innovative approach to cultural policies, traditionally considered merely ornamental and detached from socio-economic development processes. In methodological terms, this way of thinking translates into the elaboration of a local cultural plan guided by the principles of the governance paradigm (Evans, B. & Theobald, K; 2004): anticipation and consensus. This completely new way of understanding cultural policy-making, which rejects discretion and improvisation, entails drawing up medium-term strate-gic action plans, identifying future trends through diagnosis and prospective tools and designing indicators to evaluate the consecution of results. The agenda also tries to raise awareness of the need to reach social and institutional consensus on medium-term cultural development strategies by encouraging the general public to become involved in the decision-making process. Another important methodological innovation introduced by this initiative is the horizontal integration of cultural policies with other municipal policies related to environmental issues, town planning, tourism, social integration, etc. This collaboration and coordination between departments is a new way of understanding and implement cultural policies, heretofore isolated and detached from the rest.

In this new framework, local governments also coordinate with regional, national and European authorities to implement cultural policies (vertical integration) and participate in inter-municipal networks to exchange knowledge and best practices, which is crucial to innovation.

These principles for public action in the field of culture foster some of the types of innovation that have already been mentioned in this paper. The promotion of social dialogue is one of the most interesting among them because of its interaction with mass creativity. The Agenda 21 for Culture also promotes social innovation processes through the creation of new public services or the improvement of existing ones. Culture can facilitate innovation in public services by making them more attractive, fostering communication and trust between authorities and citizens, increasing the participation and integration of groups at risk of exclusion, encouraging interaction with service users through proximity and online suggestion boards, implementing creative methods to generate new ideas, identifying emerging problems and promoting experimentation through pilot projects.

The local level has some special features that make it suitable for promoting institutional innovation processes and the modernization of public policies in general. We have already seen the value of urban enclaves in the relationships between culture and development (clustering, regional branding, artistic activities and public spaces planning, etc.). Cities have a dynamic identity that combines the expression of traditional cultures with the creation of new cultural forms. At this level, citizens have greater expectations regarding transparency, democracy, public services and quality of life in general. What they are looking for is a city capable of generating new meanings through social participation. Therefore, cities need to be involved in the elaboration and implementation of a new model of cultural policy, contributing to its design from the "think globally, act locally" perspective and also taking into account the complementary approach "think locally, act globally".

The UCLG report "Culture and Sustainable Development: Examples of Institutional Innovation and Proposal of a New Cultural Policy Profile" suggests that the design of new models of cultural policy should take into account five key dimensions: social inclusion, environment, economy, governance and culture. The report includes a graphical representation of this conceptual framework:





The diagram offers a global vision where culture is not simply a resource and retains its intrinsic value as the central axis of cultural policies. It also shows the dialogue between culture and governance, the environment, the economy and other social dimensions.

Several cities, provinces, networks of cities and international organizations have initiated local cultural governance processes. Examples include Geneva, Montreal, Barcelona, Lille and Québec, Eurocities, the Cultural Development Network in Victoria (Australia), the Observatory of Cultural Policies in Africa, the Council of Europe and the European Commission.

The UCLG report identifies 21 policy areas and groups them in five interacting dimensions:

Design of cultural projects:

- Definition of the mission and vision of local cultural policies, setting of objectives and impact evaluation
- Promotion of citizens' rights and definition of their cultural responsibilities
- Diagnosis of the cultural environment and the stakeholders (diversity, size, needs, etc.)
- Study of specific sectors (arts, heritage, etc.)
- Development of professional arts education programmes
- Design of an adequate legal framework and establishment of an Intellectual Property Rights regime

Identification of joint projects between the municipal departments of culture and social inclusion:

- Promotion of cultural participation among citizens, particularly minority groups (groups at risk of exclusion, teenagers, people with disabilities, senior citizens, etc.)
- Launching of intercultural dialogue programmes
- Promotion of a gender approach to cultural policy

Coordination of cultural and environmental activities:

- Integration of environmental criteria in cultural policies, design of cultural events and facilities with minimal impact on the environment
- Promotion of territorial balance in cultural offer
- Use of cultural contents in urban planning: regeneration of neglected areas, use of public spaces
- Integration of natural and cultural landscapes, coordination between cultural and environmental tourism

The last two policy areas refer to artistic activities as a tool for urban regeneration and the integration of marginalized groups, which in turn contributes to crime prevention and the promotion of healthy attitudes. These activities are seen as a resource that can be used to fight social exclusion and improve the quality of urban life.

Culture and economy:

- Promotion of Cultural and Creative Industries (CCIs), media and new information technologies
- Cultural employment
- Diversification of the economic and financial instruments designed to support culture

Governance:

- Distribution of competences to avoid an overlap in the regions' cultural offer and optimize its territorial distribution
- Promotion of mechanisms to encourage participation of the general public, facilitating citizens' involvement in the decision-making processes to reduce the levels of discretion (cultural democracy)
- Participation in international cooperation networks and exchange of best practices in the field of culture and development

» Conclusions: Innovation, creativity and culture

In this chapter, we have described the historical evolution of the concept of innovation and we have identified a trend towards the broadening and deepening of the agents involved in its production.

The broadening of the stakeholders that participate in innovation processes results from an emerging democratization of knowledge and the increasing importance attached to the integration of its different forms (scientific, implicit, symbolic, etc.) since the appearance of the Toyota model. The characteristics of the Knowledge Society and the influence of the New Information and Communication Technologies (NICT) have only served to accelerate this trend, given the weight of the productive activities associated with the creative economy and the recognition of talent and intangible values (symbols, meanings, experiences, emotions, etc.).

The implications in terms of corporate reorganization are decisive. In the section devoted to corporate management, we described a shift from traditional Fordist pyramidal hierarchies to new models based on open horizontal structures and network cooperation where the employees' autonomy and commitment and the promotion of talent constitute a determining factor for the competitiveness of the company.

"Digital technologies play an important role in this intangible economy as they provide new forms of social exchanges and contribute significantly to new expressions of creativity. (...) However, the successes of free and open source software and services such as Wikipedia also belong to a trend that prefigures an economy in which sharing and exchanging knowledge and skills is not mainly oriented to securing financial gain. These new forms of exchange give more importance to social ends and therefore culture-based creativity. Arts and culture (and music in particular) is often the basis on which social networking is developed (peer-to-peer file sharing)". (KEA, 2009)

On the other hand, the deepening trend in the production of innovation has led to a redefinition of the classic figure of the Schumpeterian entrepreneur on the basis of a combination of the Mark I and Mark II theoretical models. Thus, entrepreneurs, leadership, experimentation and achievement acquire a new role in a context of open collective interaction.

As we shall see, cultural and creative organizations gain an unprecedented and two-fold centrality in this new framework. From the perspective of the broadening dynamic, the activities carried out by cultural stakeholders have a great influence on elements like social capital, mass creativity and hidden innovation, all of them crucial for a region's competitiveness. From the perspective of the deepening dynamic, cultural and creative organizations become key players due to their specific professional profile and their entrepreneurial spirit.

If we take a closer look at the production function of cultural and creative organizations, we realize that they are intimately connected with the different

types of emerging innovation studied in this chapter.

In short, culture has a great and yet unexplored potential in a context defined by a new interpretation of the concept of innovation, understood as the creation of possibilities (Rodríguez, 2007). From this perspective, the notion of likely or possible futures, closely related to the science of forecasting, acquires special importance. This concept is not only applied to product and services innovation, but also to alternative sets of values and development models. The reinterpretation of innovation casts a new light on economic sciences, the identification of emerging trends and the determination of the markets' future evolution. It is in this sense that intellectual property legislation becomes crucial.

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CHAPTER D3 A MICROECONOMIC APPROACH: MAIN CHARACTERISTICS OFTHE PRODUCTION FUNCTION IN A CULTURAL ORGANIZATION

» Introduction

The first chapter outlined the scenario of opportunities with which the cultural sector is presented as a result of the broadening and deepening trend found in the innovation production process. The ability of cultural stakeholders to manage their implicit and explicit knowledge is at the core of this issue. The challenges faced by socio-economic development in the 21st Century (environmental sustainability, globalization, Knowledge Society, etc.) define a scenario where the centrality of culture in regional development is reinforced through the sequence creativity>innovation>competitiveness>well-being. This sequence is fully in line with the Western perspective of creativity represented by Lubart (1999), which applies it to products and to imaginative and original problem-solving methods. This approach to creativity also focuses to a certain extent on individualism, work ethic and faith in progress.

But what real possibilities does the cultural sector have of repositioning itself? To what extent can it develop the innovations needed to face that challenge?

Cultural organizations and the local cultural system

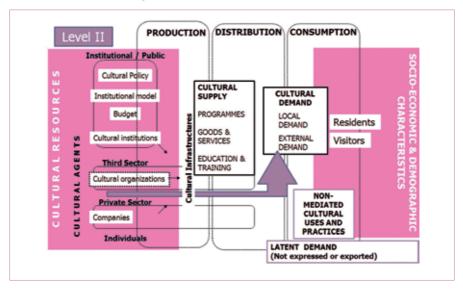
Fistly, it is necessary to make some prior considerations regarding the sectoral context of cultural organizations. The expression 'Local Cultural System' (LCS) (Carrasco, 1999) is a conceptual apparatus that tries to synthesize all the elements, variables and interdependent relationships that intervene in the configuration of a local cultural reality. By the word "system" we mean a more or less complete approach to the cultural relationships at play in a specific territory. Obviously, if this approach was more systemic (and less simplified), that is to cau if it took into account all the passible dimensions of a region's cultural

say, if it took into account all the possible dimensions of a region's cultural resources, it would have to include the symbolic, economic, political, social, environmental, artistic, educational and training spheres.

The LCS is structured in three dimensions:

- > Level I, which studies the relationships between local and supralocal entities.
- > Level II, which refers to the elements and relationships that determine cultural supply and demand at the local level.
- > Level III, which connects the different cultural systems horizontally.

FIGURE 4: The Local Cultural System



Level II is possibly the most complex, because the supply and demand of cultural goods and services in a specific region is determined by a great number of elements and relationships. It is important to distinguish between two groups of elements: those under the direct influence of the institutional structure (cultural policy, budgets, institutional model, infrastructure, and, to a lesser extent, cultural resources) and the group that includes the cultural agents. Among these stakeholders we find cultural organizations, which have an important role to play. These cultural organizations include cultural enterprises, associations and public entities in charge of cultural policy.

Some characteristics of cultural organizations

It is at the core of cultural organizations that the increasing convergence between technological, social, environmental, economic and cultural aspects manifests itself, reconfiguring the relationship between human creativity and regional development.

This kind of organizations can be analyzed applying the model proposed by the UK Technology Strategy Board (2009), which divides the cultural and creative sector into:

- > Suppliers of creative services (traditionally non-subsidized): design, architecture, advertisement.
- > Suppliers of creative content (mainly non-subsidized): publishing, music, fashion, radio and television, videogames.
- > Suppliers of creative and original experiences (mostly subsidized): performing and visual arts.

The analysis of the results of a questionnaire distributed among more than 150 European cultural organizations in the framework of our research revealed that 2/3 were private or non-governmental, only 9% were public/private consortia and just over 1/5 of them were public^{*i*}.

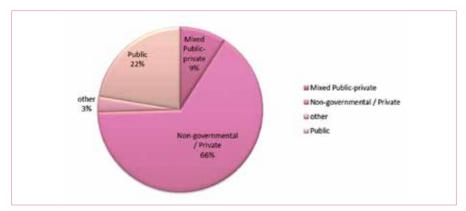


FIGURE 5: Classification of cultural organizations

Although these organizations showed different territorial orientations, most of them had influence in the local sphere. However, they displayed high levels of connectivity, since nearly 50% operated within the European sphere and over 25% had worldwide operations.

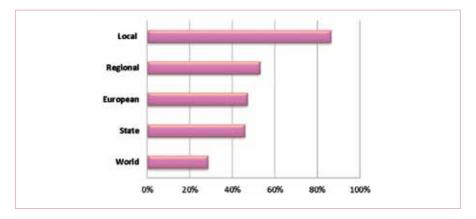


FIGURE 6: Classification of cultural organizations according to their area of geographical activity

^{1.} The exact statistical significance of this sample is unknown, since it is impossible to ascertain the dimension of the sector due to the heterogeneity of the organizations involved.

In most cases, the reasons behind the creation of cultural organizations were related to demand factors like the satisfaction of an obvious need for arts and culture (39% of the organizations considered this to be a very important reason). However, the supply factor was also important, since 41% of the organizations indicated that they were created at the initiative of a charismatic leader and another 40% highlighted the importance of groups of cultural professionals with converging interests. On the contrary, the existence of financial incentives was only relevant for 13% of the organizations.

In terms of life cycle, the organizations that answered the questionnaire saw themselves as emerging entities during the first five years and considered that they had attained stability or maturity after 10 to 20 years of activity. About 8-9% of them were redefining their objectives. At the time of creation, the average age of its members was 34 years old and women represented around 45.6% of the workforce. However, that percentage rose to 52% later on, which means that there tend to be more men involved in the establishment of cultural organizations, whereas women go on board throughout their development.

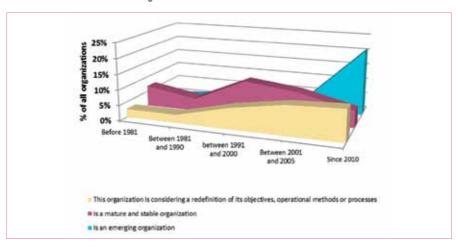


FIGURE 7: Year of creation and cycle

Almost 80% of the cultural organizations surveyed operated in more than two artistic fields or disciplines.

Regarding the perception of development difficulties, 11.7% of the organizations described them as almost insurmountable, 35.8% indicated that they had to make considerable efforts to stay afloat and the rest thought that although it required a great deal of effort, the organization was not any more difficult to maintain than any other type of organization. Slightly more than 5% of respondents thought that their development had been particularly easy.

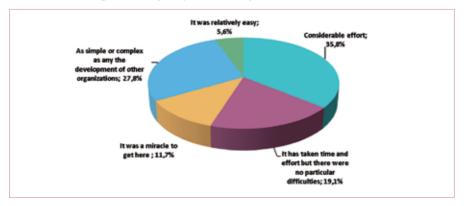


FIGURE 8: Cultural organizations' perception of development difficulties

Finally, almost 70% of the cultural organizations began their activities with a budget of less than $10,000 \notin$ and another 18% did so with a budget that oscillated between 10,000 and 100,000 \notin .

Market-oriented cultural organizations

According to the report "The Entrepreneurial Dimension of Cultural and Creative Industries" (HKU, 2010), which uses a broad definition of the creative sector, the subsectors with the highest employment rates in Europe are fashion (31.41% of the total sectoral workforce), design (20.12%), architecture (10.74%) and books and press (9.89%), followed at a great distance by music (0.38%), performing arts (2.43%) and visual arts (3.58%).

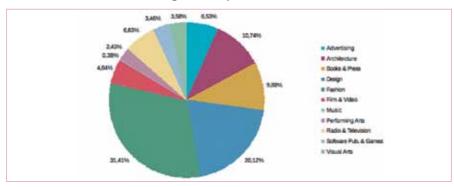


FIGURE 9: Classification of cultural organizations per sector. Source: HKU, 2010

As we've already mentioned, cultural and creative entrepreneurs also work in other productive sectors, fostering the development of "creative capabilities". The UK Technology Strategy Board estimated in 2009 that 800,000 of the 1.1 million people directly employed in the country's creative industries work outside the cultural and creative sector. This indicates that the impact of the CCIs

on the economy as a whole is still greater than suggested by the statistics. If we look at turnover, the largest figures correspond to fashion (247,189,494 thousand euros), design (157,115,932 thousand euros) and radio and television (155,192,531 thousand euros).

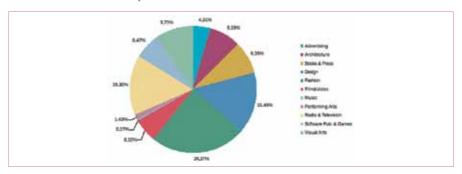


FIGURE 10: Share of turnover per sector. Source: HKU, 2010

Considering the previous data and the model of the UK Technology Strategy Board (2009), the creative contents and services providers are the companies within the sector of the Cultural and Creative Industries (CCIs) that have benefited the most from the growth of the digital market.

In terms of business dimension, the cultural statistics issued by Eurostat (2011) show that about 80% of the CCIs are Small and Medium Enteprises (SMEs) or microenterprises. In fact, CCI workers are twice as likely to be self-employed than the average of the economy.

As shown in Figure 11, almost 60% of the microenterprises have between 1 and 3 employees. Although the vast majority of CCI businesses are microenterprises (with less than 10 employees), they are only responsible for a modest share of the sector's turnover. Large companies (over 50 employees) only represent 1% of the total number of enterprises but generate more than 40% of the annual turnover.

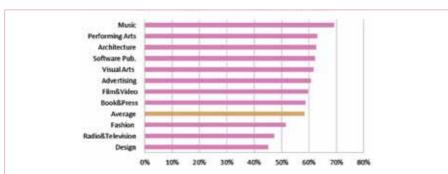


FIGURE 11: Dimension of cultural organizations. Share of organizations with less than 3 employees Source: HKU 2010 Therefore, the most significant feature of the cultural and creative sector in terms of business dimension is the virtual inexistence of medium-size enterprises and the great difficulties that SMEs experience to reach that status. The gap between the "large players" and the microenterprises hinders the growth of the latter and makes it more difficult for the "small stakeholders" to penetrate the market. This gap also generates project scalability problems and leads to the establishmet of very asymmetrical power relationships between the agents.

» The production function of cultural organizations

Once we have introduced some general considerations about the sector, the next step is identifying the elements that integrate the production function of a cultural organization. We will do so by conducting an input-output analysis, which involves characterizing the typology of productive resources, analyzing the production processes and the organizational and management methods, typifying the products and services generated and evaluating their impacts. This methodology, illustrated in the diagram below, will allow us to identify in detail the innovative elements associated with cultural organizations.

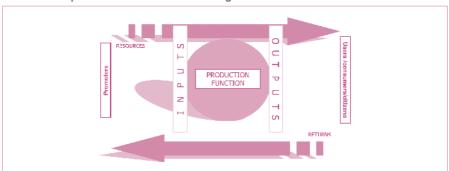


FIGURE 12: The production function of a cultural organization

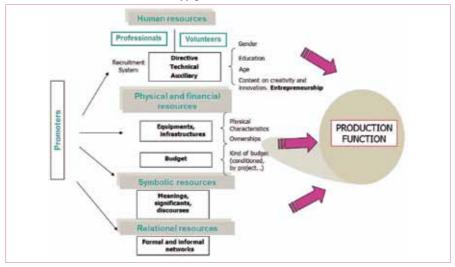
A cultural organization is a structure driven by the initiative or will of a group of promoters who transform a series of resources (inputs) – into another series of services and products (outputs) oriented towards a more or less determinate number of users or consumers using a series of processes (the production function).

The productive resources of a cultural and creative organization

In this section, we will take a closer look at the kind of resources that cultural organizations incorporate into their production function in order to determine their relevance and analyze their impact on innovation processes. At a first glance, the most remarkable aspects in this regard are the intensive use of knowledge in CCI productive processes and the specificities of the sector's human resources (creative skills, attitude towards risk, ability to combine disciplines, aptitude for interpretative and open innovation processes, etc.). The main resources considered are:

- > Human resources
- > Infrastructures and equipment
- > Economic resources
- > Symbolic resources
- > Relational capital

FIGURE 13: Production function: The supply side



Human resources

The level of competitiveness of creative activities is closely linked to innovation processes, which are based on the materialization of creativity, talent, the detection of new opportunities and the search for solutions. Since these attributes are usually found in individuals rather than in structures or organizations, the management of human resources becomes a strategic element in social and economic activities.

The human dimension of the productive activity is quite apparent in the cultural and creative economy and extends to other social and economic activities. Factors like the role of leadership, the creation of less structured working environments that allow for more informal creative contributions, multifunctionality or the identification of a given occupation with a certain way of life² are taking root in human resources management, influencing organizations in both the creative and

^{2.} The "bohemian lifestyle", which according to some authors identifies the CCI labor relations model, is based on self-realization, a certain differentiation from other parts of society through dress codes and behaviour, a rejection of the principles of strict economic rationality, the vocational dimension of professional development, the subordination of private life to work and the interpretation of working life according artistic categories. (Florida, 2002; Brooks, 2000).

the non-creative sectors. We must also take into account that an important number of cultural and creative workers carry out their activity outside the cultural sector. As we have already pointed out, the production function of cultural organizations is labour and knowledge intensive, which is why this section deserves special attention.

On the whole, cultural workers are known for:

- > High levels of training, above the average of the economy.
- > Higher creative skills: imagination, divergent thought, aesthetic values, critical spirit, etc.
- > A cognitive nature that gives them the ability to turn the management of implicit and explicit knowledge into their own livelihood. Their lifestyles are integrated into the way they make a living.
- > An occupational choice based on pleasure, prestige and entertainment.
- > Better communication skills.
- > Greater leadership abilities and a will to stay independent from rigid hierarchies.
- > A greater aptitude for teamwork, networking and cooperation (social) values.
- > Greater geographical mobility and higher language skills.

The artistic and creative profile determines a will for independence and autonomy that are reflected in the professional philosophy of the entrepreneur. This affects the business models and the kinds of contracts found in the cultural sector.

The Cultural and Creative Industries (CCIs) are characterized by levels of training that are relatively higher than those of the other sectors. According to the report "The Economy of Culture in Europe" (KEA, 2006), 46.8% of cultural workers have a university degree at least, in comparison to 25.7% of the total workforce. The report also highlights the following differential aspects:

- > The ratio of freelancers in the CCIs more than doubles that of the whole economy.
- > The sector employs 17% of the temporary workforce, compared to an average of 13.3% for the economy as a whole.
- > There is a higher volume of part-time workers and a higher percentage of second jobs than in the rest of the economy.

However, there are no significant differences in terms of sex or age.

Entrepreneurship

The entrepreneurial will constitutes another interpretative key of the Cultural and Creative Industries. Although full consensus on this issue has not yet been reached, the concept of the cultural entrepreneur has gained increasing recognition over the past ten years. According to the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010):

"Entrepreneurship in these sectors implies having creative ideas and commercially developing them to obtain a profit. However, profit just for the sake of it is not a driving force; it is creativity and the chance to create something, the self-realization or the capacity to carry out an activity that satisfies your own creative interests. It is a combination of the entrepreneurial aspect and the creative aspect".

Hagoort (2007) defines culture entrepreneurship as "... the process through which two types of freedom are integrated: artistic freedom as an intangible value oriented towards content and entrepreneurial freedom as a tangible value that provides support for intangible (cultural) values". In addition, Fumaroli (2011) delves into this issue by placing cultural creation on a line that ends on entertainment on one side and emotional artistic sincerity on the other.

Several models have been used to elaborate a general definition of cultural and creative entrepreneurship. However, this objective is not easy to achieve since it requires the combination of apparently diverging terms: the cultural discourse and the economic discourse.

According to Drucker (1985), cultural entrepreneurs share some features with common entrepreneurs. Generally, they have a certain propensity to assume risks (like capital loss) in moments of uncertainty. They also remain on the look-out for new opportunities to obtain profits or generate new content. Entrepreneurs see change as something normal and healthy and are involved in constantly evolving networks of clients, competitors and colleagues.

The "entrepreneurial determinants" can help us better understand the peculiarities of entrepreneurship in culture. The OECD/EUROSTAT (2008) Entrepreneurship Indicator Programme identified six factors that affect entrepreneurial activities in general:

- 1> Capital and access to financing. As we will see when we refer to the financial resources, the cultural and creative sector presents special financing difficulties that affect its innovation potential. These difficulties are related to the uncertainty surrounding the demand for cultural goods and services and the lack of institutional sensitivity towards alternative forms of innovation that are not based on the productive/technological approach.
- 2> Technology and Research & Development. Both allow for inventions and recombinations that can lead to new products or processes. As we will see when we look at the management of new technologies in cultural organizations, the cultural entrepreneur is a cognitive worker who shows a special sensitivity towards the use of new technologies and interaction with them through the generation of creative content.
- 3> Entrepreneurial skills. This includes the entrepreneurs' social and human capital. Given the autonomy and independence of cultural organizations, entrepreneurship is inherent to their activities.
- 4> Market conditions. These are determined by public intervention, level of competition, access to foreign markets, acquisition regulations and standardization. Cultural organizations operate under harsh and complex market conditions in which they need to respond to unpredictable demands.

- 5> Regulatory framework. This framework, which covers issues like taxes, regulations and other public standards that affect entrepreneurship, determines the entrepreneur's opportunity costs (unpaid wages, unemployment conditions or loss of health insurance). Here, non-economic motivations like creative pleasure, fun and social objectives should also be taken into account.
- 6) Culture. According to Ivancevich (1996), culture exerts a decisive influence through the values, decisions and attitude towards entrepreneurship shown by the members of a community. It is the amniotic fluid in which entrepreneurial processes occur. As we will see later on, the principles that guide the mission and vision of cultural organizations are perfectly in sync with this issue.

Cultural and creative entrepreneurs also present the following characteristics:

- > They work with people that usually attach more importance to the excellence of the content rather than to its potential for commercial distribution.
- They usually create very small enterprises supported by networks with a more robust structure.

Cultural and creative enterprises require specific support programmes, because they operate in a different and more complex environment.

As explained in the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010), "the markets are totally different. That is the purpose of some specific policies adapted to the creative industries, the features of the enterprises, the market, the business models, and the laboratories... having well-adapted policies that link up with this term can be guite useful".

There have been disagreements on the choice of the most adequate term, because the use of a single concept entails generalization, whereas the motivations and circumstances found in the activities that integrate the CCIs are diverse. Terminological debates aside, the need to advocate for cultural and creative entrepreneurship has been recognized, since the value of the cultural and creative industries has still not been sufficiently acknowledged and has not been reflected in policy implementation despite initiatives like the recent Europe 2020 Strategy. As stated in the HKU report: "It is an important issue: whether or not there should be a common definition of the CCIs. Perhaps it might be useful at this stage to distinguish [CCIs from the other industries]. In the future, when we have evolved towards a more creative economy and a creative society, this distinction will not be useful any more. It is currently useful to be able to understand the ideas, the process, and how to be successful. It is also useful to have on the political agenda."

On the other hand, there are critical voices that question the official position on cultural entrepreneurship and warn of the dangers of precarious employment and self-exploitation, particularly if the institutional analysis and the power structures are not taken into account. The myths about cultural entrepreneurship are related to a certain scale of values, and the privatization of profits and the outsourcing of costs are unfortunately quite common. As Rowan (2009) points out, "fake entrepreneurs" abound in a sector where not everyone identifies with this figure. Risks like self-exploitation, discrimination in the workplace, loss of legal

rights or the extreme commodification of human relationships are an inherent part of this discourse. If culture is instrumentalized, there is a risk that it could be managed unsustainably if the restrictions are not clearly defined. Historical memory, territorial identity and individual creative freedom are sensitive and fragile in this contest between cultural values and economic resources.

Creative competences

Creative people are known for their intuition, their capacity for abstraction and analogy and their lateral, divergent way of thinking, which enables them to adopt an alternative approach to problem-solving. The cultural and creative workers, heterodox and critical, are more prone to disruption, which favours their ability to connect seemingly unrelated or even contradictory realities. This is particularly important because of the current need to readapt to the paradigm of sustainable development. It is in this sense that the ability to hybridize different disciplines can be considered extremely interesting, as are the concepts of "interlopers" (stakeholders that operate from a transdisciplinary perspective) and "polymaths" (stakeholders that connect the artistic dimension with the scientific dimension). The use of the New Information and Communication Technologies (NICT) and the role of design are good examples. Another remarkable feature of cultural workers is their higher sensitivity and better understanding of the importance of signals, symbols, emotions and aesthetic aspects. In short, as the European Commission points out in "Culture as a Catalyst for Creativity" (2010), we can identify a vast array of new knowledge for new jobs in the framework of a change of technical-productive paradigm conditioned by the knowledge-based economy, experience and the digital economy. In this context, the creative skills are particularly important for lifelong learning.

According to the studies conducted by Pérez and Vila³ on the skills of workers engaged in creative activities, it is fairly clear that these workers demonstrate special competence in: ability to generate new ideas and find new solutions; use of computers and the Internet; knowledge of other areas or disciplines; predisposition to question their own or other people's ideas; ability to perform under pressure and ability to identify new opportunities. These are the same skills required to generate innovation processes.

Likewise, CCI workers show a certain lack of competence in the skills needed to mobilize other people's capabilities, make themselves understood, engage in analytic thought, use their time effectively, negotiate, and exercise their authority. Some of these capacities are related to process efficency (efficient use of time, analytic thought, ability to mobilize other people's capabilities) and the relationship with other workers (making themselves understood, negotiating, exercising their authority). Therefore, CCI workers are more individualistic and less efficient in processes that require a certain amount of instrumental rationality and collective action.

^{3.} The skills profile of young university graduates that occupy a position in the cultural and creative sector is analyzed in relation to a) the skills profiles required for their current job and b) the profiles of people with similar characteristics that do not occupy cultural and creative positions. The research is based on the results of a macro-survey carried out among 40,000 young university graduates in 14 European countries.

It is clear that the abilities that facilitate work in the creative sectors are the very skills required to make innovation possible. As a result, workers in the cultural sector are also the ones that have the greatest potential to innovate. Since the creative and the innovation process require the same skills, the individuals that act as leaders in the first process are also the ones capable of generating innovation. Table 3 shows the competences of CCI workers compared to those of other workers. The data indicate that CCI workers have higher levels of competence than the other workers in: ability to find new ideas and solutions (+0.23), use of computers and Internet (+0.21), knowledge of other areas (+0.16), predisposition to question their own and other people's ideas (+0.12) and knowledge of their own discipline (+0.11). On the other hand, they have a lower average level of competence in the ability to exercise their authority (-0.20), negotiate (-0.07) and use their time effectively (-0.05).

COMPETENCES	CCI WORKERS	OTHER WORKERS	Overcompetence of CCI workers
Ability to find new ideas and solutions	5.59	5.36	0.23
Use of computers and Internet	6.02	5.82	0.21
Knowledge of other areas or disciplines	4.63	4.47	0.16
Predisposition to question their own and other people's ideas	5.57	5.42	0.15
Ability to perform under pressure	5.71	5.57	0.14
Ability to identify new opportunities	5.24	5.12	0.12
Knowledge of their own area or discipline	5.49	5.38	0.11
Ability to speak and write in foreign languages	4.62	4.54	0.08
Ability to present ideas and reports in public	4.99	4.93	0.05
Ability to coordinate activities	5.56	5.53	0.03
Ability to acquire new knowledge	5.70	5.67	0.03
Ability to work with other people	5.68	5.65	0.02
Ability to draw up reports and documents	5.44	5.43	0.01
Ability to mobilize the capabilities of others	4.97	5.00	-0.03
Ability to make themselves understood	5.35	5.39	-0.04
Analytic thought	5.37	5.41	-0.04
Ability to use their time efficiently	5.37	5.42	-0.05
Ability to negotiate	4.58	4.65	-0.07
Ability to exercise their authority	4.47	4.67	-0.20

TABLE 3: Competences of creative and cultural workers

The percentage of people that were not working in the CCIs but had similar competences to those shown by CCI workers when the survey was conducted gives us a rough idea of the creative and innovative potential in the whole system. Table 4 shows the percentage of people who are not working in the CCIs but have a higher level of competence than the average CCI worker in four or more of the six skills most often sought by CCI enterprises. In Table 3, we can see that 34.3% of the people from the group of 11 countries analyzed who are not working in the CCIs have similar key skills for creativity and innovation, since they have a higher level of competence than the average CCI worker in at least four of the six skills most sought after in the CCIs. If we apply stricter suitability criteria and only consider those candidates who demonstrate higher competence than the average CCI worker in at least five of the six skills most sought after in the sector, the percentage drops to 18.6%. The countries where the workers show higher creative and innovative competences are Austria, Portugal and Germany; whereas France, Italy and Belgium are the countries with a lower percentage of working graduates with creative and innovative skills.

	At least 4	At least 5
FRANCE	20.80%	9.10%
FINLAND	28.40%	15.50%
BELGIUM	29.40%	14.80%
NORWAY	29.40%	17.00%
NETHERLANDS	33.80%	17.80%
ALL	34.30%	18.60%
ITALY	34.40%	14.80%
UNITED KINGDOM	37.50%	21.10%
SWITZERLAND	37.90%	21.20%
PORTUGAL	49.50%	30.70%
GERMANY	50.60%	29.20%
AUSTRIA	54.40%	35.40%

TABLE 4: Share of workers with creative competences in non-creative sectors

These high percentages of workers with creative and innovative skills might indicate that compared to other occupations, especially the traditional ones, creative work is disproportionally generated outside the creative industries (Cunningham, 2011). In other words, people who have been trained to carry out creative tasks are more likely to work outside the creative industry than as part of the internal workforce. This is the case in most countries, and has been that way for a long time.

Mobility

Generally speaking, cultural and creative workers have a greater degree of mobility (albeit with some restrictions, as we will see later on) and a cosmopolitan nature. They also have higher average academic profiles than the workers employed in other sectors and are relatively young. In addition, there are more women than men in this group. As for the role of mobility in the creative class, the conclusions of the European project ACRE (Musterd & Gritsaid, 2010) suggest that the conceptual framework developed by Richard Florida can only be taken as a useful preliminary hypothesis, not as a robust theoretical construct. This is especially true for Europe, culturally and historically very different from the United States. The US, where liberal thought is the norm, is structured around individual mobility and autonomy, whereas Europe has been articulated around families, localities and different cultures. In other words: Americans choose the group to which they want to belong and are therefore likely to abandon their place of origin to become part of that group, whereas Europeans tend to stay in the group or culture in which they were born or raised. This cultural explanation seems to be very important because it reveals some of the reasons why European countries survived the Americanization era. Cultural roots are particularly important in Southern and Eastern Europe, where people remain close to the family clan, feel obliged to attend family gatherings, look after the graves of their ancestors, etc. This cultural difference greatly undermines Florida's belief that culture is given more importance than economic stimuli. According to this author, people are no longer driven solely by economic forces and are becoming increasingly aware of their cultural milieu. While this may be true for the United States, where the economic factor has been dominant until very recently, it is not true for Europe, where the cultural factor has always been just as important. There is also a fundamental difference in the understanding of the significance of the cultural environment, which Florida interprets on the basis of "soft factors" (attractive urban surroundings, cultural amenities, tolerant atmosphere) and Europeans do so from the perspective of cultural, national or regional traditions, language, religion and family structures. The creative class dynamics described by Florida can only be observed in a very specific and highly restricted group: truly cosmopolitan artists, film directors, people working in the advertising and fashion industries and journalists, particularly those who use Internet. Therefore, it cannot be used as a

generalization to articulate urban or regional policies that attempt to achieve regional success by attracting the creative class.

Leadership skills

Entrepreneurship is another feature that distinguishes the cultural sector. Although the causes are complex and difficult to analyze (Rowan, 2009), aspects like individualism and the need to develop personal and original projects often lead straight to it. Leadership skills are in turn influenced by the capacity to anticipate and draw up imaginative possibilities, which boosts the potential to penetrate the markets and occasionally even creates new ones.

In terms of organizational structure, the people involved in cultural and creative activities place a high value on personal autonomy and professional independence. Also, the level of implication and volunteering is higher than in other sectors, generating more resilience in business projects (usually non-profit associations or microenterprises). This context has lead to the emergence of the figure of the Pro-Am (Professional Amateur), who carries out his activities under amateur conditions but with high professional standards. The introduction of creativity in the economy has caused a redefinition of the role of small and medium-sized enterprises within the economic system. Some authors highlight the capacity of cultural organizations to foster economic inclusion and operate in differentiated markets, increasing the capillarity of the whole economy. SMEs decentralize and diversify the production of creativity. In addition, they act as avenues for innovation, and are in direct contact with the sources of social knowledge, which materializes into social innovation. One of the weaknesses of business projects lies in the scant management skills and abilities of their initiators (Bauer, C., Viola, K., Strauss, C., 2011)

Creative work, innovation and social interaction

Creative workers are known for their high levels of participation in various kinds of social networks (local, cultural, political, social action). The relationships between the social and voluntary ambits blend with occupational activities and become spaces for experimentation and training in entrepreneurial and leadership skills and collective action. Creative workers contribute their efforts and human capital in different social environments and participate in non-market or informal exchanges (pre-commercial) that generate spillovers for social and participation spaces and at the same time activate learning processes and enable the accumulation of human and social capital. Workspaces are designed to offer a recreational and fun environment that fosters creativity and innovation. Creative workers generate higher levels of innovation (in products, services, tools or technologies) in this kind of environment than in other fields of activity.

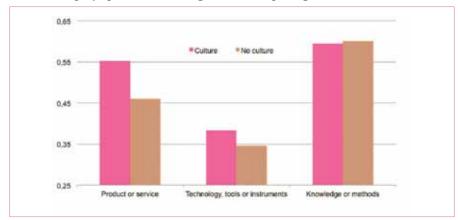


FIGURE 14: Do you play a role in introducing innovations in your organization/work?

In terms of self-perception, cultural workers demand a high level of autonomy in the workplace but end up carrying out their tasks in environments that offer higher degrees of personal autonomy than required, they have less free time and less job security than they would like, along with fewer career prospects and lower salaries than expected. On the brighter side, they also receive more social recognition than expected.

In contrast with the discourse that highlights the autonomy and the creative and innovative capacities of cultural workers, there are also several studies that point out the disadvantages of this type of occupation: "Creative work is project-based and irregular, contracts tend to be short-term, and there is little job protection; there is a predominance of self-employed or freelance workers, career prospects are uncertain and often foreshortened; earnings are usually slim and unequally distributed, and insurance, health protection and pension benefits are limited; creative professionals are younger than other workers and tend to hold second or multiple jobs; Women and ethnic or other minorities are under-represented and disadvantaged in creative employment. All in all, there is an oversupply of labour to the creative industries, with much of it working for free or on subsistence wages". (Banks, Hesmondhalg, 2009). Work in the creative sectors is presented as a neo-alignment: "Apparently, workers are encouraged to view their job as a site of unbridled pleasure, a vision often reinforced through games and the provision of relaxation areas, gyms and socialization spaces or through the promotion of a sociable work culture both in and out of office hours. Such questions of quality of life and dynamics of 'self-exploitation' have been studied by an increasing number of researchers". Other studies refer to the "precarity trap" (Murray, C., Gollmitz, M, 2011) and the need to articulate labor policies that rehabilitate the notion of "flexicurity".

Infrastructures and physical equipment

As we will see when we study the cases of the Sostenuto partners, the way cultural organizations use and manage their infrastructures and physical equipment is closely linked to two of the sector's characteristics. Firstly, these organizations tend to be micro-enterprises, which means that they have a limited ability to acquire resources. Secondly, their activity – that is, their cultural production – is associated with prestige, aesthetic pleasure and symbolic value, which makes it an excellent vehicle for social and institutional marketing and in turn strengthens their negotiation capacity.

Within the restrictive framework of the micro-enterprise, which entails using low-cost formulas (renting rather than buying), cultural organizations have learnt to use their intrinsic ability to seek creative solutions (leasing in exchange for services) and exploit a negotiation potential based on the publicity provided by culture (free lease). Also, the knowledge provided by the organizations' social capital enhances their capacity to identify suitable offers (donors, patrons). Therefore, cultural organizations turn need into virtue.

Organizations like Bunker and CITEMA, both partners of the Sostenuto project, revitalize and increase the value of facilities considered historical and artistic heritage by using them as headquarters, generating and channeling creative content.

Through the management of public or private unique spaces like old factories, farmsteads, palaces and castles, cultural organizations contribute to the promotion of territorial identity and reinforce the local historical memory.

Finally, the clustering processes examined in the previous chapter are also highly significant in terms of the resources available to cultural organizations. The cases of A.M.I. (Lead partner of the Sostenuto project) and the cultural complex "Friche la Belle de Mai" are particularly relevant in this regard, as we will see later on.

Financial resources

According to the report "The Entrepreneurial Dimension of Cultural and Creative Industries" (HKU, 2010), the most important source of financing for the CCIs is self-financing. Public subsidies, bank loans and private support have a residual role and other sources only have marginal importance.

There is a certain margin for innovation and diversification of the financing sources, albeit with considerable restrictions: cultural organizations have a limited capacity to devote part of their business management efforts to the study of the options available, the various levels of government and different sectoral policies turn the process of applying for financial aids into a veritable labyrinth, and the financial bodies, which tend to be averse to risk, show scarce sensitivity towards the specific nature and needs of the sector.

Like most studies, the European Commission's Green Paper on "Entrepreneurship in Europe" (2003) states that capital is one of the crucial factors that determine the success of the entrepreneurial initiatives. This is particularly true for cultural projects. Their microeconomic dimension, the intangible nature of their assets and the "soft" nature of their innovations contribute to a lack of recognition of the economic value of CCIs on the part of financial organizations. As acknowledged in the study "The Entrepreneurial Dimension of Cultural and Creative Industries" (HKU, 2010), one of the key obstacles faced by CCIs is funding. The results of the survey carried out in the course of our research show that 33,8 % of the participants thought funding was the most important challenge to be overcome when starting up a company. Although capital and access to funding play a major role during all the phases of the corporate life cycle, they are particularly important in the early stages.

The funding needs of cultural enterprises are slightly lower than those of noncultural companies, but there are no marked differences in global terms. According to the studies on France conducted by Greffe and Simonnet in 2003, the greatest difference was found in the group of enterprises that required less than \pounds 2000 (in the period 1998-2003), which in the case of cultural enterprises amounted to almost one quarter (23.89%). These percentages varied according to the subsector: in visual arts, 52.4% required less than \pounds 2000, while only 10.6% of the companies operating in the audiovisual sector needed less than \pounds 2000 to start up their business.

Greffe and Simonnet pointed out in their study that obtaining a bank loan and using personal resources significantly improved the companies' chances of survival. The main question that arose was whether the companies that received bank loans were more efficient because they had more resources or because their projects were better and easier for the banks to identify.

Once the loan has been obtained, the capacity of the cultural organization to repay it is equal to its chances of survival.

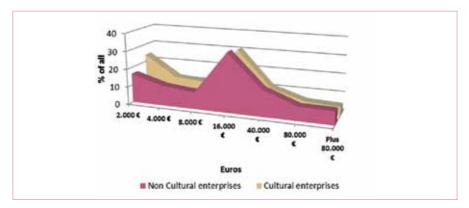


FIGURE 15: Financial resources needed to start up a business Source: Greffe, Simonnet, 2008

According to these same studies (Greffe, Simonnet, 2008, 2010), the larger the initial budget of a cultural enterprise, the greater its chances of survival. This correlation puts into question the notion that the main capital of cultural enterprises is their symbolic capital.

The studies reveal a lesser recourse to bank loans, a greater use of personal funds and – contrary to what might be expected – a slightly greater reliance on public subsidies.

With respect to subsidies, the subsectors with a higher proportion of subsidized enterprises are handicrafts and, roughly at the same level, visual arts, audiovisual and publishing. Performing arts and heritage have lower percentages than non-cultural enterprises. Surprisingly, the percentage of non-cultural enterprises that receive subsidies is only 4.5 points below that of cultural companies.

TABLE 5: Financial resources of cultural enterprises Source: Greffe, Simonnet, 2010

% of total resources	Visual arts	Performing arts	Heritage	Publishing sector	Audiovisual sector	Handicrafts	Total number of cultural enterprises	Non-cultural enterprises
Bank loans	8.09	19.69	39.39	20.44	23.29	27.9	19.14	27.48
Personal funding	60.54	73.54	27.27	69.78	69.73	67.38	66.91	60.47
External capital	6.37	15.69	0	9.78	11.64	13.52	10.43	9.12
Public funding	29.29	20.92	21.21	30.66	31.57	47.42	31.92	27.13
Subsidies	2.33	4.00	9.09	4.38	2.85	6.01	3.71	1.96

The inability of small companies to obtain the funds they need to grow affects the chances of success of the Europe 2020 Strategy, as the Council of Europe recognized in the Conclusions on Creating an innovative Europe (May 2010). Successive administrations have acknowledged the importance of venture capital and have fostered initiatives to support investment in initial venture capital to finance the SMEs operating in the Creative and Cultural Industries.

The majority of CCIs can be divided into two large categories depending on their degree of orientation towards the market or towards public funding. Commercial companies that carry out their activities within the creative sector are subject to consumer demands, whereas cultural SMEs that receive public funding are strongly influenced by changing political priorities. Furthermore, many cultural services are also public services and receive support as such, particularly in terms of fiscal measures.

Even when cultural services are primarily financed by the State, innovation in public policy-making is increasingly pointing towards mixed-funding formulas based on public-private partnerships, as confirmed by the report "The Impact of Culture on Creativity" (KEA, 2009). The aim is minimizing the risk of inefficiency associated to public subsidy policies and promoting self-sufficiency through a progressive reduction of aid programmes. However, expectations of public support are widespread in the cultural sector, since many CCI organizations work on the basis of short-term projects.

Furthermore, overlaps between public and private funding sources are common. As Pratt (2009) points out: "the public and private sectors are integrated in CCIs by means of sponsorships, donations and effective cross-subsidies".

The CCIs' funding problem has worsened as a result of the financial crisis. According to the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010), 39% of the companies surveyed expected a reduction of 5 to 10% in their turnover, whereas 18% foresaw certain stability in their sales revenue (+/- 2.5%). This trend is also affecting public funding earmarked for cultural activities. On the other hand, the financial recession has made most banks reluctant to take risks, which has led them to reduce their support to CCI enterprises. In this context, the three most important instruments that can be used to increase the sector's financial opportunities are government aid, self-financing and bank loans.

Symbolic resources

The use of symbolic resources in the production function is one of the main distinctive features of cultural and creative organizations. This typology of resources falls within the context of the new economic paradigm, characterized by the value of knowledge, experience and digitization (The Impact of Culture on Creativity, KEA 2009). The integration and valorization of symbolic resources in the production function leads to the emergence of new forms of production and consumption. The most interesting aspects of this kind of production function are:

- > The value of information goods lies in their expressive content (aesthetic, symbolic and social expression).
- > There is an increasing interaction between the product's tangible and intangible values, between the object and the sign. Symbolic resources add intangible value to the product's design, thereby increasing its final value.
- > From the perspective of the consumer's empowerment and sovereignty, the aesthetic values of the organization interact with its ethical behaviour, and by extension, with its relationship with clients.

- > Human behaviour is the field of experimentation: the consumer is on the lookout for the unexpected, for meanings and emotional experience (affinities, sensations, feelings). The message and the narrative – symbolic resources– are absolutely essential.
- > Symbolic values and signs provide crucial elements of competitiveness and demand like style, prestige, status and reputation.
- > Differentiation strategies: the value of the unique and authentic, communication skills, the ability to attract consumers' attention.

Thus, issues like aesthetic and cultural values, identity and memory of the region, legends and sagas, folklore, oral tradition and tangible and intangible heritage are incorporated as a resource into the production function of creative and cultural organizations.

In this context, the debate between intellectual property rights and free access to the symbolic universe takes on a strategic dimension. The tensions between the philosophies espousing the protection of content and those in favour of free access are often articulated through the expression "access versus exploitation". The first approach underlines the importance of Intellectual Property Rights (IPR) as a tool that can generate revenue for intangible assets and guarantee the control of content and the use given to intellectual property, while the other approach opts for free access to content, which can be used to develop new products or services.

Relational resources and social capital

Relational capital is one of the features that distinguish cultural organizations. We should remember that cultural and creative workers are characterized by the integration between lifestyle and occupation. To a certain extent, it amounts to the maximum expression of the Toyota model of integrating implicit and explicit knowledge. In this regard, personal relations and social capital are just another work resource.

Furthermore, as we will see in section 3.6 when we discuss organizational aspects, the predominance of SME-like entities in the business fabric demands organizational formats that are characterized by networking and outsourcing for competitive reasons, in a market that is also characterized by its high level of uncertainty. This amounts to a business model characterized by the dynamics of co-dependence and competitive cooperation strategies. As a result, in practical terms, this leads to processes in which cultural and creative activities are concentrated in specific regions, forming clusters.

The very nature of art and the social prestige conferred to culture favour the development of the social capital by agents in the sector, given their attributes in terms of talent, attraction and social outreach, in line with what we said above about Florida's concept of the creative classes (2002).

Mobility is also another prominent attribute with a great significance for the

configuration of networks and the development of social capital. In this regard, the European dimension and its internationalization is another notable feature. Mobility is another distinct feature of those involved in the cultural and creative sector, many of whom begin to participate in exchange programmes and artist residencies in the initial stages of their training.

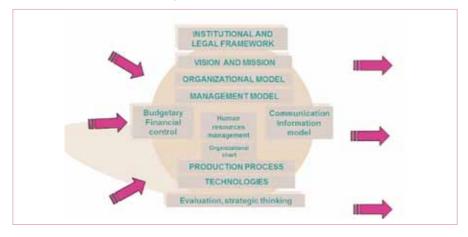
In addition, networking and social capital stimulate certain dynamics that are crucial for a cultural organization. It is often the case that learning processes or information about avenues of funding and ways of obtaining resources are closely associated with this issue. For example, the main source of knowledge for SMEs in the sector is individual shared information (informal networking), followed by cooperation with other sectoral associations in the sector (formal networking), as described in the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010). This report also identifies personal networks as the primary means for channelling the advice and support that cultural enterpreneurs need when they start their business.

Networking is the organizational method par excellence for managing complexity (Wagensberg, 2002) and constitutes a first-rate source of innovation through the exchange of experiences and best practices, ideas and perspectives for analysis, information and knowledge. Cultural and creative organizations make a natural use of their networks based on the attributes of the sector, and the evolution of the New Information and Communication Technologies (NICTs) outlines a horizon of possibilities wider than ever before.

Furthermore, if we consider the relationship between the regional development model and the innovation framework found in cultural organizations, we can see the diverse typology of significant stakeholders that can form part of these networks either on a formal or an informal basis. In this context, the notion of transversality (the integration of cultural matters into economic, technological, ecological, urban, and social aspects) along with the multi-level perspective (integrating local proximity and the global macro trends through regional and national levels) is particularly interesting (Abeledo, 2010).

Processes of the production function within a cultural organization

The processes of the production function cover the entire set of objectives, procedures and restrictions that define and determine the way in which all the resources all tie in with one another to turn inputs into outputs. As far as restrictions are concerned, first of all we could talk about the legal and institutional framework in which the activities of cultural organizations take place, followed by the mission and vision of the organization, which have an influence on both the order of the processes and the methods used to implement them. Next we will analyze the organizational model and its management system (financial resources, human resources and information). This does not follow a straight production pattern, but is conditioned by the technology involved and the techniques applied to review, evaluate and reformulate the processes.



This diagram illustrating the production function points to a number of key issues:

- Current demand and trends: changes in demand due to existing or potential audiences and emerging issues related to changes in the socio-economic development model and the paradigms of globalization and sustainability.
- Digital technologies: repercussion on new distribution channels and audience innovation.
- 3> Building user loyalty: in a context of high competition, the focus on the user leads to a diversification of services, enabled by the new technologies.
- 4> Innovation: the ability to anticipate change favours penetration in a rapidly evolving market. Conceptual innovation is favoured by creativity, artistic imagination and the educational function characteristic of cultural organizations.
- 5> New financial and business models resulting from the interaction between new technologies, emerging audiences and the socio-economic development model.

The traditional idea of the production line is evolving and in many cases the relationship with intermediaries has to be rethought. According to Hearn (2007), technological advances have hastened the decline of a linear production process in favour of what he calls "value-creating ecologies". This concept is based on the idea of a constellation of dynamic firms that works through clusters of networks where the value flow is multidirectional. This idea offers a clearer explanation of the productive and organizational change experienced by many CCIs:

> The perception of the consumer changes and the figure of the "prosumer" is taken into account. Users become co-generators of value through their interactive participation in the productive process.

- > The notion of the product is reconfigured from a perspective that is completely separate from its value as a part of the network.
- > Simple forms of competition move towards a dual relationship of cooperative competition.

More and more often, cultural and creative entrepreneurs need to foster a direct interaction between the producer and the user. They need to interact closely with their target audience to monitor the trends or initial reactions in leading consumers. Technological advances such as multi-platform capabilities offer a greater degree of connectivity with the user and can provide feedback on the production loop, which means that the user can interact directly, allowing the producer to adapt to changes in demand. The increasing incorporation of the user/consumer as co-producer, coupled with efficient communication channels, has led to a certain convergence between the phases of production and consumption.

On the other hand, the UK Technology Strategy Board (2009) recognizes that the increase in sources of knowledge and information exchanges is blurring the lines between different sectors, triggering growth in multi-disciplinary equipment. Activities that contribute directly to the creation of a product or original service fall within a backdrop of administrative, organizational or manufacturing operations. These networks of lawyers, managers, and accountants contribute to the specification of agreements at the core of the CCIs and are an essential part of the structure of such industries.

Legal and institutional framework

The existence of cultural organizations is determined by various regulatory frameworks, ranging from the basic and higher education systems to cultural policies, active policies drawn up to support entrepreneurship, the laws and treatment of the social economy, the fiscal treatment of sponsorship and patronage, specific industrial policies targeting the cultural sectors, regulatory framework for artists and creators' labour relations and intellectual property regulations. The range of realities in Europe is extremely diverse, which makes it difficult to conduct a global analysis.

According to the report "The Entrepreneurial Dimension of Cultural and Creative Industries" HKU (2010), the three main regulatory factors that influence the development of cultural and creative SMEs are intellectual property regulations, tax measures and measures to facilitate business start-up.

In EU countries, a favourable attitude towards innovation and a certain degree of economic development make all the difference in terms of cultural and innovation policies. There are also other factors associated with business culture and demographics, which determine the degree and profile the entrepreneurial activity.

Furthermore, the various levels of innovation and recognition of CCIs are not only due to differences in the regulatory framework for innovation, but also to the methods used to implement them, which basically amount to productive and technological improvements (pursuing countries) or the promotion of human capital and creativity (richer and more innovative countries). Only a handful of countries have proposed a combined model based on the cooperation between various ministries and the recognition of the social, economic and cultural aspects of the CCIs. Generally speaking, despite the recommendations of the European Council, very few countries have fully recognized the role of CCIs as the driving force behind growth and innovation in Europe.

The most widespread approach on support for creative and cultural entrepreneurship is based on tax deductions and favourable fiscal policies. In Europe, cultural and creative SMEs generally receive the same treatment as all the other SMEs. Therefore, they are subject to the priorities and strategies set by traditional innovation policies.

Mission and vision of cultural organizations

As Throsby and Withers (1979) point out, cultural organizations are often nonprofit and their mission is defined by multiple objectives, many of them of a social nature. As we will see below, these characteristics often shape their organizational and business management models, which are heavily influenced by the lifestyles favoured by cultural and creative workers.

The authors identify four dimensions for analysis:

- 1> Promoting artistic excellence, which means having a favourable attitude to wards innovation based on motivation (Patterson et al, 2009).
- 2> Facilitating access of potential clients to cultural goods and services and encouraging audiences to play an active role.
- 3> Generating educational services.
- 4> Developing research functions, essential to generate innovation through the proposal of new ideas and creative problem-solving strategies (Patterson et al, 2009).

Of course, given the diversity of activities forming part of the CCIs, the motivations of the entrepreneurs may vary depending on the sector. As a general rule, there may be two extreme situations: orientation towards creation and orientation towards growth. The first is characterized by a desire to give priority to the cultural value of creation and the lack of motivation to generate economic value. In the second case, economic aspects are given priority over the cultural value inherent to production.

The will for social transformation, along with a transgressive and critical disposition, are typical of the cultural sector. This implies that there is a will to generate innovation in the CCIs. Among the categories of values that shape cultural organizations, it is worth highlighting:

> Organizational values: independence and self-employment, doing voluntary work, working for pleasure, fairness, social initiative, non-profit.

- > Transfer to work methods: participatory approach, transparent management, networking, fostering innovation and quality.
- > Personal growth: rights support, mutual respect, critical thinking, negotiation and agreement.
- > Values and social liability: fostering the principles of solidarity, sustainability, equality, democracy and diversity.

Clearly, the formulas and the degree of specificity will vary depending on the activity. There may even be a huge gap between the presumed values and the activity itself. In any case, the right communication strategy will be absolutely essential for transferring and implementing these ideals, both internally (among workers) and externally (among audiences and in society as a whole). Similarly, a certain commitment to the development of the region where the organization operates is embodied in the local implementation of the values guiding its mission.

As explained above, the CCIs often combine cultural and creative efforts with economic and entrepreneurial zeal. According to Hubert et al, the combination of a cultural/creative attitude and an entrepreneurial spirit generates four different approaches to the personal orientation of the cultural and creative entrepreneur. As we can see in the following table, cultural and creative entrepreneurs identify themselves with four sets of ideals: business success, professional achievement, artistic creation and professional development.

According to Eichmann (2007), these four sources of motivation can in turn be identified on the basis of five dimensions: personal aspirations, interests, degree of separation between work and personal life, occupational model (employee, freelance, etc.), sectoral activities and additional typical features. Based on this basic outline, there is a spectrum of possibilities ranging from the most artistic and bohemian (independence as an aspiration, aesthetic criteria and lifestyles) to completely market-oriented business models.

TABLE 6: Main motivations for creating a cultural organization Source: Eichmann, H. et al, 2007

Main motivation	Entrepreneurial success	Professional achievement	Artistic creation	Career development
Predominant occupational aspiration	Success first, then autonomy	Balance between success, autonomy and security	Autonomy, artistic recognition, aesthetic criteria	Security, reciprocity, affiliation of autonomy and success
Dominating identification focus	Personal enterprise	Professional status more important than occupation status	Art communities, the Art Scene	Employee
Work and live	Professional activities in the centre; private activities marginal	Professional activities are more important than private life	Professional activity as a personal choice Refusal to make a distinction between professional and private life	Professional activities and private life are equally important. Separation between professional and private activities
Type of occupation	Employer, manager	Freelancer Employee Rarely employer	Freelancer. Rarely employee or employer	Employee or Freelancer
Sector and profession	All sectors of the Creative Economy	Technical professions Architects, sound technicians, cameramen	Artistic professions. Design, film, architecture, visual arts	IT, advertising, sales
Additional typical characteristics	Predominantly men	Mostly people with experience	Separation between "bread-earning" activities and other activities	Majority of young people

Clearly, these variables are not static, so the model should be considered in dynamic terms. Depending on the stage of the life cycle in which the organization finds itself, its motivations, values and objectives will be subject to modification.

Organizational model

Given the specific characteristics of the sector in terms of corporate dimension and intensive use of labor, the CCIs implement organizational and cooperation processes based on networks. Smaller companies tend to adopt outsourcing and clustering strategies, combining multiple projects in order to compete with larger companies. This phenomenon is incremented by the high level of uncertainty associated with the demand for cultural goods and services, so content-producing industries tend to work on several projects at the same time to compensate the risk of failure. On the other hand, the specific characteristics of the cultural sector in terms of social prestige and projection underpin the importance of the relational capital. The companies' internal organization is conditioned by the small dimension of the business sector. Evidently, the organizational design of a micro-SME (1-3 employees) does not provide many opportunities for specialization. This also implies an informal organization of labour in which it is not unusual to find everyone cooperating and helping each other with their respective tasks. According to Maarse (2009), charismatic leadership, team-building and the distribution of responsibilities in projects are some of the key features of cultural organizations. It is well known that the aptitude for teamwork is a distinguishing feature of creative entrepreneurs. Networking (at a personal and functional level and in several layers of interaction) is practically intrinsic to CCIs. As the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010) points out, many creative individuals begin networking during their academic years and acquire a more professional structure when they enter the job market. Outsourcing is another organizational characteristic of the CCIs. A great number of enterprises within this sector are creation-oriented and many of them decide to continue carrying out small-scale activities to maintain their flexibility and adaptability, gualities that are not always found in larger companies. As mentioned above, large enterpises have a structural advantage in terms of research, development, administrative management and design activities, to which micro-SMEs have very limited access. Similarly, the reproduction, distribution and promotion of creative products and copyright management are complex processes in which larger companies have an advantage over smaller ones. Nevertheless, according to the European Commission's Green Paper on "Unlocking the Potential of Cultural and Creative Industries" (2010), larger companies take fewer risks than micro-SMEs. Small companies must be more flexible, dynamic and innovative to be able to compete with larger companies, which are unable to be so versatile. This allows CCI entrepreneurs in charge of microenterprises to adopt a daring attitude.

SMEs in the CCIs prefer to have fewer workers and resort to outsourcing for ad hoc services. The solution chose by many organizations is to vary the level of integration and control over certain aspects of production and outsource them to dynamic companies that are able to take risks.

Even large intermediary companies organize the production of new media content into relatively small and semi-independent teams. For microenterprises, outsourcing also means having to combine creativity with the management of freelance activities.

Citing the report "Unlocking the Potential of Cultural and Creative Industries" (HKU, 2010):

"The big companies in the CCIs have reduced their employees in the past 50 years... they outsource. The degree of outsourcing is very high. This also means that people don't do what they are good at (they need to acquire the job, have to make their own taxes, have to do everything, marketing...). In the past, this was dealt with through the division of labour. So creative people lose a lot of time doing things they are not good at and that shouldn't be part of their job!" The disparities of CCIs in terms of size and growth strengthens their tendency to outsource, especially sectors like retail, fashion and partly computer games, where the automation of production facilitates the process. Furthermore, a high percentage of freelancers and microenterprises rely on networks and personal contacts to face the monopolistic tendencies of some CCIs.

Management model

As we have seen, many companies operating in the CCI sector must integrate artistic freedom as an intangible value and entrepreneurial freedom as a tangible value that supports intangible (cultural) values. Some entrepreneurs are more growth-oriented, whereas others are more motivated by the cultural and artistic value of their products and services (creation-oriented). Certain CCIs maintain specific employment patterns to combine the flexible approach of small and medium enterprises. This inherent tension between the two "types" of entrepreneur is often reflected in the organizational and management structures.

Next, we will analyze the management methods applied by the CCIs to the following aspects:

- > Human resources policy
- > Uptake of economic resources
- › Knowledge
- › Copyright
- > New technologies
- > Innovation

Human resources policy: Training, wages and types of recruitment

Cultural organizations have serious training shortfalls in business skills (planning, management and marketing) due to their small size and cultural orientation. The report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010) identifies this issue as the second major challenge (the first one being funding) that entrepreneurs have to face when they start up their business.

This shortfall is aggravated by the structural inadequacy of formal education and artistic degrees with regard to business entrepreneurship. In addition, the funding prospects are complex and financial institutions pay scant attention to the specific needs of the sector.

The report admits that entrepreneurial and business know-how are mainly acquired through internships and hands-on work experience after completing

the formal education. In this "learning by doing" process, personal networks, informal contexts and mobility are of paramount importance. Moreover, as Seltzer and Bentley (1999) point out, participation in lifelong learning is another salient feature of the sector.

A further outstanding concern is the importance of offering customized support in financial matters through coaching and mentoring at the companies' request. Entrepreneurs are often unaware of the sources of financial support available (public funds, venture capital or bank loans). The lack of information and the time and effort required to obtain it represents an additional burden for the cultural and creative SMEs. Since the need for funds cannot always be anticipated, financial support "on demand" could be encouraged at the local and regional levels, which are the closest to the user.

Regarding wage policies and types of recruitment, cultural and creative entrepreneurs are more prone to engage in unconventional methods of employment (such as part-time work, temporary contracts and self-employment) than the working population in general.

In terms of wages, Throsby (2001) highlights that only a minority of full-time workers receive a regular salary in most CCI sectors. Cultural workers need a minimum income to survive and a certain degree of financial security, so holding more than one job is commonplace. As Towse (2004) points out, most CCI sectors are characterised by a dynamic of frequent job changes in which short-term contracts are the norm. Due to the difficulty of having their intan-gible creations recognized, certain cultural and creative entrepreneurs combine their self-employment activities with professional occupations that provide them with sufficient financial stability to continue creating. This leads to a problematic blurring of the distinction between "employed" and "unemployed". Many actors, writers, directors, visual artists, craftspeople, composers, designers, etc. could be considered as self-employed workers. In general, creators accept the fact that they earn less than the average worker, which may be explained by their preference for creative work or their lesser aversion to risk.

Economic planning and management in cultural organizations

Generally speaking, the inefficient economic planning of cultural organizations adds to a scenario of structural funding difficulties caused by the complexity of the available financing options and a lack of sensitivity towards the needs and potential of the CCIs.

As in the case of human resource management, the small business scale is a determining factor. According to the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010), the sector is characterised by weak economic and financial planning: a significant percentage of organizations (practically one fourth of the ones interviewed in the study) had no plan at all and those that did were based on a short-term approach (one year). A very small minority (barely 5%) had a financial forecast for up to five years.

The survey showed that 75% of the SMEs draw up their own forecasts and only 20% hire the services of professional consultants. This is significant from the perspective of the difficulties of combining administrative tasks with the creative process. The underlying debate is between an economic orientation (profit-seeking and market-oriented) and a cultural orientation (not-for-profit). As stated in the Creative Economy Programme (2006) of the British government's Department for Culture: "The key issue is not the availability of funding and business development services but the access and use creative enterprises make of the support. Specifically, productivity and growth are inhibited by the scarce tendency and ability of many creative enterprises to make full use of the funding, consultancy and expertise that are available".

An inefficient economic management has far-reaching consequences, especially considering the complex scenario of the financing world. As the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010) explains, the multiple policies for each level are not necessarily visible or known to the public. In fact, the various territorial levels of support are often obscure and overlapping, which means that cultural and creative SMEs face a highly complex scenario. The support provided, for instance, may be a combination of tax exemptions and municipal funds, national sectoral funds, and broader projects funded by the European Commission.

Financial institutions also contribute to increase the difficulties that the CCIs experience when trying to gain access to funding. Karra (2008) underlines the fact that ordinary financial institutions offer CCIs very little advice and expertise on development tools. Moreover, the companies' assets are often intangible and protecting the copyright of new products can be complicated; returns are uncertain and product innovation is not easily integrated into formal business structures. All these factors have an impact on the access to credit.

In such a context, there is a hypothetical potential for diversification in funding sources. The most obvious instruments are:

Access to venture capital

Venture capital is an important source of funding for companies with a high growth potential that require a significant amount of capital to develop and expand. The Europe 2020 Strategy recognizes the relevance of venture capital but there are important restrictions associated with the size of SMEs and the return rates on long-term investments. According to the KEA report "Promoting Investment in the Cultural and Creative Sector: Financing Needs, Trends and Opportunities" (2010), Europe has few venture capital funds devoted to the CCIs, and around half of these are designed for audiovisual enterprises related to Information and Communication Technologies.

Intermediary bodies

They provide alternative sources of financial support via venture capital and microcredit programmes for new SMEs and creative entrepreneurs, and facilitate accommodation endorsements that minimize the risk.

Business angels

These are generally wealthy people who buy shares in start-up companies and show a higher degree of personal involvement than institutional investors, offering business and management advice. As Ramadani (2008) points out, the reasons that lead business angels to invest in new and risky projects range from the expectation of huge profits to a feeling of social responsibility, including a desire to help young entrepreneurs and the fun and pleasure of investing for the sake of it.

Tax incentives

The most widespread ways of supporting cultural and creative entrepreneurship in Europe are tax deductions and the implementation of favourable fiscal policies (HKU, 2010). Tax incentives can promote a prosperous entrepreneurial environment via direct and indirect taxes and compulsory social contributions. The European experts consulted in the HKU report consider that fiscal exemptions, together with accommodation endorsements, are the best way to provide financial support to the CCI sector. In this sense, one of the instruments most frequently used to stimulate CCIs is the setting up of special tax schemes for cultural and creative entrepreneurs.

Public-private partnerships

The diverse nature and dynamics of cultural SMEs implies that access to funding depends on many factors (the sector, the organization's stage of development, and so on). The Conclusions of the Council on "Creating an Innovative Europe" (May 2010) highlight the need to coordinate the action of public and private agents in order to face the complex issue of access to funding.

Funding and life cycle phases

The importance of access to funding varies throughout a company's life cycle. The amount and type of funding differs according to the phase. Registration costs, for instance, are only needed during the first phase and funds for innovation are mostly required in subsequent phases, when the company is more consolidated. The transition from a single-person company to a multi-person company has a significant impact on the type and amount of funding required, especially if additional workers are employed.

Knowledge and information on the types of financial support available is essential to companies, particularly during the initial phases of existence. Generally, however, Cultural and Creative Industries have limited access to funding partly due to their lack of awareness of the existence of funds that are not specifically targeted to their sector, as stated in the KEA report. Cultural and creative entrepreneurs need to be informed of the various financial options available (linked to economic, cultural, social and innovation aspects). On the other hand, an excess of financial aid may be counter-productive, because it might generate aversion to risk and inhibit growth.

During the last phases of the cycle, other kinds of barriers must be overcome. SMEs targeting growth need specific structural funds and working capital to build out. Financial support needs to be accessible during every phase of the business life cycle, but the types of support must meet the changing needs of each phase.

To provide the right funding mechanisms, a firm understanding of the particular characteristics and needs of CCIs is crucial. Direct support for the CCIs at the EU level is inadequate, mainly due to the bureaucracy and complex procedures involved. However, the regional level offers the potential to coordinate local and national action. Moreover, the funds invested at the regional level enable the development of a cultural identity in the area.

On the other hand, according to the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010), the national level is the most adequate to create a leading fiscal environment. Determining what financial instruments are available and who can benefit from them is also important at this level.

Strategic planning and knowledge management in a complex and uncertain scenario

In general, planning and knowledge management constitute two of the most prominent entrepreneurial skills and are essential to detect new market opportunities. They are particularly relevant in the market of cultural and creative products and services, characterized by unpredictable demand conditions. Entrepreneurs must take into account diverse and changing preferences. In addition, creative products often fulfil functions that cannot be measured "objectively" and quantitatively. They are experience goods, and the uncertainty that surrounds the demand is strengthened by the intangible nature of the products and services, as well as the fact that they are project-based. This means that the outcome of a project cannot be predicted at virtually any phase of the production sequence. An unexpected success can inexplicably become a huge success, whereas guaranteed successes fall to pieces. However, this level of complexity and uncertainty does not mean that everything can be left to improvisation. In a constantly changing market, it is necessary to plan and anticipate, not only to get it right but also to know what position is the company in and in which direction is it headed.

Thus, the first issue that needs to be considered in terms of strategic planning is the development of an entrepreneurial vision. In order to function in the complex and turbulent world of a creative economy and archieve a longterm strategic position, cultural and creative entrepreneurs need to be able to develop a long-term business vision. Yet, most of the entrepreneurs in the sector launch their project thinking only in the short term.

Subsequently, the need arises to prepare an analysis of the situation, which will enable them to gain a position in the market. Market positioning is vital at each phase of a project's life cycle. At first, positioning can be based on a product or service, whereas a more mature stage requires differentiation based on a variety of product-market combinations. This core competence – the ability to determine a company's market position – is necessary in all phases of corporate development.

The volatile and unpredictable nature of the cultural goods and services market promotes emerging, temporary business strategies that are highly receptive to users' demands. These strategies are based on "emotional" and "intuitive" knowledge as well as standard market research.

Furthermore, digital convergence has changed the value chain and the distribution process, allowing a certain "democratization" of the access to distribution and a higher participation of content creators and producers. According to the report "Driving Innovation: Creative Industries Technology Strategy 2009-2012" (UK Technology Strategy Board, 2009), such changes have caused CCIs the need to adopt new market strategies and new business models.

In the opinion of the sectoral experts consulted for the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010), the knowledge factors that appear to have the greatest influence on an organization's growth are related to information about market opportunities. In this sense, 19% of the CCIs surveyed for the report pointed out that they found it especially difficult to identify new markets, while 15% referred to their lack of knowledge about foreign markets (15%).

The main barriers encountered by microenterprises when trying to enter the market are the exclusivity agreements reached with key distributors and the access to information on market opportunities. The presence of many large-scale competitors constitutes an added difficulty.

As stated in the report "Sourcing Knowledge for Innovation: The International Dimension" (NESTA, 2010), identifying knowledge sources (especially at the international level) and belonging to a network are key to understand the global market. The lowering of trade barriers and the integration of the global markets has enabled all sorts of companies, including the newly-established ones, to exploit global opportunities. Globalization processes induce enterprises to adopt outsourcing strategies and generate a strong contraposition: on one hand, the large corporations that control a highly competitive market, and on the other, cultural and creative microenterprises that must face the limitations caused by the lack of awareness of the opportunities offered by their environment both during the start-up phase and throughout the company's life cycle.

New technologies management

The provision of services (e.g. design), content (e.g. music) and creative experiences (performing arts) has undergone a profound transformation due to the development of the New Information and Communication Technologies (NICTs). According to the report "Driving Innovation: Creative Industries Technology Strategy 2009-2012" (UK Technology Strategy Board, 2009), the dynamics of digitization have changed and diversified the means of production, circulation, distribution and the exchange of cultural goods and services, significantly contributing to the increase of revenue and employment in the CCIs. The value chain of cultural organizations has been completely redefined, affecting intermediation between stakeholders and users' relationship with the production process. As stated in the report:

"The purely linear business model is giving way to a much more inter-woven environment, where cross-fertilisation of stimulus and response, data-driven supply and demand, and speed of communication enable a much more rapid evolution of product development and consumption".

The importance of digital content for the CCIs has encouraged the development of new applications and the integration or regrouping of the resources that intervene in the production process. The creative content industry is a good example. This activity is increasingly important and is well-developed throughout the value chain. Internet and the changing preferences of consumers have added to the complexity of the flow of funds between the players that participate in the chain. Consumer spending is the most important source of funds. According to the report "Fostering creative ambition in the UK Digital Economy" (Analysis Mason, 2009), physical media still represent a substantial part of the market, but at the same time, they are the most exposed to online substitution.

New technologies multiply and diversify the channels through which cultural works reach the audience. Initially there is an incremental effect, followed by episodes of "cannibalization" between old and new channels. However, the final consumer has more opportunities to access culture, which leads to an increase in cultural consumption.

In this radically evolving environment, the challenge consists in finding adequate business models. The overall consequences of the Information and Communication Technologies (ICTs) on culture are ambivalent. They open new creativity and distribution opportunities, but they also alter conventional content. When new models try to emerge, cultural content runs the risk of becoming just another good that can be traded in the virtual market, therefore losing part of its value.

The shift from traditional methods to new productive methods is not the only challenge faced by the CCIs in a market structure that has undergone significant changes. The new formulas represent new market opportunities for content producers and generate important growth prospects for the cultural and creative industry. The increase of citizens' participation in the arts through digital and electronic media demonstrates the potential of digital media in terms of new market opportunities.

According to the report "Business Innovation Support Services for Creative Industries" (KEA, 2010), creative and cultural SMEs have limited knowledge on the use of Intellectual Property (IP) and the management of related rights. However, such formal and informal rights are an important source for creative companies and can be seen as a mechanism to remunerate creativity.

The results of the survey conducted for the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010) show that 52% of the small and medium enterprises received no advice on intellectual property rights before starting operations, compared to 40% that did receive such advice. Among those who did receive advice, 38.5% received it from national organizations, 20.5% were oriented by sectoral organizations and 11% resorted to European institutions.

Furthermore, the experts interviewed for the report considered the regulation of Intellectual Property Rights (IPR) as the second most important regulatory issue (21%) after tax deductions (29%).

Failing to use and manage IPR affects the entrepreneurial ability of cultural and creative SMEs, because it prevents them from obtaining fair remuneration for their creative efforts. Thus, policies need to be implemented to encourage IPR management as a work tool in the CCIs.

In the digital market, content management has become increasingly complex, making it difficult to monitor. According to Cabrera Blázquez (2007), piracy and content sharing have fostered the development of a free-of-charge culture that hinders the appropriation of the economic value of creative processes and may prevent creators from exploiting their own works. In turn, this circumstance erodes the incentive to invest in new creations.

However, certain authors stress the need to lower the protection of creative content and advocate for a greater access to copyrighted content, thus releasing the potential benefits that the free exchange of content could generate. This line of thought promotes the right of consumers to share digital content.

The debate revolves around the combination of legal exceptions, exclusive rights, consumer rights and the creators' interests and remuneration. As we saw in Chapter 2, digitization alters the creative "value chain" and turns it into a creation cycle that bypasses intermediaries. The link between copyright holders and consumers shortens, increasing the contact between consumers and creators and the number of potential platforms that enable the free exchange of content. The example of YouTube illustrates the growing accessibility of online content and the issue of Intellectual Property in digital environments, which is still evolving.

Future support policies for the development of cultural and creative industries should take into account the changes in business models and the Intellectual

Property environment without losing sight of the importance of Intellectual Property as an incentive for cultural and creative entrepreneurs and a way to remunerate their work.

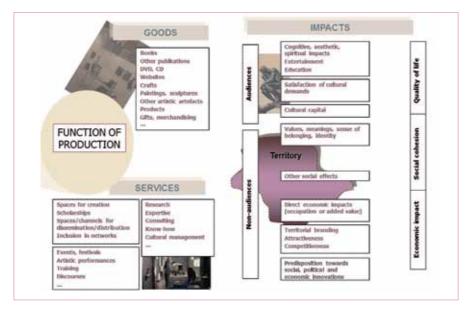
The most important aspect is the impact that this trend has had on the business models of the CCI companies, which need to adapt to a changing environment and at the same time be flexible enough to keep up to date with the latest changes and opportunities.

Products and services of cultural and creative organizations

The diverse production of cultural and creative organizations includes books and publications, music (CDs), audiovisual material (DVDs), websites, paintings, craftwork, merchandising material, etc. Apart from such goods, the CCIs also provide infrastructure services such as: spaces for creativity; artist residencies; exhibition, dissemination and distribution channels and professional networking. In addition, they promote are all sorts of activities, including workshops, events, festivals and artistic performances. They also offer courses, research programmes and consultancy services.

In line with the classification made by Scott (1997), we can distinguish the following types of cultural products:

FIGURE 17: The production function: The demand side Source: Eichmann, H. et al, 2007



Qualitatively, cultural and creative products and services differ from other manufactured products in the fact that they are intangible assets with a subjective value and are often based on projects. Other specific economic characteristics are determined by the ability to produce them "instantly" and by the fact that they cannot be consumed in any other context (e.g. plays, ballet and live concerts). Such products and services are an extreme example of product differentiation strategies, necessary to combat the standardization imposed by cultural globalization.

UNESCO's Convention on the Protection of Cultural Diversity (2005) stressed the differential nature of cultural goods and the need to distinguish them from the mass production of standardized consumer items, and even considered the possibility of excluding them from international trade agreements and competition regulations. Cultural products are not "mere goods", because they embody cultural uniqueness and promote cultural diversity.

On the other hand, the demand for this kind of goods is unpredictable and they involve a long construction process. As the report "The Impact of Culture on Creativity" (KEA, 2009) points out, quality and utility for the user cannot be anticipated. Consumption, experience and even repeated consumption is required to change perception and acquire a taste for cultural products. In general, demand increases exposure through a process of "rational addiction". Cultural and creative products are experience goods because they offer experiences that are directly related to the user. During the design process, user demands are constantly integrated through feedback loops, therefore improving it. Thus, the production of a cultural and creative enterprise is not only a product or service but also a design process.

Creating new experiences is highly subjective and its economic value cannot be precisely determined in advance. This level of subjectivity implies that cultural and creative entrepreneurs are constantly taking risks. Given the size of most CCIs and the high levels of competition, the sector's entrepreneurs need to keep seeking creative solutions and new trends, products and services that meet the demands of users and consumers.

Moreover, we have already alluded to the reference framework that determines the Knowledge Economy paradigm for cultural and creative production. The relationship between cultural and creative goods and services and the socio-economic innovation processes involves many important issues: the users' approach, new forms of relational consumerism (as opposed to transactional consumption), product customization and personalization, the economic value of originality and distinctive experiences, the growing impact of the intangible aspects on a product's added value, content innovation, and diversification in delivery methods.

Impacts generated by cultural organizations

In this paper we have pointed out the need to link models of territorial development to the CCIs' potential for innovation. This scenario includes the educational and research services developed by the CCIs, the identification of new audiences, business models, and the development of cultural value or its economic impact, to cite a few examples. If we consider the production function of cultural and creative organizations, we can identify a large variety of impacts generated by the goods and services they produce. Such impacts are not always noticeable in time and manner, so their recognition, identification, and even their nature present serious assessment difficulties.

Nonetheless, there is an increasing institutional recognition, materialized in documents like the Green Paper "Unlocking the Potential of Cultural and Creative Industries" (European Commission, 2010) and the Communication on the "European Agenda for Culture in a Globalizing World" (COM/2007/0242 Final). A preliminary classification enables us to distinguish two large areas: the impacts that affect CCI audiences and those that go beyond the direct aims of the CCIs:

Impacts on audiences

- > Satisfaction of cultural demands
- > Entertainment, education
- > Development of cultural capital
- Cognitive and aesthetic values, development of meanings, emotional and spiritual impact
- Social cohesion (feeling of belonging to a community)
- Territorial identity (historical memory)
- > Promotion of values and lifestyles

Impacts on non-audiences

- Direct economic impacts and added value generated by cultural and creative activities
- › Job creation
- > Promotion of tourism and valorization of cultural and natural heritage, especially important in rural development contexts
- > Potential for renewing neglected urban areas
- > Recreational use of public spaces and promotion of social capital
- > Promotion of activities linked to the Knowledge Economy
- > Territorial branding and projection. Enhanced competitiveness
- > Incentive for the attraction of the creative classes
- > Promotion of innovation at the social, economic and political levels
- > Relationship with social policies: diversity, intercultural dialogue, fight against exclusion and promotion of social capital

In general, it could be said that the impacts of cultural organizations on both audiences and non-audiences manifest in three levels. In the case of the audiences, level one refers to the individual transformation that takes place as a result of the exposure to symbolic influences that have aesthetic, cognitive and spiritual effects. Level two refers to transformations at the meso level that involve the development of expressive and communicative abilities and primarily affect effectiveness and efficiency in the accumulation of human and social capital. Lastly, we would be alluding to the social and economic rewards arising from exposure to cultural experiences. For non-audiences, the first level of impact would be aesthetic, involving landscape, territorial branding, and personal or corporate reputation. The second level would be the variation in the propensity for innovation, networking and other effects that empower players, communities and territories. Lastly, the third level would be the macroeconomic impact in terms of income, occupation and variations in competitiveness, which will be addressed in the next chapter.

The potential impact of job creation in the sector becomes fully apparent if we integrate cultural activity into the development challenges set out in the European 2020 Strategy:

- > Environmentally sustainable development: social communication and institutional marketing services, education and sensitization about values, ethics and lifestyles.
- > Inclusive development: cultural diversity, multicultural society, social dialogue, fight against exclusion.
- > Intelligent growth: integration of knowledge.

» Innovation processes in cultural organizations: Main factors for change

As we said in Chapter 1, increasing the breadth and depth of innovation creates a complex and dynamic scenario that is highly favourable for the productive activity of cultural and creative organizations. This is confirmed by the emergence of a new conceptual framework (soft innovation, hidden innovation, open innovation) that complements the classical perspective of technology and production-based innovation. Such broadening and re-conceptualization is closely linked to service innovation, the production of knowledge through the integration and recombination of different aspects, the transcendent value of meanings and symbols, and open, cross-cutting organizational models and networking. Innovation is inherent to the mission and productive and organizational characteristics of cultural agents. The dynamics described above increase this dimension by placing it in the context of the need for competitiveness and well-being associated with territorial development. The Third Austrian Report on Cultural and Creative Industries (2008) indicated that the level of innovation in CCIs is higher than the average of the economy as a whole. This is confirmed by the sector itself, which has recognized the importance of innovation processes. Of all the CCIs surveyed for the report "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010), 74% stressed the need to invest in innovation and provide more support for the sector's small and medium enterprises in order to encourage research and development (R&D).

Moreover, the Austrian report highligthed the relevance of CCIs as providers of innovation for other economic sectors of the economy. The European 2020 Strategy confirms this perception when it underlines the role of cultural and creative SMEs in the promotion of non-technological and scientific innovation methods, which are not yet sufficiently recognized at the institutional level. The tables below summarize the key elements of the innovation dynamics found within the CCIs, associating them with the different parts of the production function.

TABLE 7: Links to innovation: Demand

INPUTS		
PRODUCTIVE DIMENSION	LINKS TO INNOVATION	
HUMAN RESOURCES	Cognitive workers: higher levels of training than the average of the economy Creative skills, talent and tolerance: importance of divergent and critical thinking, imagination Technical know-how and ability to integrate several disciplines and languages Leadership skills, independence and entrepreneurial attitude Greater capacity for teamwork and valorization of relational capital Integration of lifestyles into the professional activity. High geographical mobility and greater international projection (networks)	
SYMBOLIC RESOURCES	The production of the CCIs is intensive in the use of knowledge and symbolic resources Symbolic production presents a growing value for companies' competitiveness and differentiation strategies in the framework of the Knowledge Economy High interaction between the aesthetic dimension of production and companies' marketing strategies and ethical values	
RELATIONAL RESOURCES	Wealth of social capital, valorization of social capital in production processes Generation, interaction and use of social environments and physical spaces conducive to creativity	

TABLE 8: Links to innovation: Processes

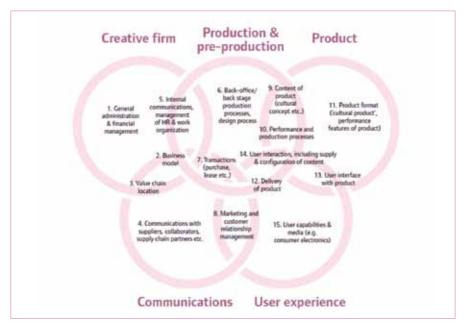
PRODUCTIVE PROCESS		
PRODUCTIVE DIMENSION	LINKS TO INNOVATION	
VISION AND MISSION	Social responsibility values: equality, diversity, solidarity, sustainability Orientation: not-for-profit, beyond profit Territorial involvement, proximity Artistic excellence criteria that promote continuous improvement through research and experimentation Educational function, promotion of access to culture	
ORGANIZATIONAL MODEL	Organizational values characterised by independence and autonomy at work, voluntary work, working for pleasure, transparency Cultural entrepreneurship Importance of an organizational behaviour based on hacker ethics: the individual as the focus and the network as support Open network cooperation through non-hierarchical structures Interactive hyperconnectivity: potential use of Web 2.0 Clustering dynamics: effects of concentration and territorial networks on social innovation	
MANAGEMENT MODEL	SME dimension. Shortfall of entrepreneurial skills Management skills affected by issues like Intellectual Property. Knowledge management characterized by high levels of improvisation and very short-term planning as a result of the uncertainty associated with cultural markets. Models of human resource training characterised by the importance of lifelong learning through personalized and informal methods	
COMMUNICATION	The communication function is a tool inherent to cognitive workers: the value of expression, emotions, production of meaning Information network management, hyperconnectivity and use of NICTs	
TECHNOLOGIES	Interaction between creative content and promotion of the use of new technologies Favourable synergies between the organizational philosophy of the CCIs and the potential of Web 2.0: use of multi-platforms and free content Inefficient management of Intellectual Property Rights and negative implications of digitization (piracy)	
BUSINESS AND FINANCING MODEL	Not-for-profit and "beyond-profit" organizations Entrepreneurship and innovative funding methods: crowdfunding, business angels, venture capital	

TABLE 9: Links to innovation: Outputs

OUTPUTS		
PRODUCTIVE DIMENSION	LINKS TO INNOVATION	
PRODUCTS	Cognitive nature of production: experiential, informational, intangible goods; symbolic production, emotions, aesthetic values	
SERVICES	Spaces for creativity: workshops on creative work methodologies Cultural (meta) research, thought and experimentation. Critical analysis. Promotion of spaces for divergent thinking Educational and sensitization services Creative content and communication Cultural entertainment and social mobility (citizen participation) Internationalization and integration in territorial networks	
	IMPACTS	
TYPES OF IMPACTS	Audiences: diversity of impacts related to human development (educational, cultural capital, entertainment, aesthetics) Promotion of self-employment through cultural entrepreneurship Territorial impacts: branding, use of cultural resources in regional development planning, interterritorial cultural cooperation, productive diversification, cultural tourism, promotion of creative environments (public and participatory spaces) Development of mass creativity and hidden innovation (integration of artistic abilities in the educational model, promotion of social dialogue and use of the NICTs) Environmental sustainability: development of alternative consumer values and lifestyles. Development of consumer-led innovation (cultural agents as avant-garde users). Fight against social exclusion: social cohesion, territorial identity and historical memory, cultural diversity, art as a tool for urban renewal and the integration of marginalized groups (crime prevention, promotion of healthy attitudes) Institutional innovation and optimization of public services: improvement of an area's attractiveness, greater trust and communication between Administration and citizens, greater involvement of groups in risk of exclusion, proximity and interaction with users, participatory online suggestions systems; creative methods for generating ideas, visibility of emerging problems, experimentation, pilot projects Innovation services for other economic sectors: design, product and service innovation, branding (communication of values), human resources management (creative skills)	

Going a bit further into the analysis of the production function, Miles and Green (2008) identify five areas of innovation in cultural organizations:

FIGURE 18: Sites of innovation in the Creative Industries Source: Miles, Green, 2008



The chart above illustrates the five main areas for innovation that can be found in the CCIs: companies, production process, products, communication and users. These areas interact within a socio-economic and technological context that is constantly evolving. It is essential to consider these areas from a dynamic perspective, because change is the key to innovation. It is these changes that makes society and the economy generate new demands for innovation (in the shape of new needs and challenges like the ones included in the Europe 2020 Strategy, for instance), inspires cultural agents by offering new opportunities for creation and promotes the acceptance of hitherto undervalued innovation transfers.

Following the outline of the value chain of cultural organizations proposed by Bakhshi and Throsby (2010), there are three vectors that determine the dynamics of change in the CCIs. These three vectors are interdependent, since each of them is strongly influenced by the evolution of the other two:

> Cultural demand: the aim is identifying latent and emergent demands in the cultural goods and services market through prospective exercises, research and experimentation with trends related to changes of values and consumer and audience behaviour. Changes in demand affect the way in which audiences are managed (i.e. new ways of delivering experiences, design of accessible cultural services, user-driven approach).

- Digitization and technological developments. Web 2.0, distributed social networking and multi-platform applications are decisive innovation elements when reconfiguring the productive process and the business model of a cultural organization. Digitization deeply re-examines the traditional intermediation carried out by cultural organizations. According to Throsby's conventional description of the value chain of cultural organizations (1979), the relationships between these organizations and audiences (content and services offered in exchange for box office); artists (visibility in exchange for creation) and public institutions and sponsors (value and public usefulness in exchange for funding) are subject to new rules. Intermediation between the production, distribution and consumption spheres adopts new forms (Peer to Peer sharing –P2P– being the most obvious expression) that require adaptation to generate added value and justify the role of intermediaries.
- Diversification and reconfiguration of the sources of revenue and funding that enable credit and investment. The institutionalization of the central role of new funding mechanisms like crowdfunding in development processes facilitates alternative methods of public funding (as in the case of the Sostenuto project, funded through INTERREG). Cultural goods and services are given new social and public uses (e.g. public services upgrading, introduction of innovation in the design of policies aimed at combating social exclusion, promotion of self-employment, development of social creativity, etc.).

On the other hand, the unsustainability of the predominant social and economic development model and the need to lead it towards more desirable options through new values and lifestyles that promote change in production and consumption trends generate important opportunities for a recombination of cultural services based on their educational, communicative and research function. The accelerated development of the possibilities offered by the New Information Technologies increases the scope of interaction with audiences and users exponentially. In turn, audiences and users grow and diversify in a society faced with the challenges of economic globalization, environmental sustainability and the fight against social exclusion. The search for audiences and the successful retention of customers require a deep adaptation to the new scenario.

From an external perspective, the Third Austrian Report on Cultural and Creative Industries (2008) pointed out the importance of the CCIs as suppliers of innovation for other economic sectors. The main argument is that creative industries introduce new ideas that filter down through other productive sectors (e.g. through design) or that creative industries facilitate the adoption and retention of new ideas and technologies in other sectors. From this perspective, economic policy should turn its attention towards cultural sectors, not only because they are economically significant in themselves, but also because they promote growth in other sectors. The generation and transfer of innovation become key variables that explain the connection between creative sectors and economic growth. Some empirical approaches to the Spanish case (Ruiz-Navarro, Martinez-Fierro, 2010) show that: a) cultural entrepreneurs find different sources of opportunity than entrepreneurs in other economic sectors; b) they are more innovative and c) they use the new technologies more intensively. Their conclusions seem to fit quite well into our line of reasoning: "Cultural entrepreneurs cause a greater economic impact than non-cultural entrepreneurs by generating innovation, stimulating the use of advanced technologies and detecting potential opportunities in an idiosyncratic manner" (Ruiz-Navarro, Martinez-Fierro, 2010).

In any case, our analysis is conditioned by the way in which the economic nature of innovation affects cultural organizations' actual possibilities for action in this matter through the "credit-investment-innovation" cycle. The restrictions of institutional visibility (which raise the need for adequate indicators to assess the impact of innovation on cultural and creative goods and services) add to factors like the higher risks associated with the shortfall of entrepreneurial skills in the sector and the lack of recognition of the specificities of their economic value (intangible assets, soft innovation, etc).

The research developed by institutions like NESTA or the European Innovation Scoreboard tries to overcome such structural limitations, although the sensitivity and economic support of European programmes are far from sufficient: less than 3 of the 174 billion euros invested by the EU to stimulate Research and Development and new technologies in the 2007-2013 period were aimed at promoting culture-based creativity.

As indicated above, the value and knowledge creation processes developed by cultural and creative organizations are not sufficiently recognized by conventional research approaches and their economic feasibility is difficult to justify. The SMEs operating in the CCI sector have great difficulties to develop their innovation capacity due to their limited access to funding, essential for R+D+I. This access should be facilitated by enhancing coordination with universities, research centres, the business fabric, and so on. The CCIs must improve their ability to integrate and use the impacts of the New Information and Communication Technologies.

In this chapter we have carried out an in-depth study of the production function of cultural and creative organizations in the framework of the broadening and deepening trend that is affecting innovation production processes.

According to Potts (2007), the autonomy, complexity and dynamism of the relationships between innovation processes and the CCIs, their inherently innovative nature and the important synergies that they create with other productive sectors and territorial development (e.g. social and environmental aspects) raise the possibility of considering them as a creativity system within the innovation systems. As the analysis of the production function has shown, cultural and creative activities are profoundly integrated in the fields of representation, experimentation and search for novelties. For Potts (2007), these characteristics make arts and culture a vital part of today's economy, because they are essential to facilitate the penetration of new ideas and their transfer to the social context. This issue needs to be considered in dynamic terms, also taking into account the relevance of the territorial perspective and the proximity criteria, the non-neutrality of space and the value of territorial resources and dynamics in the production of innovation.

The innovation systems theory (Freeman, 1987; Lundval, 1988 and 2007) stresses the importance of interaction and mutual learning processes between entrepreneurial players, social actors and institutions. Here, innovation is considered as a dynamic and social process in which technological change is endogenous. The evolution of public policies designed to promote research and innovation illustrates this notion. After two generations of policies in which efforts were focused in laboratories (the linear model) and infrastructures (coordination of science, education, competition and fiscal policies), the third generation underscores the creation and continuous updating of knowledge and mutual learning processes between the players who are directly or indirectly involved. The innovation policy instruments based on the innovation systems theory stress five large categories (Castro et al, 2003):

- Updating of the capabilities of the innovation system: placing the accent on specialized resources and infrastructures (education, training for researchers, labour market, development of companies' creative spirit and innovation capacity, detection of the needs of SMEs, clusters, incubators, etc).
- 2> Promotion of knowledge dissemination and the relationships between players in the system. Fostering of mobility and placement schemes, cooperation between companies, universities and other knowledge centres, intellectual property support, etc.
- 3> Diversification of the economic fabric: the aim is expanding areas of knowledge and regional specialization, managing new opportunities. This diversification will ultimately attract external companies, generate favourable environments for advanced services and create spin-offs.
- 4> Culture of innovation and governance: information transparency is necessary to ensure minimal levels of uncertainty and risk. Social capital development, prospective or scientific dissemination are some of the actions that could be promoted in this area.

5> Funding of R&D projects. This is a classical support instrument that lowers and shares the risks inherent to Research and Development. Venture and seed capital, along with schemes and criteria like loans, grants, credits, exemptions and stakes in holdings, can be taken as a reference in this sense. Taking into account the analysis of the production function of cultural and creative organizations developed throughout this chapter, it is obvious that the shadow of the CCIs influences all these policies, which illustrates their condition of creativity systems within innovation systems.

A geographical and territorial approach to innovation: creative clusters and local innovation systems

This method includes three complementary approaches:

- > The creative city as a space for innovation. This approach encompasses Richard Florida's theories on the creative class and urban creative management.
- > Creative Clusters. This approach identifies the characteristics and configuration mechanisms of creative activities and their relationship with the rest of the local economic sector and the local innovation systems.
- > Cultural Activities and Local Creativity. This proposal is based on the social aspect of the concept of urban creativity and highlights the role of citizens, artists, the cultural offer, the environmental factor and the function of urban governance in the design of an urban creative space.

The concept of Creative City illustrates the regionalization of culture. This concept presents three broad approaches to the origin of innovation. The first one indicates that the generation of new ideas depends on the regional concentration of creative individuals; the second one links it to the clustering of cultural and creative industries and the third one associates it with a kind of urban management focused on arts and culture. These are the three interpretations that authors like Greffe (2011) and Costa (2008) use to synthesize academic literature on this subject: creative classes, creative clusters and urban cultural planning.

Since we have already covered the first approach, we wil focus on creative clusters and urban cultural planning.

The economic theory that studies the geographical clustering of productive activities began to be applied to the cultural sphere in the 1990s. The concepts of geographic economy and industrial clusters (Porter, 1990) emerge as an explanation of the "competitive edge" in the framework of "international trade". In general terms, clustering factors include the reduction of transaction costs and the increase in occupational mobility, which allow regions to specialize in certain products.

Research on creative clusters analyzes the level of regional concentration of creative activities and the type of specialization. Methodologies like mapping and the use of indicators (as a location quotient) are often used for such purposes. The importance of this type of research lies in the fact that it is aimed at identifying the ways in which clusters foster the generation of new knowledge. How is creativity transferred to the other activities in the region? At a time when processes are indeed becoming increasingly more complex and open, there are four types of analysis that can be used to examine this issue:

- Identification of creative clusters: Even though Cultural and Creative Industries (CCIs) tend to be more concentrated than any other industrial sector (Lazzaretti et al, 2011a), there is a great lack of knowledge in this respect in the European context.
- > Specific features of creative clusters: Cultural industry clusters are different from those of other sectors. Various types of creative industries can coexist in the same region. In fact, there is a strong correlation between the presence of some industries and the establishment of others. Some clusters group industries that operate in the same phase of the creativity value chain, as it is the case for audiovisual production. (Chapain et al, 2010; De Propis et al, 2010); Bakhshi, H. et al, 2008).
- > Relations between creative industries and the rest of the economy: Research conducted by authors like De Propis et al. (2010) and Müller, K. et al. (2008) has found that creative businesses maintain strong business relations with other sectors. Input-output research has revealed that the most innovative industries are those that conduct more exchanges with the creative sector. The correlation between the geographical location of the creative sector and that of other sectors indicates that creative businesses and innovative companies like "those involved in high-tech manufacturing and knowledge-intensive business services (KIBS)" tend to co-locate (De Propis et al., 2009).
- > Configuration mechanisms for creative clusters and contribution to local innovation: The key point in this last level of research is the identification of the mechanisms through which creative businesses concentrate and contribute to innovation in a given region. What makes creative industries cluster in certain regions? Lazzaretti et al. (2011) point at factors like the presence of historical and cultural heritage, the effect of economic agglomeration, the role of human capital and the presence of the creative class (Florida).

On the other hand, how does the creative sector contribute to innovation? This sector is included in local innovation systems. According to this approach (Potts, 2007 and 2009; Lazzaretti et al., 2011a; Kimpeler & Georgieff, 2009), the economic growth of a region depends on the presence of institutions like universities or innovation centres, whose systematic performance will lead to innovation. As we have already pointed out, innovation, increasingly open and complex, feeds on ideas and knowledge from a diversity of sources. In Potts' words (2007): "the standard innovation systems approach focuses only on physical technologies and engineering-type considerations of technologies. Notably, it excludes the sort of knowledge studied by the arts and humanities along with the set of industries gathered under the rubric of 'creative industries'".

As for the third issue, culture, understood as the production and consumption of cultural and artistic activities, creates circuits and relations in specific regions, thereby fostering innovation. Costa (2008) draws attention to the relationship between the regional agglomeration of cultural activities and "the mechanisms

behind innovative dynamics in these regions, with a specific focus on the issue of creativity."

Creativity has to be understood as a participatory process where communities need to be encouraged to play an active role. The linear idea of the cultural process coming to an end when it reaches the consumer needs to be changed. This can be done by identifying the creative capacity of consumers. According to Greffe (2011), "activating the role of arts" implies promoting a project-based culture through the artistic practices developed by the inhabitants of a city, with the understanding that creativity takes place within a system of social relationships and power.

In this group of processes and relationships, it is worth highlighting the leading role that cultural mediators play as creative agents capable of activating said processes and imagining potential future scenarios for a community's symbolic universe.

To summarize, promoting territories' cultural vitality means preparing them for the development of a creative economy, construed as the entire space for the exchange of cultural experiences in a community.

Interpreted in this way, creative processes have the capacity to integrate communities, but also to exclude them. Therefore, governability becomes a determining factor in the creative development of any city. In other words, the model of creative city adopted will depend on the kind of strategic decisions taken at the institutional level in terms of cultural programming and public funding for cultural and creative activities.

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CHAPTER 04 THE CONTRIBUTION OF CULTURAL AND CREATIVE ACTIVITIES TO THE SHAPING OF THE EUROPEAN SOCIO-ECONOMIC SPACE

» The noticeable dimensions of connection between cultural and creative activity and the rest of the socio-economic space

Revisiting the needs to be satisfied by the system

The cultural field produces values, and values are one of the elements that determine our behaviour and govern the way we perceive the world. In fact, it is our set of values that sets the objectives of the institutions we create in order to articulate our life in society. Therefore, all our institutions are the result of our hierarchy of values and a consequence of our cultural architecture. However, if we lower our level of analysis, we can see that the satisfaction of cultural needs is the main purpose of any economic system and that the set of values derived from the cultural sphere shapes the rest of the socio-economic space.

Cultural rights and the purpose of the economic system

Ultimately, the role of an economic system is none other than to fulfill the desires, wishes and objectives of a community. Once the basic material needs have been covered, the next group of needs are those related to the individual or collective cultural dimension. This idea materializes in the formulation of the cultural rights¹, which can be basically summarized in the right to be, the right to express oneself and to communicate and the right to participate through culture and artistic expression. Cultural rights, as a substantial part of human rights, constitute the intrinsic dimension of the value of culture regardless of its other values. Culture is valuable because it makes us inherently human. The rapprochement between economy and culture is a recent process, despite the widespread idea among all areas of humanist philosophy that economic growth constitutes only the means to achieve cultural progress. Ironically, Linder (Linder, S., 1970) denounced the lack of connection between the professed means (the economy) and the purported end (culture): "The cultivation of the mind and spirit is generally accepted as being the supreme goal of human effort"(94). "The profane thinkers who developed the gospel of economic growth regarded economic progress as an active means of promoting cultural progress. They expected that more and more time would be devoted to the cultivation of the spirit. In Tibor Scitovsky's words, 'they hoped that progress would turn more and more people into philosophers in their own image, engaged in the leisurely and philosophical contemplation of the world and its wonders'. Much of the optimism of the Enlightenment thinkers was bound up with such expectations. Now that economics has developed into a science, its practitioners have lost interest in the ultimate purposes of economic growth and how much can be achieved. Nor have the analytic tools developed been able to provide any insight into the interplay between economics and culture. However, the time allocation theory can provide some guidance in this respect. It reveals what

^{1.} Fribourg declaration, 2007.

many may call a disturbing circumstance: economic growth subjects culture time to an increasing competition, and the time devoted to cultural exercises is probably decreasing (94)".

Keynes himself believed that the economy should be seen as a means to move on to superior realizations of art and culture (Hession, C., 1984). In other words: the economic system enables individuals to realize their cultural rights, acting as a tool to achieve the ultimate aims of mankind. Culture gives an ethical purpose to economic organization.

The notion of progress itself has been reconceptualized, evolving from being associated to merely economic growth to incorporating aspects like human development, social justice or environmental quality. Moreover, culture becomes a moral imperative as the purpose of progress. Sen's understanding of progress as a process that improves individuals' capacities and expands their freedom (Sen, A., 2001) obliges us to include cultural issues among the purposes and means of progress.

The new aims that must be fulfilled by the collective organization system are related to the broadening of the possibility frontiers that individuals can reach through the manifestation of their cultural dimension.

Culture brings values into the equation

The field of culture is externalizing values that permeate into the socio-economic space and seem to be much more in line with the concept of sustainable development, especially against the backdrop of the economic crisis. Concepts like copyleft and commons create new universes of values that affect the economic and the social space. They reflect a new hierarchy that includes aspects like the explicit wish to innovate, relational consumerism (as opposed to transactional consumerism), free exchange, critical thinking, personal development, solidarity, cooperation, networking, the value of diversity and beauty, participation and the importance of the recreational and vital dimension as opposed to the purely economic gain. In other words, the actions of creativity are not exclusively guided by instrumental rationality. Expressive values and values of exchange and mutual benefit are also at work. Recently, we have become aware that it is precisely the instrumental rationality based on the maximization of profits that has led us to this dead end street of financial and economic crisis, which has pointed us towards a certain ethical reassessment of the individuals' needs. Values from the cultural field like cooperation, solidarity, transparence or responsibility are being reclaimed. These new values spread through the conventional social spaces but also through the new ethics that radiate from the social movements articulated on the Internet. The interests that guide creative action are not only economic. Thus, the concept of innovation broadens to incorporate value-creating social processes. The new producer ethics spreads throughout the economy and materializes in the emergence of new values, models and business sectors. The values of sustainability,

creativity, transparency, participation, responsibility, technology and commitment become the ethic foundations of new productive sectors like the Social Economy, the Digital Economy, the Creative Economy, the Open Economy or the Green Economy. Therefore, the values and principles that promote socioeconomic dynamics in line with the ideal of sustainable development acquire greater importance, as the European Commission pointed out in the report "Unlocking the potential of Cultural and Creative Industries". The convergence between cultural activity and social purposes constitutes a main priority, especially in social innovation processes and in the practices related to the cooperative economy (Murray, Caullier-Grice, Mulgan, 2010). The values that radiate from the cultural field also arise as a reaction to the "inadequacy of the present socio-economic paradigms to handle the distributional discrepancies, build sustainable models of economic inclusion and solve the problems of urban, environmental and social violence that we suffer, not by equalising down, but by allowing a new class of agents to enter the economic circuit, albeit mostly in an informal manner". (Fonseca, A., 2008)

I have nothing smart to say about the creative industry. This might be because I'm in the middle of it myself, not being able to see it clearly anymore. But most of all, creativity can't be compared with industrial principles. It's not about production, it's about reflection. It's not about security, but about experiments. It's not about output, but about input. It's not about graphs, but about people. It's not about similarities, but about differences. It's not about majorities, but about differences. It's not about the private domain, but about the public domain. It's not about financial space, but about cultural space. Creativity has nothing to do with the economy, or with bureaucracy. It's about cultural value, trust, autonomous positions and undefined spaces. *Annelys de Vet (Lovink, G., Rossiter, N., 2007)*

The values stemming from the cultural field incorporate a new dimension into the maximization processes that determine decision-making. Thus, individuals take into account factors that go beyond the evaluation of costs and benefits in purely economic terms. Participation in cultural and creative activities, be it in the market or in the social sphere, is explained by the usefulness provided by the pleasure and recreation of creative processes; the autonomy and personal entrepreneurship, the softening of hierarchies; the possibilities of innovation and lifelong learning; the need for communication and exchange; the possibility to participate in projects with social impact; the perception that these work environments are egalitarian and open to diversity and the fascination for the novelty of the sector (Ptgk, M., 2011).

Nowadays, some discourses attribute behaviours apparently distant from the conventional notion of instrumental rationality to much subtler maximization models that point towards the emergence of a new era characterized by non-market production and innovation processes driven by the democratization of digital production media and the surplus that they generate (Benkler, 2011).

From a more philosophical perspective, the cultural space builds its own dignity. Taking this requirement into account, the creative economy is founded on the values of the solidarity economy in the sense that the aim is producing and acting together, respecting democratic principles, sharing cultural values and establishing relationships based on negotiated reciprocity. Cultural commitment prevails over the rewards obtained through monetary payments. Artists may sell a lot, but their projects do not have to be profitable to be considered of general interest: they only need to implicate the people around them that are committed to produce meaning and values in the public sphere to feed the common imaginary of "living together" (Lucas, 2009).

FIGURE 19: Extract of the manifest "Towards Transformational Cultures"²



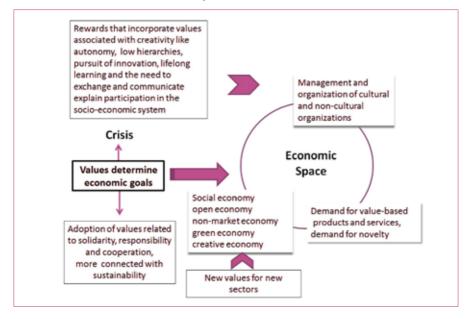
The cultural field provides a set of individual values that facilitate the implementation of sustainable development models, while cultural organizations incorporate new organizational values. The movement that unites creative workers and the new management is bidirectional. "On the one hand, creative workers (in the broader sense: artists, architects or software developers) are increasingly required for tasks related to post-industrial mutation and innovation. On the other, the new human resources management uses them as an inspiration and adapts the old factories to the requirements of contemporary economy". (Ptqk, M., 2011)

The relevance of values in the articulation of demand is another differential element of the "cultural attitude". The articulation of the "demand for novelty" in social spaces becomes the sanctioning mechanism for innovations proposed by the set of cultural and creative activities in a certain exchange space. Therefore, the "creative class" is not only relevant from the perspective of economic and social innovation. Ultimately, it is the creative class itself that constitutes the solvent demand that accepts or rejects innovation through its buying preferences. This hypothesis is rare among the majority of innovation studies, which suggest that new ideas are scarce and valuable things derived from important investments. However, in the context of art, music, fashion and intellectual ideas, the experience of consumers that move in social spaces filled with novelties comes closer to a regular exposure to innovation. The Internet has

^{2.} Forum "Ready to change: An experimental forum on culture and social innovation in Europe and in the Med Area", December 2010, Ljubljana-Slovenia.

multiplied the possibilities to access cultural goods and services. The issue is no longer stimulating production, but rather managing its abundance.

FIGURE 20: Cultural values and economic space



The non-neutrality of space

One of the essential characteristics of symbolic production is that the attributes of space are somehow integrated in the production of creative goods and services, as is the case of fashion in Paris, theatre in London, music in Nashville or ceramics in Caltagirone. Cultural and creative activities are particularly sensitive to grouping and "districtualization". A cluster can be defined as the densification of the relations established in a certain territory between public and private organizations in a particular sector. This densification generates financial and technological externalities due to the co-existence and combination of the forces of competition and collaboration rooted in the historical tradition of the territory and its socio-economic context³.

All cultural activities have a high level of connection with the territory that manifests itself in the agglomeration of cultural production and consumption in areas that benefit from scale effects and externalities. There are countless examples of territorial concentration of such activities that combine endogenous and exogenous factors to reaffirm their specificity (and consequently, their competitiveness) in a global context: on the one hand, taking advantage

^{3.} Xavier Greffe indicates that the competitive effects on a cultural company that operates within a cluster take away 0.36 per cent while the synergic effects of collaboration add 0.82. Therefore, the net effect of "districtualization" is positive.

of the specific production conditions of each location (influenced by a culture based on the local dimension), and on the other hand, becoming part of larger structures of flexible specialization. (Costa, P. 2011)

Space not only constitutes the geographical referent of cultural resources (material or immaterial). It becomes a resource on its own. A cultural district with a creative component is a district in which creativity is a relevant input in the production process of symbolic goods and services and where production and distribution through a network of small and medium-sized companies that are born from the branching off of "ambitious operators" and most of the time share common relations and similar operational and management models. These kinds of districts are also characterized by a high degree of specialization and continuous innovation, combined with flexible labor relations models. Another requirement that a district needs to fulfill to be considered "cultural" is that the flows of information and knowledge transmission have to be very dense. Low transaction costs in "erga intra" information transmission processes, informal dissemination of know-how and the existence of common tacit knowledge are a must. Formal and informal spaces where the different agents can interact and get involved in "cross-fertilization" processes between stakeholders and projects are also necessary.

This last consideration is especially relevant, since cities like the Athens of Pericles, Florence, Paris or New York have proved to be adequate melting pots for the connection between artistic creators. From the urban dimensions that allow frequent and casual contact between citizens (up to 50,000 inhabitants) to the emergence of bohemian neighbourhoods associated with the cultural agents that live in large metropolis, spatial concentration seems to be essential to generate processes of "creative eclosion".

The existence of spatial spillovers and their effects on innovation has been widely recognized in the regional and urban economics literature (Capello 2006). If we apply this concept to the issue at hand, the logic is that creative industries produce externalities that are transferred to other industries in the same geographical space. If the externalities affect the production function of firms operating in the region, then we can talk about an "external economy" that generates pecuniary returns for the firms. This, in turn, translates into higher levels of income in the region.

The literature offers a wide range of approaches to external economies. For example, the Frontier Economics (2007) report on the effects of the spillovers of creative industries on the economy of the United Kingdom (Creative Industry spillovers – Understanding their impact on the wider economy, p.1) differentiates between:

- 1> Knowledge spillovers new ideas that benefit other firms without rewarding the firm that creates them.
- 2> Product spillovers new products that are used to benefit other firms without rewarding the firm that has produced them.

3> Network spillovers – benefits that can only be generated when firms group together.

The report suggests that "a number of Creative Industries may be unique in their ability to generate network spillovers by attracting other firms and workers. This will apply to firms that can confer attractiveness to an area" (Frontier Economics 2007, p.1-2).

Another way to divide spillovers is considering whether they result from proximity and regional synergies or from regional and institutional factors.

Spillovers arising from proximity, regional synergies and regional interaction include several mechanisms:

- 1> Within-industry spillovers coming from specialized industries and regional clusters. This kind of external economy was first described by Marshall (1890), who referred to a specialized local labour market, local specialized suppliers and knowledge spillovers. Recent research has relied on similar mechanisms. For Jaffe (1986), the initial concentration of creative industries in a region boosts the future development of creative industries or their production.
- 2> Cross-fertilization between different industries. This idea, proposed by Jacobs in 1961, entails the exchange of complementary functions or knowledge between different industries located in the same region. Thus, the existence of creative industries in a region provides complementary functions and knowledge to other industries. Cross-fertilization can also occur between related varieties (Boschma and Iammarino, 2008). In this case, there are knowledge spillovers due to the complementarities between sectors in terms of shared competences.
- 3> Social diversity. As opposed to the "melting pot" societies, social diversity and multiculturalism generate new ideas and forms of social organization that affect the regional performance (Jacobs 1961). As Florida (2002) remarks, creative people like all this social diversity, so places considered diverse tend to produce and attract creative people.
- 4> Human capital density. Knudsen et al. (2008, p.464) point out that "high densities of creative capital lead to frequent face-to-face interactions, thus facilitating 'creative' spillovers and subsequent innovations".

Regional institutional factors refer to the role of networks between organizations, financial and legal institutions, technical agencies and research infrastructures, education and training systems, governance structures and innovation policies (lammarino, 2005, p.499) in regional innovation. Rodríguez-Pose (1999) indicates that the capacity of institutional networks to catalyze innovation depends on the "social filters", understood as the combination of the social and structural conditions of a given territory. Through this social filter, territorially embedded institutional networks favour or hinder innovation.

From the supply perspective, the size and articulation of the territory are necessary conditions to facilitate serendipity, cross-fertilization or creation

by friction and chance. From the demand perspective, territory is the space is where critical masses of solvent demand of innovation crystallize, where new values and attitudes are identified, imitated and disseminated. Therefore, territory sanctions economic, social, institutional and political innovation, making it visible and disseminating it. Space, culture and economy show a high degree of symbiosis. In modern capitalism, this symbiosis is re-emerging vigorously in the economic dimension of culture in certain cities. The more cities have a specific cultural identity, the more they enjoy "place monopolies" that translate into a specific economic configuration and competitive advantages on the global market (Scott, J.A., 2000).

The relationships between culture and development⁴

The literature that explicitly addresses the role of culture in the promotion of economic development does not offer a precise and in-depth description of the relationships between the variables involved. In recent years, there has been an onslaught of studies on creative cities and territories and local development models based on culture. This trend was popularized by Richard Florida with his various publications on the concept of the Creative Class⁵. Paradoxically, there is a true explosion of literature that already brings empyrical proof of a disruption in the current economic cycle, which means that we cannot ascertain whether the theories that served us well to explain the role of creativity and culture in the past will still be valid to explain their role in the future. The key question is whether the cultural sector is just another economic sector that has gone through an excellent period during the first decade of the 21st Century thanks to the combination of terciarization, the restructuring of the value chain in many sectors and the technological revolution of digitalization and globalization and will go back to a more discreet behaviour when these processes deplete or reverse, or whether we are talking about an activity that, as pointed out by authors like Potts (2007), has become the key element that defines the competitive potential of organizations, companies and territories. Potts and Cunningham propose four possible scenarios to situate cultural and creative activities within the dynamics of development:

^{4.} Throughout much of the 20th Century, economists showed little interest in culture and cultural aspects were largely ignored. However, if we analyze the key factors of the theories that attempt to explain economic growth, we can identify the specific role played by cultural and creative factors. From the publication of Joseph Schumpeter's seminal work on innovation (1911), the facus of economic literature moved to the importance of new knowledge and technological change spurred by innovation and knowledge spillovers, aspects associated with the fundamental role of information and its dissemination. Moreover, the studies on endogenous growth initiated during the 80's by Romer [1986] and Lucas [1988] introduced a new perspective that explicitly considers the role of human capital (education and skills) and knowledge capital. It was then that the economic sciences recognized the role of intangible assets. Nevertheless, the human act of producing creative thoughts has always been considered an exogenous variable. [Sacco, P.L., Segre, 6. 2009; 285]

^{5.} This report analyzes and develops the theory of economic growth advanced in "The Rise of the Creative Class". This theory argues that economic growth and development depend on 31s—Technology, Talent and Tolerance. Traditional models say that economic growth comes from companies, jobs or technology. However, this report argues that these models are incomplete. Technology is important, but there are other factors that come into play. As for Talent, human capital theorists have long argued that educated people are the key driver of economic development. Following "The Rise of the Creative Class", we use measures of creative occupation and human capital based on educational attainment, such as the percentage of the workforce that holds a Bachelor's or higher degree.

TABLE 10: The four relation models between culture and economy Source: Potts and Cunningham, 2010

THE WELFARE MODEL	Culture is a net charge on the economy, which is worth paying for, because the global effect on welfare is positive. This is due to the production of high value cultural products with a low market value. The intervention of cultural policy is justified by the consideration of "tutelary goods" or the theory of "market failures", according to which the market is unable to internalize the cultural value of the good.
THE COMPETITIVE MODEL	Culture is just another sector. Hence, changes in the size of the creative industry affect the whole economy but only proportionally. Culture is structurally neutral on the global dynamic. Effects on income, productivity or welfare are no different from those of any other sector. In terms of public policy, culture is as deserving or undeserving of subsidies as the rest of the industrial activities.
THE GROWTH MODEL	In this model, creative industries are a growth vector in the same way that agriculture was at the beginning of the 20 th century, or factories in the 1950-60s. There are many possible explanations, but they are all variations of the idea that creative industries generate externalities that cause variations in productivity or in the competitiveness of other sectors (for example, innovation-oriented design) or facilitate the adoption and retention of new ideas and technologies in other sectors (e.g., ICT).
THE INNOVATION MODEL	Creative industries are not a sector per se, but rather they are a structural part of the innovation system of the economy as a whole. Culture leads the changing process in the economy and is considered a public good in a dynamic sense.

The implications in terms of cultural policies are very diverse. While the first model outlines a merely protectionist intervention structure, the second one points us towards a conventional industrial policy and the fourth understands cultural policies as a part of the innovation policies.

The ability of cultural and creative activities to affect the potential for growth of a certain territory can be linked to several factors.

The most obvious ones are related to productivity and its effects on competitiveness. The greater productivity of cultural and creative activities with respect to the average economic activity is the most obvious explanation for the fact that an increase in the percentage of economic activity related to the cultural and creative sector improves the capacity for growth of the whole economy as a consequence of its increased productivity (Rausell, P., Marco, F., 2010). However, it is clear that this cannot be a hefty effect, because cultural activities only represent a modest proportion of the whole system. Culture can also affect the global capacity for growth through its potential to boost competitiveness by becoming a complementary attribute in certain sectors. Tourism is the paradigmatic case. The cultural dimension, understood as complementary offer in Porter's terms, improves the competitive ability of mature tourism products. Another effect pointed out by numerous authors is the role of cultural territorial density as an element of localization of economic activities not necessarilly linked to culture, often despite the higher costs of the remaining production factors. In addition, the other economic sectors use inputs from the creative and artistic sectors in their production to add a differential element to their products and services, thus improving their competitiveness.

Obviously, the analyses we are most interested in are those which link cultural and creative activities to the growth processes linked to innovation.

The research linking creative industries and innovation, both understood in the broader sense, is still in its infancy. There are two main lines of research: one focuses on innovation in creative industries and the other studies the role of Creative Industries in the promotion of innovation across the rest of the economy. Cross-sector spillovers are not only present in the Creative Industries, but more importantly between creative and non-creative industries. It is through the latter that creativity generates cascading innovations in contiguous manufacturing and service sectors (for studies on the links between creative and non-creative industries, see Bakhshi et al. 2008, Experian 2008, Sunley et al. 2008). It is through such cross-spillovers that creativity impacts indirectly on the wider innovation economy, contributing to economic growth. Many creative industries produce innovations that reach the markets in the form of intellectual property. The most common forms of intellectual property related to creative industries are patents, designs, trademarks and copyright. This includes from artistic creativity, quite common in creative industries, to scientific creativity, typically associated with R&D activities.⁶

Of course, creative industries can also affect innovation in an indirect way. The role of creative industries in regional innovation and in the innovation that takes place in other industries has been addressed by Bakhshi and McVittie (2009), Chapain et al. (2010), Cunningham and Higgs (2009), Davis et al. (2009), Muller et al. (2009), Sunley et al. (2008), Gwee (2009) and Potts (2007).

The authors identify two mechanisms: the transfer through input-output links between creative and non-creative industries (Bakhshi, 2009; Muller et al., 2009), and the spread of spillovers from creative industries to the rest of the economy (Chapain et al. 2010, Davis et al. 2009, Sunley et al. 2008, Gwee 2009, Potts 2007). Müller et al. indicate that from a micro perspective, "the creative industries are among the most innovative sectors in the economy. They

^{6.} Handke (2007) analyzes the record companies in Germany (Handke 2007), Sunley et al. (2008) examine the design consultancy sector in the UK, and Tran (2010) focuses on the Danish fashion industry. Chapain et a. (2010) scan the creative clusters of Software, Film, Media Production and Advertising in some United Kingdom locations, and Stoneman (2010) looks at the publishing, music and video games industries. Miles and Lawrence (2008), Müller et al. (2009), Stoneman and Bakhshi (2009) consider that the difference between the level of trademark activity and the level of R&D or patenting activity is a useful way to measure soft innovation.

support innovation in a variety of other sectors through creative inputs, such as ideas for new products (i.e. innovation content), supplementary products and services (such as software) or marketing support for product innovations. What is more, they are also an important user of new technology and demand innovations from technology producers, particularly information and communication technologies. Their own innovative activities are a key driver for supporting innovation. However, the creative industries are not an homogenous sector. While software and advertising show the strongest links to industrial innovation, architecture and content providers contribute relatively little to industrial innovation".

Bakhshi and McVittie (2009) and Müller et al. (2009) state that creative industries introduce innovations both directly and indirectly through links in the supply chain. The analysis of direct innovations is part of the first group of studies about innovation in creative industries. Indirect innovation happens when creative industries support innovation in other industries through creative inputs and knowledge exchange, which can be either upstream (goods and services sold by each industry to the creative industries) or downstream (creative goods and services purchased by each industry). For example, Bakhshi and McVittie (2009) estimate that "if a typical firm in the UK spends double of what it does on creative products – around 6 percent as opposed to 3 percent of its gross output – the likelihood that it will introduce a product innovation either new to the company or to its market is around 25 percent higher".

The importance of the creative sectors for the wider economy has also been highlighted in studies published by Work Foundation and NESTA (2007) or Experian (2007). The first refers to the effects of innovation in the software sector on the growth of the economy in terms of an increase in Total Factor Productivity, while the second one shows that the links in the supply chain (forward and backwards) are those that exist between creative industries.

Moreover, the Centre for European Economic Research acknowledges the role of creative outputs and, introducing a methodological change, establishes that creative industries boost or stimulate innovation in sectors that provide them with inputs (especially technological ones) because they require a high degree of technical sophistication. The center also analyzes "to what extent creative companies boost innovative activities in their clients, in what stages of the innovative process [...] and which sectors benefit from this leverage" (ZEW, 2008: 20).

The report "Creating Innovation: Do the creative industries support innovation in the wider economy?" collects evidence on the B2B trading linkages between creative companies and other sectors in the United Kingdom and concludes that "the industries more connected to the creative industries have an increased performance in innovation". (NESTA, 2008: 3)

Reid et al. (2010), Cunningham and Higgs (2009), Gwee (2009) and Potts (2007) include the creative industries in the innovation ecosystem of any given econo-

my because of their influence on the innovation environment. Moreover, Gwee (2009) stresses that increasing innovation in knowledge-based creative clusters requires time. The author also indicates that government policies should ensure the development of a human capital capable of generating creative products and ideas.

In their study of the United Kingdom, Chapain et al. (2010), state that some creative industries are more innovative than the high-tech manufacturing industries and the non-creative knowledge-intensive services. However, the three sectors tend to co-locate, meaning that creative industries influence innovation in other sectors. They found this relationship in the different spillovers from creative businesses: knowledge, product and network ("urban buzz"). Work Foundation and NESTA (2007) add that job mobility spillovers are the most powerful way in which creative industries create spillovers. Kloosterman (2008) finds these innovation-generating spillovers among the young professionals of the Dutch architectural sector, many of whom come from outside the Netherlands.

Müller et al. (2009) also emphasize the contribution of creative industries to innovation, although they include the high-tech and low-tech manufacturing and the services industries among the beneficiaries.

Davis et al. (2009) argue that the dynamism in the creative cluster of screenbased media in Ontario is due to innovation, mostly driven by small firms. The cluster cooperates with its counterparts in the United States and participates more in the social environment than technological clusters.

Other authors support the idea that the impact channel of cultural and creative activities is articulated through the models of interaction between the cultural capital and the social capital. The simpler models derive from Florida's thesis of the Creative Class, which according to the European Competitiveness Report (2010) links urban growth to the Knowledge Economy. Mellander and Florida (2009) indicate that the creative workforce can have an indirect impact on regional growth through its positive impact on high-tech employment, innovation and entrepreneurship. The authors stress that occupations related to arts and culture, which have not typically been associated with regional development, play a significant direct role in the process (Mellander, Ch., Florida., R., 2011).

The results seem to indicate that the structure of relations between the cultural and creative dimension is more complicated and sophisticated than previous analyses suggested. More sophisticated approaches inspired by Romer's endogenous growth models (Romer, 1990) describe the incorporation of cultural capital into the economic system. These approaches connect with Sen's formulation of capability building. In this sense, the crucial issue is enabling individuals to access the competences that are needed to appreciate and value creative goods or experiences (Sacco, P. L., Segre, G., 2009). The density of cultural and creative activities in a territory thus becomes the medium in which these capabilities are built. The novelty of this approach is that it incorporates the demand, since it considers that the degrees of competence and the capabilities acquired by the inhabitants of a certain territory through culture ultimately determine whether or not there is a critical mass of solvent demand for cultural goods and services. In these models, the cultural capital is an essential part of the growth processes, where knowledge alone does not suffice. "Our claim is that the simple use of knowledge attained through education is not a sufficient condition to obtain effective productive employment models, since cultural insight, imagination, and originality are essential, and the main source of these qualities is cultural capital (Bucci, A., Segre G., 2009).

Finally, another channel through which cultural and creative activities impact on the capacity for growth is their role in the evolution of institutions through the creation, adoption and retention of new 'social technologies' or coordination rules. Cultural and creative activities contribute to institutional innovation, which is why they are important for economic development. According to Jason Potts, this suggests three different levels of analytic focus for the dynamic contribution of the creative industries. First, the creative industries have microdynamic effects. This entails the acknowledgement that the process of economic evolution involves agents that react to novelty and change. It is an entrepreneurial action insofar as it constitutes an imaginative creative leap based on perceptions of economic opportunity within the constraints of economic institutions. The creative industries play a key role in these microdynamics. Secondly, the creative industries have mesodynamic effects. These are the contribution of the creative industries to the innovation process. In evolutionary economics, an innovation trajectory (or meso trajectory) follows a three-phase process: origin, adoption and retention. The creative industries are instrumentally involved in all three phases on both the demand and the supply side, which makes them part of the innovation system. Thirdly, the creative industries have macrodynamic effects. These are the industrial and institutional dynamics in the context of economic growth and development. Again, the creative industries contribute to institutional dynamics (and therefore economic development) through their role in the co-evolution of cultural, political and socio-economic systems.

The different formulations of the relationships between cultural activities and development are summarized in the following table:

TABLE 11: Relation models between cultural and creative activities and territories

Relation	Description	Authors
Direct impacts of the cultural and creative activities. Increased direct productivity of the system	Culture and creativity show higher levels of productivity than the average of the economy, and therefore have an instant impact on the ability to generate wealth	Rausell, Marco, 2011
Increased competitiveness of other sectors	Spillovers as complementary offer that can improve the attractiveness of a certain territory, catching the attention of visitor flows, physical or human capital	Florida
Increased productivity in other sectors	Creativity and culture as an input in other productive processes that leads to an increase in productivity and innovation	Experian, 2007 ; Bakhshi et al., 2008
Interaction and enrichment with the human capital	Endogenous-based growth models where the cultural and creative dimensions interact with the human capital	Mellander, Florida, 2009; Sacco, Segre, 2009; Bucci, Segre, 2009*
Cultural and creative sectors as vectors of the demand and dissemination of innovation	These sectors guide and facilitate the creation, adoption and retention of new ideas (innovation process) in the economic system	Bakhshi and McVittie (2009), Chapain et al. (2010), Cunningham and Higgs (2009), Davis et al. (2009), Muller et al. (2009), Sunley et al. (2008), Gwee (2009) and Potts (2007).
Cultural and creative activities are an essential service in the process of economic growth and the development and evolution of the socio-economic system	Creativity and culture contribute to the process of evolutionary growth of the economic system. They also affect the institutional dimension and are a relevant part of the innovation system	Potts, 2011
Culture as an element that broadens capabilities	Culture satisfies cultural rights, thus becoming the key element in the broadening of individual freedom	Sen, 1999

* To this aim, we build a two-sector endogenous growth model where human and cultural capital accumulate over time. Since physical capital is assumed to be in fixed supply, the representative household uses all the income that it does not consume to invest in cultural capital. The first conclusion of the model is that the more cultural and human capital investments complement each other, the higher the equilibrium growth rate of real per-capita income is over the long run. Moreover, we have studied the conditions in which an increase of the share of the cultural capital in GDP has a positive effect on real per capita income, and more precisely, the conditions in which the stock of cultural capital in the wider economy produces congestion spillovers in a context where there is an upper limit for its shadow price.

» Culture and development in the European regions

The European Competitiveness Report 2010 indicates that creative industries, which are cultural sectors indeed, account for 3.3% of the total production of European Union (EU) measured in terms of Gross Domestic Product (GDP). However, using the broader classification proposed by UNCTAD (2010), they reach 6.5% of the EU's GDP. These figures are quite similar for the worldwide economy, in which creative industries generated \$2,706 billion GDP in 2005 and exports of creative goods and services reached \$424 billion, representing 6.1% of the world GDP and 3.4% of the total world trade (Howkins 2007; UNC-TAD 2008). In addition, the creative industries sector has been one of the most dynamic in Europe, showing great growth potential and generating wealth for the countries and regions that host them. The report also mentions that between 2000 and 2007, employment in the creative industries grew by an average of 3.5% per annum, compared to 1% in the overall EU-27 economy. In the US and China, the creative industries also grew quickly, with employment growth rates of 1.8% and 1.9% per annum respectively.

However, is there any real evidence that proves that cultural and creative activities have some measurable effect on the structure and performance of the economy? Can we infer, even indirectly, that greater involvement in cultural and creative activities somehow improves productivity, competitiveness, or the capacity for innovation or growth? As a recent study of the ESPON 2013 program inquires, are the European regions with larger creative workforces the most successful? Do workers in the creative sector have some effect on the regional capacity for growth? Numerous and very recent studies deal with this issue from different perspectives (ESPON, 2011; Russo, A. Quaglieri, 2011; Rausell, P. Marco-Serrano, F., Abeledo, R., 2011; Power D., Nielsen T., 2010; De Miguel B, Hervás JL, Boix R, De Miguel, M, 2012; Mellander, Florida, 2011).

Some empirical evidence

The first evidence is the strong correlation between GDP per capita in PPS and occupation in the creative services sector, already shown by the studies conducted by the *European Cluster Observatory*.

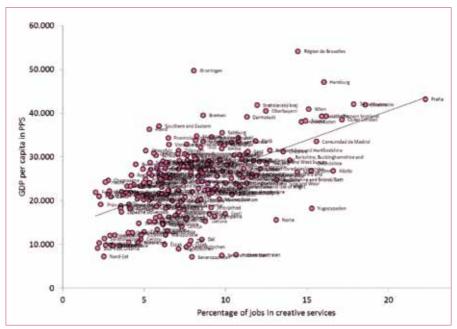


FIGURE 21: Correlation between the share of jobs in creative industries and the GDP per capita in EU regions (250 regions, Inner London removed form the sample). Data for 2008

A strong correlation also emerges using an adaptation of UNCTAD's classification of creative industries, which is more comprehensive. This adaptation uses 2008 data in the new NACE Rev.2 classification, which better captures the new realities of creative and knowledge-intensive sectors, particularly in services. A simple coefficient of correlation reveals that correlation between GDP per capita and the percentage of jobs in creative industries in the EU regions was about 0.64 in 2008. The graph above shows that there is a positive correlation between both data and that some regions stand out in terms of both GDP per capita and percentage of jobs in creative industries. The correlation holds when Inner London is treated as an outlier and removed from the sample of regions, although the coefficient of correlation is slightly reduced to 0.56. However, an important clarification must be done here. The behaviour of creative services and creative manufactures is completely opposite. Creative manufacturing (fashion) shows a negative correlation with the GDP per capita of about -0.34. This could be explained because the data merges high fashion made in some of the largest European capitals with basic manufacturing of clothing and footwear, which is still important in some low-income European regions. On the contrary, creative services show a strong correlation with regional wealth, since the coefficient of correlation increases to 0.75. Furthermore, all the creative services show high correlation coefficients with the GDP per capita. The highest correlations are found in computer programming, advertising, publishing, and audiovisual (all above 0.6).

TABLE 12: Correlation coefficients between the share of creative services and the total	
employment, detailed by activity	

Correlation coefficients between the share of creative services and the total employment of the regions, detailed by activity		
Computer programming	0.68*	
Advertising	0.67*	
Publishing	0.66*	
Audiovisual	0.61*	
Architecture and engineering	0.53*	
R&D	0.52*	
Retail (creative)	0.51*	
Broadcasting	0.38*	
Design, photography	0.37*	
Arts, entertainment and recreation	0.33*	

*Statistically significant at 5%

Obviously, the correlation does not necessarily imply the existence of causal relations between the dimension of creative services and the level of wealth in a region.

According to the endogenous growth theory, long-term growth emanates from economic activities internal to the economic system that generate new knowledge. The theory proposes that there are channels through which the rate of technological progress, and hence the long-term economic growth rate, can be influenced by economic factors. The starting point is the consideration that technological progress takes place through innovation, in the form of new products, processes and markets, many of which are the result of economic activities.

The second wave of the endogenous growth theory, known as the "innovationbased" growth theory, recognizes that intellectual capital, the source of technological progress, is different from physical and human capital. The key point is that while physical and human capital are accumulated through saving and education, intellectual capital grows through innovation.

Innovation-based growth develops through two main types of models. The first ones, the "endogenous technological change models", were formulated by Romer (1990). These models assume that aggregate productivity is an increasing function of the degree of product variety. In this theory, innovation causes productivity growth by creating new, but not necessarily improved, varieties of products. Intuitively, an increase in product variety, as measured by A, raises productivity by allowing society to spread its intermediate production more thinly across a larger number of activities, each of which is subject to diminishing returns and hence exhibits a higher average product when operated at a lower intensity.

The other version of the innovation-based growth theory is the "Schumpeterian" theory developed by Aghion and Howitt (1992) and Grossman and Helpman (1991). This version focuses on quality-improving innovations that render old products obsolete through the process that Schumpeter (1942) called "creative destruction". In essence, the growth rate depends on the share of the GDP spent on Research and Development.

Therefore, the innovation-based theory implies that the way to grow quickly is not saving a large share of the output but to devote it to creative activities. The trends from the 1980s and 1990s assimilated creative activities with R&D. However, the logic behind the innovation-based theory becomes more robust when creativity is introduced in the model in a broader sense. Thus, creativity brings new ideas, which transform into innovations, and innovations affect productivity, bringing long-term growth. Consequently, regional differences in productivity, per capita income and long-term growth should be explained by the dimension of the creative sector in the area.

The models

We use two types of models. The first is a structural model⁷ that can be used to contrast the effects of clusters (number of regional specializations) and the productive structure in terms of knowledge and creative intensity on the GDP per capita of the European regions.

The empirical model is not based on a formal theoretical model and assumes that the differences in GDP per inhabitant in the European regions are due to these two elements, combined in levels in a linear and cumulative way.

^{7.} To see the modelization process, please refer to Appendix 1 at the end of this chapter.

TABLE 13: Descriptive statistics for the main variables

Variable	Mean	Std. Dev.	Min	Max
GDP per capita in PPS	24,465	9,005	7,100	85,800
% jobs in creative services	6.88	3.83	0.01	32.86
% jobs in high-tech services	0.88	0.78	0.01	4.43
% jobs in other knowledge-intensive services	28.25	6.45	13.98	42.71
% jobs in less-knowledge-intensive services	27.77	4.17	14.55	45.42
% jobs in manufacturing	16.40	7.40	0.01	35.99
Population	1,934,258	1,531,182	27,153	11,700,000
Population density (population/sq.km.)	363.14	890.89	3.30	9,405.70
Productive diversity	16.73	5.62	3.43	26.23
Average firm size in the region	8.21	7.02	1.00	44.22

The second model is a more elaborated proposal in line with the endogenous growth models. In particular, Romer's model (Romer 1990, Jones 1997) explains cross-country or cross-region income and growth differences on the basis of differences in innovation, or in other words, the generation of ideas.

We will base our description of the results and basic conclusions on the next table, which offers a parsimonious estimation of the final model and does not take collinear variables into account.

TABLE 14: Results of the enhanced structural model and the complete version of the Romer-Jones, both including technical change Pa

	Structure			Romer-I	
Structure	OLS Robust			OLS	
	GDP/POP			GDP/L	
	Coefficient	Elasticity		Coeff. & Elast.	
Romer-I	16722.65	-	***	31.449	***
		(0.000)		(0.000)	
% creative services	1602.79	0.4316	***	0.2741	***
		(0.000)		(0.000)	
% creative manufacturing	-2363.74	-0.1522	***	-	
		(0.000)		-	
% low-tech manufacturing	-	-		0.0240	***
	-	-		(0.003)	
% high-tech services	-	-		-	
	-	-		-	
% other knowledge-intensive services	-	-		0.1330	**
	-	-		(0.031)	
% knowledge non-intensive services	-	-		0.2554	**
	-	-		(0.003)	
Total employment	-	-		-0.0769	***
	-	-		(0.000)	
Firm size in creative industries in 2001	-	-		-0.0772	***
	-	-		(0.002)	
Diversity in the creative chain in 2001	-1569.91	-0.2502	***	0.0595	***
		(0.002)		(0.006)	
Productive diversity 2001	153.32	0.1097	*	-0.1708	***
		(0.058)		(0.000)	
Patents per million inhabitants 2004- 2007	37.90	0.0840	***	0.0928	***
		(0.000)		(0.000)	
Cultural endowments	3.41	0.0095	***	0.0636	***
		(0.000)		(0.000)	
R2		0.7037		0.7664	
R2-adj				0.7556	
VIF		2.22		2.08	
Heteroscedasticity		No		No	
Normality		No		Yes	
Exogeneity		Reject		-	
Obs		250		250	

Notes: a) Probabilities in brackets; b) *** statistically significant at 1%, ** statistically significant at 5%, * statistically significant at 10%; c) Heteroscedasticity tested using Breusch-Pagan and White tests; d) Normality tested using Shapiro-Wilk, Shapiro-Francia and Skewness/Kurtosis tests; e) Endogeneity tests is the Durwin-Wu-Hausman test; f) Robust OLS estimated using Huber-White robust estimator; g) Instruments (all lagged in time and calculated for 2001 except the dummies): industrial organization in 2001 (firm size in the creative industries, firm size in the rest of industries), localization economies (internal diversity in the creative chain, interpreted as complementary suppliers), urbanization economies (population, density of population, cultural endowments elaborated for m the Michelin guide); dummies for n-1 countries.

The main results are:

1. Creative industries impact on the wealth of regions in a causal way

2. However, it is necessary to distinguish between the behaviour of creative services and creative manufacturing:

- > Creative services impact on the GDP per capita and the GDP per employee in a positive way. A 1% increase in the share of jobs in creative services in the region translates into a multiplier that ranges from 0.27 (Romer-Jones model) to 0.43 (structural model), which means an increase in wealth that ranges between 1,000 and 1,600 euros.
- > On the contrary, creative manufacturing has a negative effect on the wealth of regions. In the Romer-Jones model, the effect is very small and statistically non-significant.

3. The rest of variables that represent the employment structure in terms of knowledge levels do not show a clear behaviour. They are not statistically significant in the structural model when the effects of technical change – external economies – are introduced. However, they have a positive and significant effect in the Romer-Jones model, particularly the "Other knowledge-intensive services" series and the "Knowledge non-intensive service" series.

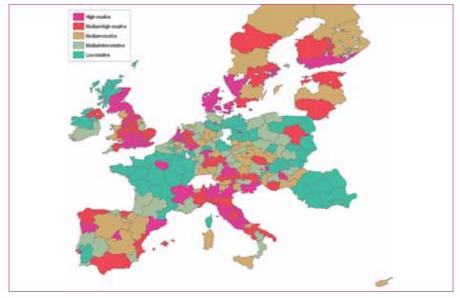
4. External economies play a very different role in each model. In some cases, the sign of the estimated coefficients is conflicting. In the structural model, only the diversity in the productive chain (internal suppliers) [negative impact], the productive diversity [positive impact], the patents per capita [positive] and the cultural endowments [positive] are statistically significant.

On the other hand, in the Romer-Jones model, most of the variables associated with external economies are significant (in a statistical and economic sense) even if their coefficients tend to be small. Scale economies (firm size in the creative industries) and urbanization economies (productive diversity) have a negative impact, as predicted by the theoretical model. Localization economies (diversity in the creative chain) show a positive coefficient, as well as part of those related to the creative class (patents per million inhabitants and cultural endowments). The last two variables – jointly with the small coefficient of R&D expenditure per capita and its lack of statistical significance, as well as the share of jobs in creative services – suggest the relevance of the Doing Using

and Interacting[®] knowledge modes, and particularly of the symbolic knowledge, in the wealth of the European regions.

Another important result is that there are no statistically significant differences between regions with different degrees of presence of creative industries. We have arranged the regions from higher to lower share of jobs in creative industries and divided them into five quartiles: high-creative regions, medium-high creative regions, medium creative regions, medium-low creative regions, and low-creative regions. None of the five groups show a statistically significant differential effect with respect to the average of the regions. The results obtained using n-1 dummies show the same behaviour as the fixed effects of the structural (naïf) model. Therefore, we conclude that there is no significant difference between high, medium and low creative regions in terms of the results of the model.

FIGURE 22: European regions in five quartiles based on the share of employment in creative industries (Data for 2008)



High-creative: (UKI1) Inner London, (CZ01) Praha, (SE01) Stockholm, (FR10) Île de France, (UKJ1) Berkshire, Buckinghamshire and Oxfordshire, (HU10) Közép, (NL31) Utrecht, (DE60) Hamburg, (UKM1) North Eastern Scotland, (ES30) Comunidad de Madrid, (BG41) Yugozapaden, (FR71) Rhône, (AT13) Wien, (NL32) Noord, (DK00) Hovedstaden, (BE10) Région de Bruxelles, (ITE3) Marche, (UKJ2) Surrey, East and West Sussex, (UKD2) Cheshire, (DE30) Berlin, (PT11) Norte, (UKH2) Bedfordshire and Hertfordshire, (ITE1) Toscana, (DE21) Oberbayern, (PT17) Lisboa, (UKJ3) Hampshire and Isle of Wight, (SK01) Bratislavský kraj, (UKD3) Greater Manchester, (FI18) Etelä, (DEA2) Köln, (UKE2) North Yorkshire, (UKI2) Outer London, (UKK1) Gloucestershire, Witshire and Bristol/Bath area, (DE71) Darmstadt, (UKK2) Dorset and Somerset, (ITE4) Lazio, (UKM2) Eastern Scotland, (SI00) Slovenia

^{8.} There are two ideal modes of learning and innovating: the Science, Technology and Innovation (STI) mode and the Doing, Using and Interacting (DUI) mode. The STI is based on the production and use of codified scientific and technical knowledge, while the DUI is based on experience. (Jensen et al., 2007)

except Osrednjeslovenska, (UKG1) Herefordshire, Worcestershire and Warwickshire, (SEOA) Västsverige, (UKJ4) Kent, [ITD3] Veneto, [UKM3] South Western Scotland, [ITC4] Lombardia, [NL33] Zuid, [BG42] Yuzhen tsentralen, [UKC2] Northumberland and Tune and Wear, [ES51] Cataluña, [ITF1] Abruzzo, [NL41] Noord. Medium-high creative: [UKF2] Leicestershire, Rutland and Northamptonshire, [UKG3] West Midlands, [UKH1] East Anglia, (NL22) Gelderland, (UKH3) Essex, (EE00) Eesti, (DE12) Karlsruhe, (SE04) Sydsverige, (AT32) Salzburg, (ITD5) Emilia, (BG32) Severen tsentralen, (DK00) Midtjylland, (DEA1) Düsseldorf, (UKD5) Merseyside, (UKE4) West Yorkshire, (ES52) Comunidad Valenciana, (ITF3) Campania, (ES70) Canarias (ES), (UKL2) East Wales, (UKK4) Devon, (UKG2) Shropshire and Staffordshire, (ES21) País Vasco, (PL12) Mazowieckie, (ITC1) Piemonte, (CZOG) Jihovýchod, (ES53) Illes Balears, (ITF4) Puglia, (UKE3) South Yorkshire, (NL21) Overijssel, (UKD4) Lancashire, (UKF1) Derbyshire and Nottinghamshire, (SEO7) Mellersta Norrland, (ITC3) Liguria, (LTO0) Lietuva, [ES11] Galicia, (DE50) Bremen, (DE25) Mittelfranken, (SE02) Östra Mellansverige, (ITE2) Umbria, (HU23) Dél, (UKC1) Tees Valley and Durham, (FI19) Länsi, (AT33) Tirol, (AT22) Steiermark, (UKNO) Northern Ireland (UK), [ES12] Principado de Asturias, [NL23] Flevoland, [ES61] Andalucía, [NL42] Limburg [NL], [DE11] Stuttgart. Medium creative: (BE21) Prov. Antwerpen, (SE08) Övre Norrland, (BE24) Prov. Vlaams, (NL11) Groningen, (UKE1) East Yorkshire and Northern Lincolnshire, [BG31] Severozapaden, [DEA4] Detmold, [SE06] Norra Mellansverige, (ES24) Aragón, (DK00) Syddanmark, (HU33) Dél, (FI1A) Pohjois, (HU32) Észak, (SE09) Småland med öarna, (ITD4) Friuli, (ITC2) Valle d'Aosta/Vallée d'Aoste, (CZO7) Strední Morava, (ES22) Comunidad Foral de Navarra, (BG33) Severoiztochen, (HU22) Nyugat, (DED1) Chemnitz, (CY00) Kypros/Kibris, (ITD2) Provincia Autonoma Trento, (UKL1) West Wales and The Valleys, (DE92) Hannover, (ES23) La Rioja, (ITF2) Molise, (LV00) Latvija, (ITG2) Sardegna, (DK00) Nordjylland, (DE26) Unterfranken, (CZ08) Moravskoslezsko, (BG34) Yugoiztochen, (DED3) Leipzig, (DE14) Tübingen, (DEA5) Arnsberg, (SI01) Vzhodna Slovenija, (AT31) Oberösterreich, (CZ03) Jihozápad, (ITG1) Sicilia, (ES42) Castilla, [ES41] Castilla y León, [CZO5] Severovýchod, [AT34] Vorarlberg, [FI13] Itä, [DED2] Dresden, [ITD1] Provincia Autonoma Bolzano/Bozen, (CZO2) Strední Cechy, (UKD1) Cumbria, (DE13) Freiburg. Medium-low creative: (PL11) Lódzkie, (DE24) Oberfranken, (ES62) Región de Murcia, (AT12) Niederösterreich, (FR82) Provence, (DECO) Saarland, (ES43) Extremadura, (PL21) Malopolskie, (DE91) Braunschweig, (HU31) Észak, (BE31) Prov. Brabant Wallon, (NL13) Drenthe, (HU21) Közép, (PL41) Wielkopolskie, (DEA3) Münster, (CZ04) Severozápad, (PT15) Algarve, (DK00) Sjælland, (DE73) Kassel, (AT21) Kärnten, (DEF0) Schleswig, (ITF6) Calabria, (DE94) Weser, (FR30) Nord-Pas de Calais, (IE02) Southern and Eastern, (DEB3) Rheinhessen, (ITF5) Basilicata, (PL63) Pomorskie, (NL12) Friesland (NL), (UKK3) Cornwall and Isles of Scilly, (DE27) Schwaben, (PT16) Centro (PT), (PL51) Dolnoslaskie, (NL34) Zeeland, (UKF3) Lincolnshire, (BE23) Prov. Oost, (BE25) Prov. West, (DE22) Niederbayern, (BE22) Prov. Limburg (BE), (FR62) Midi-Pyrénées, (FR61) Aquitaine, (PL22) Slaskie, (BE35) Prov. Namur, (DEB1) Koblenz, (FI20) Åland, (ES13) Cantabria, (BE33) Prov. Liège, (DE23) Oberpfalz, (FR42) Alsace, (PL42) Zachodniopomorskie. Low-creative: (AT11) Burgenland (AT), (FR51) Pays de la Loire, (DE93) Lüneburg, (DE72) Gießen, (DEG0) Thüringen, (IE01) Border, Midland and Western, (PL61) Kujawsko, (R007) Centru, (FR24) Centre (FR), (SK03) Stredné Slovensko, (FR81) Languedoc-Roussillon, (R006) Nord-Vest, (DE80) Mecklenburg, (DEE1) Sachsen, (R008) Bucuresti, (DEB2) Trier, (R005) Vest, (PT30) Região Autónoma da Madeira (PT), (FR52) Bretagne, (DE42) Brandenburg, (PT18) Alentejo, (BE32) Prov. Hainaut, (PL62) Warminsko, (FR41) Lorraine, (SK04) Východné Slovensko, [FR26] Bourgogne, (UKM4) Highlands and Islands, (FR63) Limousin, (SK02) Západné Slovensko,

(FR53) Poitou-Charente, (DE41) Brandenburg, (PT20) Região Autónoma dos Açores (PT), (R002) Sud-Est, (PL43) Lubuskie, (PL32) Podkarpackie, (PL31) Lubelskie, (FR83) Corse, (PL52) Opolskie, (FR72) Auvergne, (FR25) Basse-Normandie, (FR21) Champagne-Ardenne, (R003) Sud-Muntenia, (FR23) Haute-Normandie, (PL33) Swietokrzyskie, (R001) Nord-Est, (BE34) Prov. Luxembourg (BE), (PL34) Podlaskie, (FR22) Picardie, (R004) Sud-Vest Oltenia, (FR43) Franche-Comté.

These results are remarkably robust and consistent.

Dynamic analysis through structural equation modeling (SEM)

The structural equation modeling (SEM) methodology fits quite well with the concept of causality and considers the possibility of both direct and indirect relations. This statistical technique adopts a confirmatory approach to the analysis of a theoretical structure by means of a series of simultaneous equations. The achievement of a significant adjustment will give us and idea of the plausibility of the proposed structure. Causality is thereby contrasted from a theoretical (and logically reasonable) as well as an empyrical (and statistically

plausible) point of view. In this sense, SEM seems to have a better reputation in scientific literature, even though its capacity to evaluate true causal relations has also sparked debate.

In order to establish the theoretical model, we conceptualize three synthetic constructs named according to the groups mentioned in the previous section. These non-observed synthetic indicators (latent variables, according to structural equation modeling literature) constitute our structural model, while the observed variables of which they are formed establish the measuring model. The latter variables were also described in the previous section.

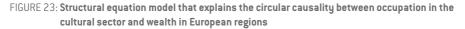
The variables used to define the different models are:

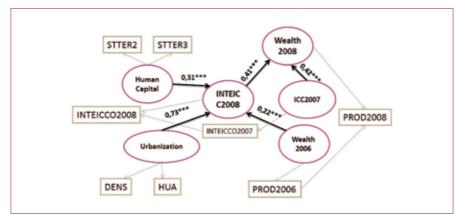
Variables	Description
GDPPC	Purchasing Power Standard per inhabitant
DIPH	Disposable income of private households, by NUTS 2 regions; Purchasing Power Standard based on final consumption per inhabitant
POPU	Total average population, by NUTS 2 regions; 1000 inhabitants
DENS	Population density, by NUTS 2 regions; inhabitants per sq. km.
HRST	Human resources in science and technology (HRST), by NUTS 2 region; %economically active population. See Canberra Manual.
EHTS	Employment in high-tech sectors (high-tech manufacturing and high-tech knowledge-intensive services), by NUTS 2 region; %total employment
RESE	Researchers, all sectors, by NUTS 2 regions; %total employment
EMPR	Employment rate in the age group 15-64, by NUTS 2 regions; Total
UNEM	Unemployment rate, by NUTS 2 regions; Total
HUA	Densely-populated area (at least 500 inhabitants/sq.km.) - % households
STTER1	Students in tertiary education (ISCED 5-6) - as % of the population aged 20-24 years at regional level
STTER3	Ratio of the share of students (ISCED 5-6) with respect to the share of the population by NUTS 1 and NUTS 2 regions
STTER2	Students (ISCED 5-6) at the regional level - as % of total students at the country level (ISCED 5-6)
PROD	Workforce productivity
INTEKIBS	Employment in knowledge-intensive services, by NUTS 2 region; %total employment
INTEICC	Employment in creative industries, by NUTS 2 region; %total employment

TABLE 15: Variables used in the determination of the SEM mode

After several estimations, one of the best results obtained reduces the causality chain to four latent variables: 'Higher Education' and 'Urbanization' cause 'Creative Employment', which presents a bidirectional relation with the variable 'Wealth'. In the following diagram, the synthetic variables are marked with an elipse, while the observed variables are shown within rectangles. The arrows that link synthetic variables indicate a relation of cause-effect, while the ones that link a synthetic variable with an observed variable indicate a relation between the structure (latent variable) and the measurement (observed variable)^g.

The model is thus modified by incorporating the delayed variables for creative employment and wealth. The structural model adapts adequately to two delays in "Wealth", represented by productivity (PROD08 and PROD06), while "Creative Employment" adapts to one delay (INTEICC08 and INTEICC07).





This model clearly shows the existence of a circular effect between wealth and the creative sectors. Employment in the cultural sectors is explained by three types of effects: the urban model, resulting from the measurement of the density of the population per square kilometer (DENS) and the percentage of population living in densely populated areas (HUA); the level of human resources, resulting from the percentage of people aged between 20 and 25 who are in the educational system (STTER1), and the percentage of students in the educational system in the specific region with respect to the whole country; and finally, the effect of affluence, with a two-year delayed effect.

The wealth of the European regions is clearly explained by the instantaneous effect of employment in the creative sectors. The study "The Economy of

^{9.} To see a more detailed description of the modelization process, please refer to Appendix 2 at the end of this chapter.

Culture" (2006) demonstrated that the creative and cultural sectors in Europe are as competitive as other industrial sectors – in some cases even more competitive if we look at productivity and profitability. The typical productivity level¹⁰ of service industries, similar to most of the cultural and creative sectors, ranges between 1.2 and 1.9. The average productivity level for the European cultural and creative sector was 1.57 in 2003. Thus, an increase in the proportion of people employed in the cultural and creative industries has an immediate impact on regional wealth due to the increase in productivity.

At the same time, we can observe a delayed effect, practically of the same magnitude, derived from the cultural employment in the previous year, which can be understood both directly, through the effect of demand, and through the spillovers derived from the innovation transmitted to the rest of the sectors.

The opposite effect, namely, how variations in wealth influence employment in the cultural sector, is much weaker and has a two-year delay. In other words, variations in wealth will generate employment in the cultural sector in two years' time. This delay can be explained either by the modulation of lifestyle changes of the demand, which transforms its preferences over a period of two years and becomes solvent demand of cultural goods and services, or by the reaction of the cultural operators, who take a couple of years to respond and formally consolidate the cultural companies in the face of obvious variations in the demand. Both hypotheses require more in-depth study.

Be it as it may, this approach fully proves the existence of a mutual causality between creative sectors and regional wealth. Also, cultural and creative activities show a direct and instantaneous impact on the wealth of the regions and a more complex effect, although neither is explicitly explained. The latter effect probably combines the consolidation of a solvent demand for innovation, an effect of proneness to innovation that capillarizes into the global economic structure, and supply response dynamics derived from the institutional model and the enterpreneurship opportunities.

It is worth pointing out that these effects of dissemination of the potential for innovation are reinforced by the size of the human capital and by the urbanization models. Therefore, this potential manifests itself more intensely in territories with a greater urban proportion where a large part of its population is enrolled in universities.

Urbanization is the most relevant factor explaining employment in the cultural sector, which reinforces the importance of agglomeration economies and the clustering of creative and cultural activities. Urban regions concentrate 32% of the creative workforce with only the 25% of the active population (Russo, Quaglieri, 2011). Works like the "European Competitiveness Report 2010" have pointed out several reasons why creative industries are concentrated in urban areas. The main factors are: (i) importance of specific local labour mar-

^{10.} Ratio between value added and employment costs. Productivity refers to the value generated for every Euro spent on employment costs (wages, salaries and social costs).

kets and tacit knowledge; (ii) spillovers from one specific creative industry to another; (iii) firms' access to specific infrastructures and collective resources; (iv) project-based work; (v) synergic benefits of collective learning; and (vi) development of associated services, infrastructures and supportive government policies. However, other studies based on least square estimates (European Competitiveness Report, 2010), show that the elasticity of 0.26 of the location quotient (LQ) with respect to the size of the population indicates that the degree of urban specialization of the creative industries rises less than proportionally to an increase in the population size. This data may indicate that, in certain sectors, urban spaces offer a minimum critical mass that allows for the establishment of cultural and creative activities. However, once this critical mass is surpassed, variations are not proportional. In the case of Spain, other studies show that the minimum threshold in urban spaces is around 50.000 inhabitants.

Another issue worth highlighting is that the variables that work for the construct of "human capital" are those related to the current percentage of students aged between 20 and 24, which is more or less the population studying in universities. This leads us to consider the importance of the number of young people with higher education and the role of universities. This approach questions the importance of the attractiveness of the Creative Class, since the proportion of students seems to be more relevant than the proportion of professionals. It also points at the correlation between "youth" and people employed in the creative sectors, verifying the stylized fact that the creative sectors employ a larger proportion of young people. In this case, the condition "young" is linked to both the creative dimension and the capacity to disseminate innovations. Young people participate in greater proportion in both physical and virtual networks. Moreover, young people find it more acceptable to combine labour models with a greater degree of flexibility (and precariousness), which are associated with certain "lifestyles" and can be confused with job insecurity models.

Other studies (Rausell, Marco, Abeledo, 2011) provide further evidence that the tourism specialization of the regions, seen from the perspective of demand analysis, increases the potential of these areas. We have also detected that this specialization has a certain amortization effect on the potential of the impact between the people employed in creative and cultural sectors and the wealth of the regions. This may be due to the fact that the transformation of certain cultural assets into tourism products requires an excessive simplification (and sometimes trivialization) and consequently its capacity to generate value added is reduced.

The importance of institutional aspects and the role played by demand in this scenario are left outside of our model and require more detailed research.

» The dynamics of the MED space in the framework of cultural and creative activities

For the purpose of this study and from a static perspective, there is no doubt that the economically successful regions have a high proportion of creative workforce among their active population. There appears to be a strong association between GDP per capita and the level of employment in creative activities. The regions that benefit the most from this relation are those situated in Sweden, Finland, Iceland and central Europe, including the double arch that goes from Denmark and Great Britain to the North European Regions. A large part of France does not stray from the European average in terms of GDP or the proportion of creative workers. The periphery of this system is formed by countries from Eastern and Western Europe, with the exception of certain metropolitan areas like Madrid or Athens. It is obvious that in this approximation, well reflected by the latest ESPON report, there is no differential situation in the MED area^{±1}.

In static terms, it is not possible to detect any Mediterranean dynamic at first sight if we leave out the situation in the Italian regions, which show a vigorous growth of the creative workforce but not of the GDP per capita. Undoubtedly, the regions that take better advantage of this dynamic are the Eastern European regions, including the Baltic countries, Poland, Romania, the Czech Republic, Bulgaria, the Balcans and even Greece. However, this issue is much more complex and requires a more sophisticated analysis. In 2006, another ESPON project took the NUTS III level as a starting point and classified the European regions according to their orientation in the area of culture. This study did not reveal any common trend for the MED area either.

The simpler way to detect if the behaviour of MED regions is significantly different from the rest of regions is by introducing a dummy variable in the regressions used in the previous models. The dummy variable takes value 1 for MED regions and 0 for the rest of the sample.

The results show that the dummy is not statistically significant in the structural model. However, it is statistically relevant in the Romer-Jones model, where it takes a value of 0.10. This figure means that the GDP per employee in MED regions tends to be higher than in the average of the rest of the European regions. We can also introduce a dummy for each region in the estimation. Then, we observe that in the structural model, most of the dummies are statistically significant but the differential impacts are positive and negative depending on

^{11.} MED regions include Malta, Slovenia, Cyprus, Greece (Eastern Macedonia, Central Macedonia, Western Macedonia, Epirus, South Aegean, Sterea Ellada, Peloponesse, Thessalia, Ionian Islands, Western Greece, Attica, Crete, North Aegean); France (Rhône-Alpes, Languedoc-Rousillon, Corse, Provence-Alpes-Côte d'Azur); Portugal (Algarve, Alentejo); Spain (Andalusia, Aragón, Catalonia, Balearic Islands, Murcia, Valencia, Ceuta, Mellia); United Kingdom (Gibraltar); Italy (Abruzzo, Apulia, Basilicata, Calabria, Campania, Emilia Romagna, Friuli Venezia Guilia, Latium, Liguria, Lombardy, Marche, Molise, Ombria, Piedmont, Sardinia, Sicily, Tuscany, Veneto). Source: European Union (2010): MED operational programme 2007-2013. EU, Bruxelles.

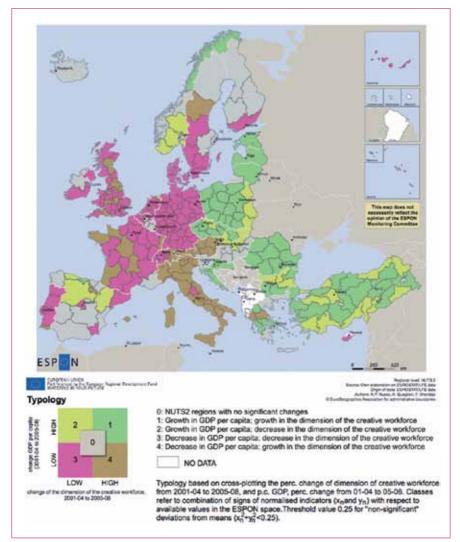


FIGURE 24: Evolution of the relation between the creative workforce and the GDP per capita in European regions. Source: ESPON, 2011

the regions, counterbalancing each other. This explains why the MED dummy was not statistically significant and captured the effects of the institutional framework for each region, which favours or hinders the relation between culture and regional wealth. Following this interpretation, we have a group of regions where the institutional framework favours the relation between culture and regional wealth, another group where it is not differentially significant, and a third group in which the institutional framework hinders the relation. TABLE 16: Effects of the institutional framework on the MED area

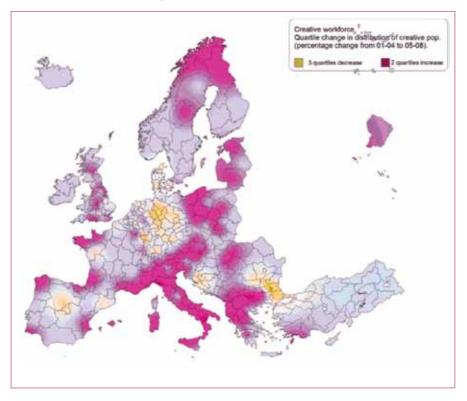
List of regions where the institutional framework improves the relationship between culture and wealth	List of regions where the institutional framework is not significant for the relationship between culture and wealth	List of regions where the institutional framework worsens the relationship between culture and wealth
Marche, Toscana, Veneto, Lombardia, Emilia, Cataluña, Aragón, Piemonte, Lazio, Slovenia except Osrednjeslovenska, Umbria Friuli, Provence-Alpes-Côte d'Azur, Abruzzo, Comunidad Valenciana, Vzhodna Slovenija, Kypros/Kibris, Región de Murcia	Molise, Illes Balears, Languedoc-Roussillon, Liguria, Puglia, Corse	Andalucía, Basilicata, Alentejo, Sardegna, Campania, Algarve, Calabria, Sicilia, Rhône-Alpes

In the Romer-Jones model, the situation is exactly opposite. The dummies are not statistically significant for most of the regions considered separately although the average effect for the complete sample of MED countries reveals to be significant.

The Convergence of the MED area

The issue may change if we analyze it from a dynamic perspective, paying attention to the regions that have experienced the greatest changes in the first decade of the 21st Century. As pointed out by Russo and Quaglieri, (Russo, Quaglieri, 2011), such analysis takes on a wider array of overtones if we consider the dimension of these changes. The following map depicts the regions that have experienced a noticeable change, captured by a quartile change in the distribution of the creative workforce indicator. In this figure, which contrasts with the traditional European banana, there are signs of a progressive catching up of the regions that used to be peripheral, among them some MED regions that had dropped behind in terms of creative professions, both geographically and in regional typologies. In this sense, it is worth noting the good performance observed in tourist coastal and island regions like the Balearic Islands and the coast of Valencia, Algarve, Galicia, the Basque Coast, Sardinia, the continental coastal regions of Greece, the Greek island of Rodos and Britain. Some authors refer to the tourist coastal areas as areas of "creative urbanization".

FIGURE 25: Evolution of the creative workforce. Quartile change in the distribution of creative jobs per 1,000 head of active population (2001-2004 to 2005-2008) Source: Russo, A., Quaglieri, F., 2011



The differential behaviour can probably not be attributed to the mediterranean dimension, because there are other peripheral areas that participate in this process of convergence. According to the *European Competitiveness Report 2010,* "another explanation of the fast growth of the creative industries in the EU is that a number of less advanced EU countries are starting to catch up with the more developed Member States. In fact, empirical evidence shows that EU countries with a low initial employment share in creative industries exhibited a significantly stronger increase in the same employment share between 2000 and 2007 (with a correlation of -0.45). This relationship remains robust and highly significant when software consultancy and supply is excluded from the creative industries. Macroeconomic growth also explains the rapid increase in the overall share of the creative industries".

Using another set of data, we can confirm that there is a catch-up process between the Mediterranean regions and the whole of Europe both in terms of wealth and employment in the creative industries.

Wealth

In order to analyze the evolution of wealth in a region we use three variables: GDP per capita, available family income per capita and apparent work productivity. While the first one is one of the most widely used variables to evaluate economic development (together with the GDP), the second variable extracts the tax effect, allowing us to determine the income that can be used individually and effectively to obtain direct utility. However, this aspect obviates the social effects derived from the use governments make of tax resources. As for the third variable, it is necessary to consider it when evaluating the wealth of an economy because of its relation to job creation and wage setting, and also because it can be seen as a driver of economic growth.

In the period 1999-2008 (Appendix 3), the GDP per capita had an average annual growth of 3.96%, 3.60% in MED regions and 4.04% in the rest. The average regional values are around 20,909 EUR (PPS), with a slight difference of less than 1,000 EUR between MED/Non-MED regions. The test of average difference suggests that this difference is significant (t=2.58, p-value=0.009872). Nevertheless, when carrying out the same test considering only the last period (2008), the results (t=1.35, p-value=0.1797) indicate that we cannot reject the hypothesis according to which the average GDPpc among MED and Non-MED regions is statistically similar. In the case of family income available per capita, there is no doubt about the equality of its average values between both regional groups (t=-0,8974, p-value=0,3697).

Employment: General

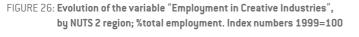
The analyzed decade was a decade of growth in terms of employment, since the employment rate experienced an annual growth of 0.71% and the unemployment rate dropped 3% per year. There are significant differences between MED and Non-MED regions in the average value of the employment rate (t=18.32, p-value=0.0000), and unemployment (t=-6.82, p-value=0.0000), reflecting a differential fact in terms of employment creation. In the analyzed decade, the MED regions present greater levels of unemployment and lower employment rates. Even so, their annual unemployment rate fell 4.77%, while in the rest of the regions the decrease rate was 2.41%. The employment rate in the MED regions increased 1.21%, more than double the rest of the regions (0.59%), which is perhaps indicative of a catching up process in terms of labour market.

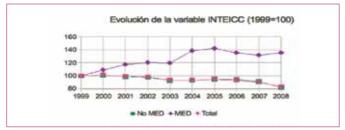
Employment: Science and Technology

The series of indicators related to employment in science and technology are in line with those of employment in general, with significant differences between the average values for employment in high technology sectors [EHTS] (t=12.98, p-value=0.0000), science and technology [HRST] (t=17.81, p-value=0.0000), and research [RESE] (t=9.18, p-value=0.0000). Unsurprisingly, the average growth rates for the studied decade are higher in the MED regions, again, probably due to a process of convergence.

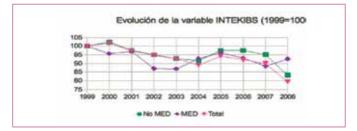
Employment: Creative Industries

In order to analyze the evolution of employment in the creative industries, we resort to the operational definition of the European Cluster Observatory (see Appendixes). Therefore, we consider both employment in the cultural and creative industries and employment in knowledge-intensive professional services. Using the July 2011 data available on the observatory's website, we have designed employment intensity variables for both sectors with respect to the whole of the economy (in percentage).









The differences between the MED and the non-MED regions are significant for the intensity of cultural and creative employment [INTEICC] (t=6.22, p-value=0.0000), and knowledge-intensive professional services [INTEKIBS] (t=13.02, p-value=0.0000). However, this difference in average values is no longer relevant for the intensity of cultural and creative employment if we only analyze the last period (2008: t=0.64, p-value=0.5205).

Higher Education

As for the higher education indicators, despite the existence of significant differences in the variables related to the percentage of young people undertaking higher education studies [STTER1] (t=-4.04, p-value=0.0000) and the regional percentage of students in higher education with respect to the national total [STTER2] (t=6.93, p-value=0.0000), the same is not true in terms of the share of the total population [STTER3] (t=-0.05, p-value=0.9588). Also, the differences are not significant for the period 2008: [STTER1] (t=-1.42, p-value=0.1598), [STTER2] (t=1.64, p-value=0.1047). This suggests that the higher average annual growth rates in these variables have managed to close the difference between the MED regions and the rest of the regions. Projects like ATTREG (2001) have pointed out that "another indicator in this class is the number of university students in the region as a proportion of young local residents, which shows areas with a certain 'creative environment' brought by student activity and the intensity of the educational output. This indicator shows high values in Central Italy, Northern Spain, Northern Greece, Poland and Scandinavia. Surprisingly, it also shows lower scores in core European regions, possibly indicating that the areas with higher unemployment are those that push a larger share of young people to obtain higher education diplomas.

Urbanization

The degree of urbanization is one of the characteristics that accompany both the economic growth and the evolution of creative and cultural industries. Since the cultural and creative phenomenon is an urban entity, it is interesting to evaluate whether these characteristics are decisive or explanatory of the degree of development of the regional economy at the European level. The differences between the two regional groups are essentially the same for the average population [POPU] (t=-1.52, p-value=0.1352), the population density [DENS] (t=-0.35, p-value=0.7274) and the degree of urbanization [HUA] (t=0.46, p-value=0.6493).

2000	Regions			
2008	Non-MED	MED	Total	
POPU (Population in thousands)	1,755.54	2,296.33	1,868.78	
DENS (Inhab/sq. km.)	306.09	354.70	316.27	
HUA (% of homes in densely populated areas)	48.54	46.81	48.18	

TABLE 17: Population and urbanization variables. MED and Non-MED regions

Some interpretations

The analysis of the previous data leads us to believe that the relative catching up process of the MED area in terms of employment in the cultural sector was originated by a greater acceleration of access to higher education in the Mediterranean area (perhaps due to the demographic composition and the greater pressure of immigration), as well as the process of urban growth and concentration. Nevertheless, the scant effect on the variations in regional wealth leads us to believe that the impact modes of culture and creativity in the MED area are significantly different from the European norm. As Russo and Quagliari (2011) conclude, Mediterranean regions seem to have caught up with core regions in terms of creative workforce. Possibly, the increasing levels of quality of life and a series of successful policies focused on the valorization and branding of localized site assets (environmental quality, cultural heritage, social diversity, quality of tourism and leisure infrastructures) have started to invert the trend of migration of creative talents to economically thriving regions, and have managed to make the most of their creative workforce as a fundamental strategic component of their transforming economies.

In an attempt to find some signs of this differentiated reality, we estimated both models for only 33 MED regions (Table 12). The results are different from those of the total sample of regions.

Creative industries do not have a significant role in explaining the differences in wealth in MED regions: the share of jobs in creative services does not have an economically or statistically significant impact on the differences in GDP per capita or GDP per employee. The share of jobs in creative manufacturing has a positive (albeit small) impact on the differences in wealth in the structural model, and it is statistically non-significant in the Romer-Jones model.

In the structural model, differentials in wealth are basically explained by the share of jobs in knowledge-non intensive services, the diversity in the creative chain, and patents per capita. In the Romer-Jones model, differentials in wealth are explained by patents per capita and cultural endowments. However, we made an additional estimation of the model including the share of creative class as an explanatory variable in 2001. This variable was not used in previous estimates because its strong correlation with creative industries caused severe collinearity problems. When the creative class is included in the estimation (next table, last column), the model shows a high elasticity (0.43) and its performance improves significantly, although the variable patents per capita approaches to zero and becomes statistically non-significant.

Despite the fact that MED regions include high and low innovative regions, the estimates do not reveal heterogeneity problems in the sample and persistent outliers are not detected ¹².

^{12.} However, we use estimates that take into account the rejection of normality. Although the results seem to be robust, the sample is small (33 regions), so they should be interpreted with caution.

TABLE 18: Models for the MED regions

	Structure			Romer		Romer	
	OLS R	obust		OLS		OLS	
Dependent variable	GDP/POP			GDP/L		GDP/L	
	Coefficient	Elasticity		Coeff. & E	last.	Coeff. & El	ast.
Constant	3470.00	-		38.051		24.356	
		(0.350)		(0.000)		(0.000)	
% creative services	123.48	0.0358		0.0439		0.0463	
		(0.680)		(0.682)		(0.480)	
% creative manufacturing	944.07	0.0602	***	0.0148		0.0162	
		(0.001)		(0.493)		(0.258)	
% knowledge non-intensive services	302.29	0.4103	***	-		-	
		(0.004)		-		-	
Diversity in the creative chain in 2001	1523.80	0.2281	***	-		-	
		(0.001)		-		-	
Patents per million inhabitants 2004-2007	83.60	0.1159	***	0.0549	***	-	
		(0.000)		(0.009)		-	
Cultural endowments	-	-		0.0557	**	0.0499	***
	-	-		(0.030)		(0.003)	
Creative class	-	-		-		0.4396	***
	-	-		-		(0.000)	
R2		0.7597		0.5102		0.6679	
R2-adj		0.7152		0.4402		0.6205	
VIF		1.53		1.68		1.60	
Heteroscedasticity		No		No		No	
Normality		No		No		No	
Exogeneity		Accept		Accept		Accept	
Patents per million inhabitants 2004-2007		33		33		33	

In short, these results suggest that MED countries have a different economic structure and that the creation and innovation processes, as well as the spillovers, work differently from the rest of the European regions. Even though the issues inferred here require a more in-depth and precise analysis, we can venture a few plausible hypotheses:

In Mediterranean Europe, the connection between wealth and culture is explained to a greater extent than in the rest of Europe by the presence of the creative class (people) rather than by presence of creative industry workers

(economic organizations). This suggests that innovation disseminates through more informal and less structured networks, which reinforces the importance of social capital and reticular models. It is in this context where the models that refer to the interactions between human capital and social capital (Sacco and Segre, 2009; Bucci and Segre, 2011) acquire their significance.

The greater relevance of cultural endowments might be related either to the greater relative specialization of the tourism sector in the MED regions (a greater cultural endowment means a greater capacity to broaden the demand), or to the role played by cultural endowments as infrastructures for the development of cultural services.

However, other studies (Rausell, Marco-Serrano, 2011) allow us to infer that the regions that are more specialized in the tourism sector show weaker links between occupation in the cultural sector and GDP per capita, maybe because cultural activities become providers or complementary of economic activities with low productivity levels like the tourism sector. This interpretation could weaken a widely used argument in the MED area about the role of culture as "complementary offer" for tourist demand.

» Some final considerations: Culture as a factor for economic and social innovation

The current state of the art and our own research make a very strong point: cultural and creative activities are one of the key variables that explain wealth in European regions. Some of the evidence even stresses the fact that it is the most important variable.

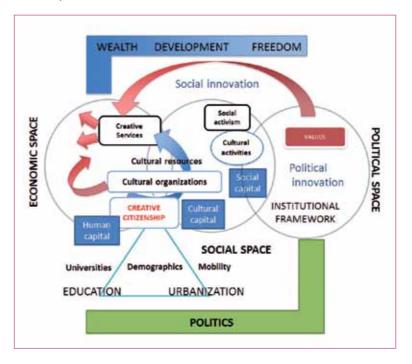
This circumstance makes us clearly reject Potts' first typology of relations between culture and economy, in which he presents culture as a net charge on the economy that is worth paying for because it has a global effect on welfare. This is due to the production of products and services with a high cultural value and a low market value. The intervention of cultural policy is justified by the notion of "tutelary goods" or the theory of "market failures", since the market is unable to internalize the cultural value of the good. We are quite aware of the fact that cultural activities are not consumers but rather net generators of economic wealth.

Taking into account the different causality analyses, we can state that the relations are circular and that variations in wealth have an effect on the activation of cultural and creative experiences that translate into increased occupation in the sector.

Thus, if creative services impact on wealth with highly localized effects, they become a relevant objective of regional policy. If the geographical effects are supraregional, national policy or coordination between regions could play an important role. If the effect is focused on specific groups of firms, the scope of the policy changes radically. On the other hand, if the impacts of the creative services rely basically on wealth on the supply side, public policies should provide the conditions for their development and interaction instead of proposing subsidies and price policies to protect the industries. Finally, if their effects on innovation spill over to the rest of the local economic system, different strategies like the provision of financial support to the firms that provide those kinds of services could be effective.

Although our analysis has focused mainly on the relations between the creative sectors and economic growth and not on the systemic effect on the innovation model, there are many signs that lead us to believe that the creative ecosystem affects innovation in the whole economy. Causality channels are complex and contain both direct and indirect impacts. The direct impacts derive from the greater flexibility of labour relations in the cultural sector, which involves a high sensitivity towards the need for innovation in the rest of the economy. The indirect impacts are due to the greater proneness to innovation or the greater productivity of this sector. However, we sense that the dynamics of the cultural and creative sector cause profound alterations in the productive model, as suggested by the most sophisticated models about the transforming role of culture as a factor for economic and social innovation.

FIGURE 28: A comprehensive vision of culture as a factor for economic and social innovation



The effect of culture as an element of economic and social innovation is beyond doubt, for reasons related to both supply and demand. The cultural space does not only generate innovation in the marketplace through new products and services or through the use of new processes in the economic space that improve its competitiveness. It also demands innovation, either as a user or as a participant. The next link has to do with the porosity of the creative class as economic agents and cultural actors in the social space. The individuals who work in cultural and creative sectors are also those who participate in the generation, provision and distribution of the cultural activities and services of the social space and consequently act as catalysts for the expansion of social innovation. Ultimately, all these interactions, which fall into the field of cultural, social and political activism, form a corpus of values. There is an ethical reframing of the individuals' needs, connected to the wish to participate, communicate, share, deliberate and express. The field of culture externalizes values that permeat into the entire socio-economic space and are much more in line with the concept of sustainable development, especially in the context of the economic crisis. These cultural values reflect a new hierarchy that includes aspects like the explicit wish to innovate, relational consumerism (as opposed to transactional consumerism), free exchange, critical thinking, personal development, solidarity, cooperation, networking, diversity, beauty, participation, and the importance of the recreational and vital dimension as opposed to purely economic gain. In other words, the actions of creativity are not only governed by the vectors of instrumental rationality but also by notions like expression, exchange and mutual benefit.

These new values spread from the cultural field through the conventional social spaces but also from the new ethics that radiate from the social movements articulated on the Internet. From copyleft to commons, they create new universes of values that affect the economic and social space. Policies are left with the role of avoiding the exhaustion of these processes and making sure that these dynamics reach larger social groups, accelerating their development and broadening their degrees of freedom.

Policy needs to favour and amplify these dynamics, creating a regulatory framework for governance and for the recognition of rights. This framework has to guarantee the conditions necessary for the transformation of the income generated by the cultural and creative activities into an inclusive process that surpasses the limited effect of the "creative class". Said process, in turn, should translate into development in the comprehensive sense advocated by Sen, allowing the innovation irradiated on the economic, social and political field to broaden the individuals' spaces of freedom and the communities' possibility frontiers.

In this moment of global change, the opportunities of European competitiveness are articulated, with few plausible alternatives, around the positioning of the activities related to creativity, innovation and talent. Therefore, cultural policies – understood in the broader sense – should play a less peripheral role and the knowledge system should be able to provide rigorous and contrasted interpretations and visions of the new possibility frontiers for regional development.

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» Appendixes

Appendix 1 Economic models linking creative industries and wealth

A naïf model linking regional wealth and productive structure

De Miguel et al. (2011a,b) have recently proposed an empirical model to contrast the effects of agglomerations (number of regional specializations) with the productive structure in terms of knowledge and creative intensity on the GDP per capita of the European regions.

The empirical model is not based on a formal theoretical model, and assumes that the differences in GDP per inhabitant in the European regions are due to these two elements, combined in levels in a linear and additive form, so that:

 $\begin{array}{l} GDP perinhabi = Const + \beta 1 \ LQHigh + \beta 2 \ LQMedHigh + \beta 3 \ LQMedLow + \beta 4 \\ LQLow non-creative + \beta 5 \ LQHTKIS \ non-creative + \beta 6 \ LQOKIS \ non-creative + \\ \beta 7 \ LQLKIS + \beta 8 \ LQcreative + \beta 9 \ PtgLHigh + \beta 10 \ PtgLMedHigh + \beta 11 \ PtgL-\\ MedLow + \beta 12 \ PtgLLow \ non-creative + \beta 13 \ PtgLHTKIS \ non-creative + \beta 14 \\ PtgLOKIS \ non-creative + \beta 15 \ PtgLLKIS + \beta 16 \ PtgLcreative + \epsilon i \end{array}$

The variables are described in the following table:

TABLE 19: Variable	es in the	Regression	Model
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Dependent variable	GDP per inhabitant
Independent variables	 LQs: Number of industrial agglomerations in each region for each one of the following collectives:
	LQs in high-tech manufacturing LQs in medium-high tech manufacturing LQs in medium-low tech manufacturing LQs in low-tech non-creative manufacturing LQs in high-tech knowledge-intensive non-creative services LQs in other knowledge-intensive non-creative services LQs in less-knowledge-intensive services LQs in creative industries
	2. Industrial structure of the region: percentage of workers in each region for each of the following collectives:
	 % workers in high-tech manufacturing % workers in medium-high tech manufacturing % workers in medium-low tech manufacturing % workers in low-tech non-creative manufacturing % workers in high-tech knowledge-intensive non-creative services % workers in other knowledge-intensive non-creative services % workers in less-knowledge-intensive services % workers in creative industries

After the first estimation, all the agglomeration variables are removed from the equation due to the fact that they are highly correlated to the structure variables, which better capture the differences in GDP per capita. Despite its simplicity, the model explains a large part of the variance only in terms of productive structure. In a second step, the share of creative industries is considered as potentially endogenous, introducing an instrumental regression.

Creative industries and Romer's model of endogenous technological change A more elaborated proposal can be achieved following the line of the endogenous growth models. In particular, Romer's model (Romer 1990, Jones 1997) explains cross-country or cross-region income and growth differences on the basis of differences in innovation (production of ideas).

Formulation of the Romer-Jones model with one input

The economy produces two kinds of goods: rival goods in the form of typical goods and services (Y) and non-rival goods in the form of ideas (A). We introduce a simplified version of the model where the only input in the economy is labour¹³:

$$Y = AL_{\gamma}$$
 (4)

The workforce of an economy can be addressed to the rival goods sector (Ly) or to the ideas sector (LA):

$$L = L_A + L_y \quad (5)$$
$$L_A = S_R L \quad (6)$$

This implies that

$$L_Y = 1 - L_A = (1 - S_R)L \quad (7)$$

Here, sR is the share of labour in the creative sector. In the original endogenous growth models, this was assimilated with the share of professionals working in the R&D sector, which entailed a restrictive view of the innovation generation process, dominated by the so-called "linear innovation model". It seems more consistent to introduce all the sectors focused on the creation of knowledge. That is: creative industries.

The growth of ideas can be expressed through the formula

 $\dot{A} = A_t - A_0 = \bar{\delta} L_A^\lambda \quad (8)$

 $\bar{\delta} = \delta A^{\phi} \qquad (9)$

 $\dot{A} = \delta L_{\lambda}^{\lambda} A^{\phi} \quad (10)$

Where:

So that:

^{13.} Relaxing this assumption with the introduction of other productive factors such as capital does not change the general performance of the model. To see the full form of the model, please refer to Romer (1990) and Jones (1997).

Then, the growth rate of the generation of ideas is:

$$g_A = \frac{\dot{A}}{A} = \delta \frac{L_A^\lambda}{A^{1-\phi}} \quad (11)$$

The parameter λ measures the existence of scale economies. The parameter ϕ measures the productivity of the ideas. If $\phi > 0$, there are increasing returns to scale in the creation of ideas, and if $\phi < 0$, there are decreasing returns in the creation of ideas. Note that if $\phi=0$, there are constant returns in the creation of ideas, which means that productivity in the creation of ideas is independent of the existence of previous knowledge and only depends on the share of the workforce dedicated to generate new ideas.

For simplicity purposes, we introduce $\lambda = 1$ (scale economies) and $\phi = 0$ (constant returns in the creation of ideas), so that the creation of ideas can be expressed as:

$$A = \frac{\delta s_R L}{g_A} \quad (12)$$

Then, the production of the economy is:

$$Y = A((1 - s_R)L) \quad (13)$$
$$Y = As_yL \quad (14)$$

or, equalling: $s_v = 1 - s_R$

And the output per worker (y) is obtained dividing by L¹⁴:

 $y = As_y \quad (15)$ $y = \frac{\delta s_R L}{g_A} s_y \quad (16)$ Using logarithms we can linearize the equation:

$$\ln y = \ln \delta + \ln s_R + \ln L + \ln s_y - \ln g_A \quad (17)$$

And finally, we can also isolate the variable on which depends the contribution of the creative sector:

$$lns_R = lny - ln\delta - lnL - s_y + g_A \quad (18)$$

Regarding our causality problem, these two equations explain that:

- 1) The output per capita of a region depends positively on the share of labour in the creative industries in the region (sR), because these industries are on the basis of the generation of innovative ideas.
- 2) The share of labour in creative industries in the region also depends positively on the output per capita (y), because it allows the allocation of a larger share of workers to the creative sector.
- 3 Both are endogenous factors that determine one another.

Q^A modeling

The $g_A = \frac{A}{4}$ term of the equation is assimilated with the technological change, assuming the existence of a regional production function A. Glaeser et al. (1992) and Henderson et al. (1995) provide an explanation for these functions from a regional perspective. For Glaeser et al, *q*A is a function of MAR (Mars-

 $\frac{s_{K}}{14. |f capital is also included in the initial equation, the solution adds a second term \left(\frac{s_{K}}{n+g_{A}+d}\right)^{\alpha/(1-\alpha)}$ multiplying the current solution, where sk is the rate of accumulation of capital, d is the exogenous rate of depreciation for the capital, and n is the population. This expression means that those economies that invest more in capital will be wealthier.

hall – Arrow – Romer) dynamic knowledge spillovers, which in practice is related to the regional degree of specialization in an industry, the diversity of the regional productive structure, the degree of regional competition and the historical conditions. Henderson et al. (1995) combine static and dynamic externalities so that the regional production function *A* and the technological change *A* depend on the current and past industry scale (level of employment in the regional industry), regional characteristics (such as access to major urban market centres and the demand for capital goods generated in metropolitan areas), the regional specialization in the industry (which facilitates spillovers or network information flows among relevant firms and the development of a local specific knowledge, relative to a diffuse localization of economic activity) and the productive diversity of the regional environment.

For the specific case of creative industries, g_A could be related to the factors that Lazzeretti et al. (2009) introduced as determinants of the geographical concentration of creative industries in the so-called "Culture – Agglomeration – Creative Class" model:

- 1> Cultural heritage includes historical places, buildings, monuments, paintings and artefacts and is the reflection of intangible historical aspects of the local culture (traditions, customs, language, lifestyle, etc.). Heritage influences the creative industries from two points of view: firstly, art, culture, beauty, and history affect the perceptions and attitudes towards creativity; secondly, heritage promotes cultural activities such as conservation, enhancement, and economic management of these resources (Camagni et al. 2004). An additional historical factor is the "capitality" of the regions, which is also associated with accumulation of resources and access to public funds.
- 2) Agglomeration economies, broadly defined as advantages in costs or quality due to the spatial concentration of productive resources and actors (population, firms, institutions and other collective agents). Agglomeration economies are classified as either internal or external to the firm. Internal economies derive from the scale of the firm, the product scope, savings in transaction costs, and internal R&D activities. According to Henderson et al. (1995), external economies include both time-static and dynamic localization (specialized local labour market, specialized suppliers, knowledge spillovers) and urbanization economies (size of the local market, productive and social diversity, density, related variety).
- 3> Florida remarks that some places are poles of attraction for the Creative Class. Consequently, the driving force behind the development of a city or region is its ability to attract and retain creative individuals who nourish the creative industries. Florida introduced the theory of the 3Ts (Technology, Talent, and Tolerance), which shifted the focus from the creative industries to the human factor and its creative habitat. The first T (Technology) is related to the specialization of the region in high-tech industries. The second T (Talent) is related to the human capital in the form of educated, skilled or talented people. Finally, Tolerance is associated with the openness of the

region to people and ideas, usually measured by the share of foreign people and gay couples living in a place with respect to the national average.

Based on the previous contributions and the workings of the Romer-Jones model, we propose the following formula for $g_{A:}$

$$g_A = \frac{E_A}{E_Y} C_H C_c \quad (19)$$

Here, EA are agglomeration economies related to knowledge (MAR, using the Glaeser-Henderson nomenclature), EY are static agglomeration economies, CH is culture and heritage, and Cc represents the Creative Class (3Ts).

The logic underlying this equation is that knowledge-related agglomeration economies (EA) will contribute to the technological change and entail a higher share of creative jobs. On the contrary, the agglomeration economies that foster the production of non-knowledge-intensive goods (EY) could reduce the rates of technological change, which translates into a larger share of jobs in non-creative industries. The role of culture and heritage seems unclear. On one hand, it could inspire new ideas, but on the other hand, a rich heritage could be seen as a stock that makes it unnecessary to create new ideas. Finally, the Creative Class fosters creativity and contributes to technical change, with results in higher shares of jobs in creative industries.

Therefore, the final equations derived from the Romer's model could take the following form:

$$\ln y = \ln \delta + \ln s_R + \ln L + \ln s_y - \ln E_A - \ln C_H - \ln C_c + \ln E_Y \quad (20)$$
$$\ln s_R = \ln y - \ln \delta - \ln L - s_y + \ln E_A + \ln C_H + \ln C_c - \ln E_Y \quad (21)$$

In Romer's original model, the variables yt and g_A are clearly endogenous. However, it is difficult to determine how the share of jobs in creative industries sR is obtained. In an enhanced version of the model, Jones (1998, chapter 5) solves sR by equalling the salaries perceived for the production of goods to the salaries perceived in the creative sector. When this is done, it is possible to observe that sR depends on the growth rate of the economy (which is also equivalent to g_A) but not exactly on the output per capita. Thus, if an economy grows faster, it will have a larger share of jobs in creative industries, because the expected returns of new ideas is higher. In practice, this means that sR can be treated as an exogenous variable. In any case, as explained in section 3.3, the assumption of exogeneity can be tested in econometric regressions.

Another interesting feature of the model is the interpretation of the terms of g_A , particularly MAR agglomeration economies and the Creative Class. Firstly, they are introduced in the equation inside the sR term, affecting the creation of wealth positively. However, they subtract resources for the production of goods, so that when they are explicitly introduced as a part of the technological change, they take a negative sign in the equation. By contrast, static agglomeration economies have a positive sign, because they are related to the production of goods.

TABLE 20: Explanatory variables: Structural Model and Romer-Jones

% creative servicesj	= jobs in creative services divided by the total jobs in the region
% creative manufacturing	= jobs in creative manufacturing divided by the total jobs in the region
% high tech manufacturing	= jobs in high-tech manufacturing divided by the total jobs in the region
% medium-high tech manufacturing	= jobs in medium-high-tech manufacturing divided by the total jobs in the region
% medium-low tech manufacturing	= non-creative jobs in medium-low-tech manufacturing divided by the total jobs in the region; creative industries have been removed to avoid double counting
% high-tech services	= non-creative jobs in high-tech services divided by the total jobs in the region; creative industries have been removed to avoid double counting
% other technology- intensive services	= jobs in non-creative and knowledge-intensive services divided by the total jobs in the region; creative industries have been removed to avoid double counting
% non-knowledge intensive services	= jobs in non-creative and non-knowledge intensive services divided by the total jobs in the region; creative industries have been removed to avoid double counting
Total employment	= total number of jobs in the region
Firm size in creative industries in 2001	= number of jobs in creative industries (both manufacturing and services) divided by the number of firms in creative industries. The variable has been lagged to 2001 to force exogeneity; data for sectors that were not included in the previous NACE Rev.1 classification have been imputed using 2008 data
Firm size in the rest of industries in 2001	= number of jobs in non-creative industries divided by the number of firms in non- creative industries. The variable has been lagged to 2001 to force exogeneity; data for sectors that were not included in the previous NACE Rev.1 classification have been imputed using 2008 data. The variable has been lagged to 2001 to force exogeneity
Diversity in the creative chain in 2001	= inverse of the Hirschman-Herfindahl index calculated for all subsectors in the creative industries. The variable has been lagged to 2001 to force exogeneity
Density of population in 2001	= Population in 2001 divided by the area of the region. The variable has been lagged to 2001 to force exogeneity
Productive diversity in 2001	= inverse of the Hirschman-Herfindahl index calculated for all subsectors in the economy. The variable has been lagged to 2001 to force exogeneity
R&D expenditure per capita in 2006	= expenditure in Research and Development divided by the population of the region. The variable has been lagged to 2006 to force exogeneity and to give time enough to the R&D effects to translate into production
Patents per million inhabitants 2004-2007	= number of EPO patents divided by the total population of the region. The variable has been lagged to force exogeneity. Mean values for several years are commonly used in the innovation literature to avoid undesirable effects caused by random peaks of patenting in a year/region
Cultural endowments	= number of events in Via Michelin in the region multiplied by the number of Michelin stars of the events and divided by the total area of the region
% of tertiary graduates in 2001	= number of tertiary graduates divided by the population of more than 25 years. The variable has been lagged to force exogeneity
Creative class in 2001	= percentage of jobs in the groups 1 and 2 of the ISCO classification, divided by the total active population in the region. The variable has been lagged to force exogeneity

TABLE 21: Aggregations of creative industries based on NACE Rev. 2. Adaptation to two digits Source: Elaborated from UNCTAD (2010) and Eurostat

Manufacturing	Creative	Non-creative
High-tech		21,26
Medium-high tech		20, 27, 28, 29,30
Medium-low tech		19,22, 23, 24, 25, 33
Low-tech	14, 15, 18	10, 11, 12, 13, 16, 17, 31, 32
Services	Creative	Non-creative
High-tech knowledge- intensive services (HTKIS)	59,60, 62,72	61,63
Other knowledge- intensive services (OKIS)	58,71, 73, 74,90, 91, 92, 93	50, 51,64, 65, 66, 69,70, 75, 78,80, 84, 85, 86, 87, 88
Less-knowledge-intensive services (LKIS)		45, 46, 47, 49,52, 53, 55, 56, 68, 77, 79, 81, 92,94, 95, 96, 97, 98, 99

NACE Rev.2 Codes: (10) Manufacture of food products: (11) Manufacture of beverages: (12) Manufacture of tobacco products; [13] Manufacture of textiles; [14] Manufacture of wearing apparel; [15] Manufacture of leather and related products; [16] Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials; [17] Manufacture of paper and paper products; [18] Printing and reproduction of recorded media; [19] Manufacture of coke and refined petroleum products; [20] Manufacture of chemicals and chemical products; [21] Manufacture of basic pharmaceutical products and pharmaceutical preparations; [22] Manufacture of rubber and plastic products; [23] Manufacture of other non-metallic mineral products; [24] Manufacture of basic metals; [25] Manufacture of fabricated metal products, except machinery and equipment; [26] Manufacture of computer, electronic and optical products; [27] Manufacture of electrical equipment; [28] Manufacture of machinery and equipment n.e.c.; [29] Manufacture of motor vehicles, trailers and semi-trailers; [30] Manufacture of other transport equipment; [31] Manufacture of furniture; [32] Other manufacturing; [33] Repair and installation of machinery and equipment; [45] Wholesale and retail trade and repair of motor vehicles and motorcycles; [46] Wholesale trade, except motor vehicles and motorcycles; [47] Retail trade, except motor vehicles and motorcycles; [49] Land transport and transport via pipelines; [50] Water transport; [51] Air transport; [52] Warehousing and support activities for transportation; [53] Postal and courier activities; [55] Accommodation; [56] Food and beverage service activities; [58] Publishing activities; [59] Motion picture, video and television programme production, sound recording and music publishing activities; [60] Programming and broadcasting activities; [61] Telecommunications; [62] Computer programming, consultancy and related activities; [63] Information service activities; (64) Financial service activities, except insurance and pension funding; (65) Insurance, reinsurance and pension funding, except compulsory social security; (66) Activities auxiliary to financial services and insurance activities; (68) Real estate activities; (69) Legal and accounting activities; (70) Activities of head offices; management consultancy activities; [71] Architectural and engineering activities; technical testing and analysis; [72] Scientific research and development; (73) Advertising and market research; (74) Other professional, scientific and technical activities; (75) Veterinary activities; (77) Rental and leasing activities; (78) Employment activities; (79) Travel agency, tour operator reservation service and related activities; [80] Security and investigation activities; [81] Services to buildings and landscape activities; [82] Office administration, office support and other business support activities; [84] Public administration and defense; compulsory social security; [85] Education; [86] Human health activities; [87] Residential care activities; [88] Social work activities without accommodation; [90] Creative, arts and entertainment activities; [91] Libraries, archives, museums and other cultural activities; [92] Gambling and betting activities; [93] Sports activities and amusement and recreation activities; [94] Activities of membership organisations; [95] Repair of computers and personal and household goods; [96] Other personal service activities; [97] Activities of households as employers of domestic personnel; [98] Undifferentiated goods-and service-producing activities of private households for own use; (99) Activities of extraterritorial organisations and bodies.

Appendix 2

Before defining the model, we proceed to conduct an analysis of the underlying structure of the relations between the variables analyzed in the previous section, to which we have added the GDP per capita average cumulative growth rate (gGDPPC). Using the PC Algorithm (Spirtes and Glymour, 1991), designed to obtain causality structures, we obtain the following graphs of relations between variables, where none of the relations is counterintuitive or contrary to the theories and stylized facts of the macroeconomy and the economic development. However, the causal direction between GDPPC and INTEICC is from the first one to the second one. Note that there are "terminal" variables, or pure effects (non-causal): DIPH, INTEICC, EHTS and HRST. The last two are correlated. The constructs "Higher Education" and "Urbanization" are considered as exogenous variables, while "Creative Employment" and "Wealth" are considered as endogenous. The best approximation to the higher education indicator is the linear combination of STTER2 and STTER3, while the urbanization indicator is formed by HUA and DENS. Both variables have an effect on employment in the creative sectors, which is an index based on the employment intensity in the ICC and KIBS sectors. At the same time, there is a bidirectional causality relationship between this index and the wealth indicator, represented by the available family income per capita and the average cumulative growth of per capita income. Although all coefficients are significant and the adjustment coefficient is 0.90, there are indications of instability in the adjusted model. Once we reconsider the definition of "Creative Employment", restricting it to the INTEICC variable, this inconsistency disappears. The definition of "Wealth" also varies from the previous model. The model also fits if we define "Creative Employment" as knowledge jobs (INTEKIBS). This negative relation between "Wealth" and "Creative Employment" has already been observed in previous research on the European and Spanish cases. Examples of this research can be found in Rausell and Marco-Serrano (2010)i and Rausell et al. (2011)ii, which pointed towards the existence of causalities between cultural employment and

regional wealth with lagged effects of up to two periods. Thus, there is a pos-

sibility that our model will appear unstable due to its static nature.

Appendix 3

Variable	DENS		Mean values	Variable	DIPH		Mean values	Variable	EHTS		Mean values		
	Regio	ons (NU	TS II)			Regions				Regions			
Year	Non- MED	MED	Total	Year	Non- MED	MED	Total	Year	Non- MED	MED	Total		
1999	411	174	366	1999	10.985	11.221	11.027	1999	4,37	2,9	4,14		
2000	417	175	374	2000	11.241	11.684	11.320	2000	4,58	3,17	4,35		
2001	414	175	370	2001	11.905	12.288	11.975	2001	4,76	3,26	4,51		
2002	385	344	378	2002	12.271	12.736	12.355	2002	4,62	3,17	4,37		
2003	387	346	380	2003	12.392	12.617	12.433	2003	4,53	3,35	4,35		
2004	387	348	379	2004	12.832	12.620	12.793	2004	4,26	3,26	4,1		
2005	384	349	378	2005	13.279	13.126	13.252	2005	4,24	3,37	4,11		
2006	379	350	374	2006	13.805	13.686	13.784	2006	4,22	3,44	4,1		
2007	381	351	376	2007	14.288	14.396	14.307	2007	4,37	3,39	4,22		
2008	306	355	316	2008				2008	4,46	3,26	4,25		
Total	385	303	370	Total	12.570	12.722	12.597	Total	4,43	3,26	4,25		
Av. Growth	-3,21%	8,24%	-1,62%	Av. Growth	3,34%	3,16%	3,31%	Av. Growth	0,25%	1,33%	0,31%		

	Variable	EM PLKIBS		Mean values	Variable	EM PLLS		Mean values	Variable	EM PLSTD		Mean values
		Reg	ions (NUT	SII)			Regions				Regions	
	Year	Non- MED	MED	Total	Year	Non- MED	MED	Total	Year	Non- MED	MED	Total
	1999	37.370	55.602	37.819	1999	2.923	696	2.496	1999	345.822	646.986	353.240
	2000	40.614	56.078	41.068	2000	2.969	711	2.536	2000	359.617	586.181	366.281
	2001	47.529	56.597	47.796	2001	3.545	733	3.005	2001	444.257	598.265	448.787
	2002	46.557	45.486	46.525	2002	3.835	774	3.248	2002	459.390	610.734	463.842
	2003	46.515	47.713	46.550	2003	3.811	797	3.232	2003	459.886	635.848	465.062
	2004	53.600	61.859	54.558	2004	4.133	3.981	4.104	2004	562.944	778.695	587.986
,	2005	54.816	63.995	55.882	2005	4.076	3.999	4.061	2005	567.934	792.918	594.048
	2006	56.158	51.276	55.355	2006	4.137	4.685	4.242	2006	572.651	653.800	586.005
	2007	57.771	49.853	56.468	2007	4.116	4.753	4.238	2007	579.139	668.499	593.844
-	2008	62.812	57.064	61.747	2008	4.201	5.705	4.489	2008	628.432	792.577	658.829
	Total	50.374	55,379	50,842	Total	3.775	2,683	3,565	Total	498.007	715.288	518,303
	Av. Growth	5,94%	0,29%	5,60%	Av. Growth	4,11%	26,34%	6,74%	Av. Growth	6,86%	2,28%	7,17%

Source: Adapted from European Cluster Observatory

Var	riable	GDP PC		Mean values	Variable	HRST		Mean values	Variable	HUA		Mean values	
		Regi	ons (NUT	S II)		Regions				Regions			
Ye	ear	Non- MED	MED	Total	Year	Non- MED	MED	Total	Year	Non- MED	MED	Total	
19	999	17.220	16.955	17.171	1999	31,4	23,47	29,92	1999	47,09	44,5	46,46	
20	000	18.425	18.108	18.366	2000	32,03	24,6	30,63	2000	48,41	46,77	48,02	
20	001	19.048	18.988	19.037	2001	32,41	25,69	31,09	2001	48,7	46,47	48,18	
20	002	19.852	19.420	19.773	2002	32,83	26,04	31,52	2002	48,12	46,34	47,72	
20	003	20.151	19.665	20.061	2003	33,63	26,86	32,35	2003	48,62	47,94	48,47	
20	004	21.176	20.255	21.007	2004	34,88	28,51	33,69	2004	48,19	45,83	47,65	
20	005	22.052	20.880	21.840	2005	35,43	29	34,23	2005	48,47	46,86	48,1	
20	006	23.220	22.133	23.024	2006	35,89	30,79	34,94	2006	47,32	47,13	47,28	
20	700	24.436	23.194	24.211	2007	36,78	30,84	35,69	2007	46,87	46,59	46,82	
20	008	24.586	23.318	24.357	2008	37,14	30,86	35,98	2008	48,54	46,81	48,18	
То	otal	21,048	20,292	20,909	Total	34,3	27,7	33,06	Total	48,02	46,53	47,68	
	w. wth	4,04%	3,60%	3,96%	Av. Growth	1,88%	3,09%	2,07%	Av. Growth	0,34%	0,56%	0,41%	

	Variable	RESE		Mean values	Variable	UNEM		Mean values	Variable	PROD		Mean values	
		Regio	ons (NU	TS II)	v	I	Regions		X	Regions			
	Year	Non- MED	MED	Total	Year	Non- MED	MED	Total	Year	Non- MED	MED	Total	
	1999	0,36	0,1	0,34	1999	8,33	13,23	9,23	1999	27.511,57	31.554,00	28.270,56	
	2000	0,42	0,31	0,38	2000	8,04	11,75	8,75	2000	29.000,83	32.978,77	29.760,85	
	2001	0,4	0,37	0,39	2001	7,9	9,84	8,27	2001	29.831,42	33.706,92	30.584,99	
	2002	0,4	0,42	0,4	2002	8,29	9,79	8,57	2002	31.092,51	34.050,82	31.656,54	
5	2003	0,46	0,31	0,42	2003	8,65	9,71	8,85	2003	30.972,98	33.884,53	31.515,43	
	2004	0,45	0,31	0,41	2004	9,02	9,67	9,14	2004	32.578,76	34.263,20	32.890,23	
	2005	0,62	0,33	0,56	2005	8,85	9,32	8,93	2005	34.001,89	35.087,04	34.215,43	
	2006	0,6	0,41	0,58	2006	8,26	8,57	8,31	2006	35.323,56	36.834,43	35.620,88	
	2007	0,63	0,41	0,61	2007	7,08	8,06	7,26	2007	36.022,08	38.312,82	36.436,27	
	2008	0,63	0,28	0,59	2008	6,68	8,52	7,01	2008	35.596,32	38.402,71	36.183,99	
	Total	0,52	0,33	0,49	Total	8,1	9,81	8,42	Total	32.200,16	34.936,22	32.724,46	

Source: Adapted from EUR0STAT

Source: Adapted from European Cluster Observatory

Variable	STTER1		Mean values	Variable	STTER2		Mean values	Variable	STTER3		Mean values
v	Regi	ons (NUT	S II)	X		Regions			I		
Year	Non- MED	MED	Total	Year	Non- MED	MED	Total	Year	Non- MED	MED	Total
2000	45,28	48,37	46,14	2000	8,84	5,93	8,03	2000	0,91	0,94	0,92
2001	44,8	50,77	46	2001	8,1	5,93	7,66	2001	0,89	0,94	0,9
2002	45,88	53,01	47,29	2002	8,79	5,93	8,22	2002	0,89	0,94	0,9
2003	48,88	52,66	49,69	2003	9,96	5,42	8,99	2003	0,89	0,89	0,89
2004	50,5	55,35	51,74	2004	10,13	5,28	8,89	2004	0,9	0,85	0,89
2005	51,74	60,24	53,88	2005	9,93	5,42	8,8	2005	0,89	0,9	0,89
2006	53,51	57,03	54,22	2006	9,93	5,44	9,05	2006	0,9	0,9	0,9
2007	55,04	62,34	56,92	2007	10,53	7,27	9,69	2007	0,9	0,9	0,9
2008	56,62	63,67	58,43	2008	10,48	7,23	9,65	2008	0,91	0,88	0,9
Total	50,72	56,86	52,16	Total	9,71	6,05	8,85	Total	0,9	0,9	0,9
Av. Growth	2,83%	3,50%	3,00%	Av. Growth	2,16%	2,52%	2,32%	Av. Growth	-0,05%	-0,84%	-0,26%

	Variable	EMPL CCI		Mean values	Variable	INTE ICC		Mean values		Variable	POPU		Mean values	
		Regi	ons (NUT	S II)		Regions			Veen		Regions			
	Year	Non- MED	MED	Total	Year	Non- MED	MED	Total		Year	Non- MED	MED	Total	
	1999	24.506	17.562	24.216	1999	1,82	1,06	1,8		1999	1.727	2.131	1.802	
	2000	25.007	16.189	24.587	2000	1,85	1,15	1,81		2000	1.730	2.139	1.806	
	2001	23.652	17.040	23.399	2001	1,8	1,24	1,78		2001	1.734	2.149	1.811	
	2002	22.788	17.833	22.605	2002	1,78	1,27	1,76		2002	1.725	2.163	1.805	
	2003	21.771	18.348	21.645	2003	1,69	1,26	1,68		2003	1.729	2.185	1.813	
,	2004	21.421	28.334	22.264	2004	1,7	1,46	1,67		2004	1.734	2.210	1.822	
-	2005	21.577	29.133	22.500	2005	1,73	1,5	1,7		2005	1.724	2.232	1.816	
	2006	21.746	23.184	21.994	2006	1,72	1,43	1,67		2006	1.729	2.253	1.824	
-	2007	21.603	23.124	21.865	2007	1,66	1,39	1,62		2007	1.734	2.275	1.832	
	2008	22.013	26.464	22.837	2008	1,51	1,43	1,49		2008	1.756	2.296	1.869	
- [Total	22.413	24.487	22.642	Total	1,72	1,4	1,68		Total	1.732	2.203	1.819	
	Av. Growth	-1,18%	4,66%	-0,65%	Av. Growth	-2,11%	3,44%	-2,06%		Av. Growth	0,18%	0,84%	0,41%	

Source: Adapted from European Cluster Observatory

Source: Adapted from EUROSTAT

Variable	EMPR	EMPR Mean values							
	Regions								
Year	Non- MED	MED	Total						
1999	64,09	54,48	62,28						
2000	64,67	55,51	62,92						
2001	64,57	56,48	63,01						
2002	64,37	57,09	62,98						
2003	64,11	58,04	62,98						
2004	63,99	59,03	63,08						
2005	64,8	59,43	63,74						
2006	65,6	60,08	64,51						
2007	66,92	60,57	65,77						
2008	67,6	60,69	66,35						
Total	65,1	58,17	63,79						
Av. Growth									

Variable	INTEKIBS		Mean values					
		Regions						
Year	Non- MED	MED	Total					
1999	4,95	3,32	4,89					
2000	5,06	3,17	4,97					
2001	4,82	3,22	4,76					
2002	4,7	2,89	4,63					
2003	4,6	2,88	4,53					
2004	4,53	3,08	4,36					
2005	4,82	3,19	4,61					
2006	4,83	3,09	4,5					
2007	4,7	2,93	4,4					
2008	4,11	3,07	3,89					
Total	4,69	3,06	4,5					
Av. Growth	-2,04%	-0,87%	-2,53%					

ADDENDUM. INNOVATION LABORATORIES: THE EXPERIENCE OF THE SOSTENUTO PARTNERS

» Introduction: Characterization of the sostenuto partnership

In this section, we shall look at the general features of the project partners. One of the first issues refers to the design of the partnership structure, which has attempted to respond to the diversity and complexity that characterizes the relationships between the cultural sector and its innovation processes.

In this regard, we can identify two important levels within the Sostenuto partnership:

The first level is associated with cultural practices and pilot experiences involving socio-economic innovation:

- > AMI (Marseille, France): Project leader. Music sector. Its aim is to develop creative business incubators.
- > Bunker (Ljubljana, Slovenia): Performing arts sector. Its aim is to design and implement Non-Monetary Exchange Systems.
- > EXPEDITIO (Kotor, Montenegro): Heritage and Architecture sector. The action plan involves participatory cultural planning.
- > CITEMA (Cetona, Italy). Handicrafts sector. Its objective is to establish a cluster.
- > ZeP Progetti (Liguria, Italy): Cultural consultancy. Its aim is to design strategies for regional governance

The first two organizations of this pilot experimental group have a primarily instrumental and operative nature (incubators and exchange systems), whereas the other three focus their activities on planning and designing strategies. The combination of this twofold strategic and operative perspective gives the partnership structure a complementary nature, which is extremely useful. The cross-border synergies arising from the interactions between the organizations will be discussed below.

The second level of partnership is characterized by a political and academic nature:

- > Relais Culture Europe [RCE] (Paris, France). Their objective is promoting and disseminating the Sostenuto project among European-level institutions. To this end, it participates in political forums, implements communication strategies, organizes events like the Paris Summer School and puts together publications like the Green Paper on Culture and Innovation in Europe.
- > Universitat de València [UVEG] (Valencia, Spain). Their objective is conducting scientific research to propose a theoretical model that depicts the relationships between culture, creativity and socio-economic innovation. Their activities include participating in academic forums, preparing this "Grey Book" and organizing the Sostenuto Final Conference.

The complementarity between both levels of the partnership has given rise to interesting synergies. The "bottom-up" approach used by the organizations and their laboratories is complemented by what we might refer to as the "top-down" approach typical of the academic, political and institutional spheres. Theory and practice are brought together using this work methodology.

Returning to the subject of the laboratories and delving a little deeper into the nature of the partners responsible for their implementation, we find a series of interesting issues concerning the selection of practices. The first issue is related to the territorial perspective. Although all the territories included belong to the MED space, they are very different from one another, ranging from a state capital (Ljubljana, Bunker) to the second city in France (Marseille, AMI), a group of rural municipalities (Chiana Valley, CITEMA) or average-sized municipal associations (Liguria, ZeP; and Boka Kotorska, Expeditio). These territories also have other features that make them relevant for our research. Such is the case of Marseille's role as the European Capital of Culture in 2013 or Boka Kotorska's condition as a UNESCO World Heritage Site.

The second remarkable issue concerns the characteristics of the organizations forming the Sostenuto partnership. Firstly, the selection of cases necessarily implies a certain diversity of cultural sectors (AMI-music; Bunker-performing arts; CITEMA-handicraft; Expeditio-architecture and heritage; ZeP-cultural consultancy). Secondly, these organizations also represent the various degrees of maturity characterizing the different phases of creative entrepreneurship: from the case of a young organization like CITEMA to longstanding organizations such as AMI or Bunker, with over 20 years of professional experience. Finally, the dimension of the organizations also varies a great deal, ranging from structures with over 15 employees (BUNKER) to much smaller organizations like CITEMA or ZeP (with less than five employees).

Before analyzing each case individually, it should be said that, with the exception of the AMI business incubator laboratory, most of the activities are conducted within a sphere of innovation that is closer to social aspects (and thus with audiences) than to technological or financial issues. This does not mean that they do not have a real or latent impact on such matters (for example, the internationalization of the craftworkers integrated in the CITEMA Cluster or the development of sustainable tourism models in Boka Kotorska). Nevertheless, the objectives of these actions are encompassed within spheres that go beyond the purely economic and commercial logic, with the problems of visibility and impact quantification that it entails.

Our defense of their relevance focuses on the value of practices like Bunker's Non-Monetary Exchange Systems, which help to diagnose emerging conflicts through creative and participatory methods and make it possible to test pilot experiments. Beyond achieving the short-term aims, their main challenge is to systematize practices, making them sustainable in the long run.

Anticipating some of the conclusions that will be discussed below, we can highlight two interpretative keys for the Sostenuto laboratories. There are two analytical dimensions that address the complexity of territorial development and are particularly important to understand these cultural management practices.

The first refers to the management of knowledge associated with the activities of all the laboratories. As we have pointed out in previous chapters, culture is one of the driving forces behind socio-economic innovation due to the relationship between knowledge integration, creative processes and innovation production. In this regard, the laboratories address issues like territorial diagnosis, sensitization and promotion of social mobility, management of emotions, feelings and the symbolic universe as a source of knowledge, training seminars focused on sectoral skills (including business skills, particularly relevant in the cultural sector), as well as research and proposals for alternative uses in public spaces.

In short, there is an approximation towards social innovation processes through a series of actions related to education in values (solidarity, sustainability, cooperation, social justice), participation and debate within the community, artistic education, creative skills and expressive competences. These actions are directly linked to the social capital of the territories through the promotion of identity, memory and creative lifestyles.

The second dimension of analysis, closely related to the previous considerations, is the design and implementation of organizational strategies. The strategies implemented by the Sostenuto laboratories are guided by a critical view and a will to change the territorial reality from up close, features that are in line with the specificities of the cultural sector.

Operationally, these organizational strategies materialize into activities that imply working with local communities, identifying and selecting relevant stakeholders for each project and establishing cooperation networks. These networks have a multi-level and transversal nature, because they combine the global and the local logic and they integrate the multiple dimensions that exist between culture and development.

The high level of mobility, networking and forms of open access that define the cultural sector represent an added value that the laboratories will use to achieve these objectives.

Finally, attention should also be drawn to the specific features of the MED space, an ensemble of territories where heritage resources, potential opportunities and operational possibilities present a relationship that is by no means linear. The historical and cultural development of the MED territories has led to a paradoxical situation. Despite the huge potential in terms of heritage and cultural resources, this area has important shortcomings in aspects like infrastructures, human resources, investment and funding that hinder the unfolding of potential impacts on socio-territorial development. Using tourism terminology, the journey from the tourist (cultural) resource and the tourist (cultural) product is arduous and complicated. The MED space offers raw material of remarkable quality. Nevertheless, the way and the conditions in which this material is used is a whole different story. This situation is in line with the classical differences found between the North and the South of Europe in productive sectors such as agriculture.

The MED space has certain socio-economic features that determine the possibilities for socio-economic innovation through the development of creative entrepreneurship:

- > Typology of productive structure and relative weight of the sectors associated with the knowledge economy in the economic development model dominant in each country.
- Situation of the educational systems: degree of adjustment to society's needs and knowledge transfer.
- > Degree of development of the innovation systems within the productive structure.
- > Dominant business culture and general attitude towards risk.
- > Public and financial support for the Cultural and Creative Sector.

The last issue worth highlighting concerns the importance of the territorial perspective in the analysis, since the regional level presents situations that can be very different from the national reality. Such is the case of Catalonia, in Spain, where the results of an analysis that considers the whole country are very different from those produced by an analysis focused on the specific circumstances of the region.

After introducing these general considerations, we move on to analyze the experiences and specific features of the Sostenuto laboratories.

The analysis focuses on four main aspects:

- a> Territorial context. This part will allow us to link the innovation practices promoted by the laboratories to the local development model in which they are located.
- b> Sectoral context. The specific features of the cultural activities carried out by the organization define different approaches, needs and possibilities that should be taken into consideration.
- c> Main characteristics of the human resources team. As we saw in the chapter devoted to the microeconomic approach, cultural organizations can be defined by aspects like the charisma of their leaders, their socio-cultural values, their mission or their level of autonomy and mobility, and the Sostenuto partners are no exception. The implications of these issues acquire special importance in the assessment of the progress of the laboratories and their chances of success.
- d> The laboratory. As we will discuss later on, most of the innovative practices developed are integrated in the field of organizational and management innovation rather than in the technological field, even though the two fields could interact with relative ease. Action is oriented towards services and socio-economic matters. The main areas of activity are: a creative business incubator, a territorial crafts cluster, a non-monetary exchange system and a set of cultural planning and local governance initiatives. As noted above, this type of social or soft innovation affects the visibility of their impacts, which results in limitations in terms of funding and institutional or business sensitivity.

» AMI, Centre de Développement pour les Musiques Actuelles: Cultural and creative business incubator

Territorial context: Marseille, European Capital of Culture 2013

Marseille is a city and port district located in the departamental prefecture of Bouches-du-Rhône, in the French southern region of Provence-Alpes-Côte d'Azur (PACA). It is the second largest city in France, with a population of 859,543 people, and also the main economic hub and biggest metropolis in the south of the country, drawing together nearly 1,605,000 people in the urban area of Marseille-Aix-en-Provence.

Furthermore, Marseille is the most important commercial port in France and the Mediterranean region and the third most important in Europe after Rotterdam and Antwerp. The city is a hive of industrial activity, specializing in petrochemicals, oil refining, and various other industries. In addition, it serves as a communications hub where the routes bound for Paris, Italy, Switzerland and Spain all converge. Marseille is also a first-rate university centre dating back to 1409. The city has been chosen European Capital of Culture 2013. The European Council and the European Parliament confer this title to two European cities each year to give them the chance to showcase their cultural life and development. In general terms, European cities take advantage of this designation to overhaul their cultural structures, staging all kinds of artistic events and boosting their presence in the international arena. Since its beginnings in 1985, this initiative has been favourably received by European citizens. Today, its cultural and socio-economic impact is growing thanks to the large number of visitors and tourists that it attracts.

The fact of being proclaimed European Capital of Culture represents a great stimulus for Marseille and its cultural and creative sector, since it can trigger favourable institutional and territorial dynamics: greater political awareness of the role of culture in economic development, the possibility of creating new and better jobs, enhancement of the attractiveness and the international projection of the region, the opportunity to breathe new life into deprived urban areas, etc. The AMI case study will serve to illustrate these matters.

Sectoral context: Music

Music is a very important sector in Europe in terms of product and its contribution to cultural diversity. However, access to international markets presents serious difficulties.

The business structure of the European music industry is characterized by the predominance of microenterprises (one to three employees). As can be seen in the following table, 69.18% of the businesses in the industry have between one and three employees, compared to an average of 58.38% for the whole cultural sector.

TABLE 22: Distribution of number of employees in the music sector. Source: Eurokleis (2009)

SECTOR	1-3	4-9	10-49	50-249	+250
Music	69,18%	18,35%	10,20%	1,83%	0,44%
Average for the cultural sector	58,88%	28,75%	14,93%	2,49%	0,45%

The number of large companies is marginal: only 2.27% of music businesses have more than 50 employees. However, their relevance in terms of production is much greater. A small number of large multinational firms control most of the music business. While 88% of the companies generate 30% of the sector's revenues, businesses with more than 50 employees generate approximately 40% of the output.

These percentages are even more striking if we analyse them in terms of potential innovation. Small independent businesses gain importance from this point of view, since they are the key protagonists of the innovation processes that take place within the sector. The small companies are the ones that discover new talents and produce around 80% of the new releases.

The music industry is also characterized by the following qualitative aspects: > It generates intellectual property.

- > It is strongly influenced by digitization (particularly in creation and interaction with users).
- > It is generally project-based.
- > Sometimes, like in the case of AMI, the businesses are run like a not-for-profit organization, facilitating access to culture and a number of social objectives.
- > The businesses in the sector combine self-financing and public subsidies according to their work objectives.
- > The music industry is currently facing a structural crisis due to the problems caused by peer-to-peer sharing and piracy.

The impact of digitization and its influence on the transformation of the business model are specially relevant for the creative business incubator run by AMI. On an introductory note, it should be said that Europe generates about half of the revenues from music editions and a third of the global record sales. This contrasts with its 17% share in the digital market.

Due to its emergence and expansion, the digital market offers small and medium entreprises in the sector the opportunity to reach a wider audience. However, the difficulties to access this market hinder the realization of this objective. Large companies such as Google or Apple control most of the digital music content, preventing small independent labels from penetrating the market. In addition, the fragmentation of the European regulatory framework for critical legal issues like copyright or intellectual property rights causes problems at the national level.

The AMI human resources team

AMI is the leader of the Sostenuto project. The association was established in 1985 and currently has a staff of nine workers in charge of arranging artist residencies, organizing festivals, holding workshops and coordinating participation in international networks of cultural operators. AMI's mission is to develop a comprehensive platform of services for stakeholders in the sector and citizens interested in musical practices in order to promote new spaces for artistic management or practice. AMI provides creation tools (workshops, residencies, rehearsal and recording spaces) and distribution tools (festivals, itinerant programmes), always trying to seek new audiences and reinforcing their connection to the socio-economic and cultural dimension.

As we shall see later on, one interesting aspect of AMI's work is its global/local focus, since the organization combines its commitment to the socio-economic and cultural development of Marseille with the international dimension of its activities. The organization of international workshops, the implementation of exchange programmes with the Middle East, Japan, Russia or Africa and the editions the MIMI Festival held outside Marseille (in Naryan-Mar, Russia and Kinshasa, Democratic Republic of Congo) are a good example of AMI's desire for international cooperation.

This international outreach is closely associated with the figure of Ferdinand Richard, AMI's director. Cultural organizations are often characterised by a strong charismatic leadership. The case of AMI follows this model. The experience and lifestyle of its founder are reflected in the activity of the organization. Therefore, a brief biographical outline will help us understand AMI's avant-garde and international vocation.

Ferdinand Richard was born in 1950 in Meknes (Morocco) and studied Medieval Literature and Law in Grenoble (France). It was there that he took a course for bass musicians at the Regional Music Conservatory in 1973. Richard then abandoned his studies and joined the band Etron Fou Leloublan as their bass player, singer, songwriter and manager. The band was known for its innovative, nonconformist and avant-garde music, characterized by a mix of styles. Richard stayed with Etron Fou Leloublan for thirteen years until the band dissolved, recording six albums and giving concerts throughout Europe and North America. He has also recorded two experimental solo albums and participated in other bands such as Gestalt et Jive, Bruniferd and Ferdinand et les Philosophes.

In May 1986, Richard entered the world of management, founding the Mouvement International des Musiques Innovatrices (MIMI), a spring festival held in Marseille featuring unknown musicians.

Another aspect worthy of mention is Richard's training facet. For over a decade, he has been taking part in cultural management courses (Certificat Européen Marcel Hicter, DESS/Grenoble, ECUME/Dijon, etc.) and political debate societies like the Observatoire des Politiques Culturelles.

Another interesting aspect concerning the management of AMI involves the extraordinary use of infrastructure. AMI was one of the first organizations to join la Friche La Belle de Mai, Marseille's cultural cluster par excellence. Since its creation in 1994, AMI has occupied offices in this old tobacco factory refurbished as a cultural cluster that has gained recognition among European academia. In this space, more than 70 cultural stakeholders from various sectors (performing arts, audiovisual arts, design, etc.) gather to carry out their activities and interact with one another. This enables economies of scale and generates interesting synergies. However, this kind of impact was not fully confirmed during the interviews with Richard.

Services provided by AMI: Training and networking to transfer knowledge

AMI runs six rehearsal spaces that facilitate the initial contact with musicians. Around 80 music groups use these installations every year. AMI also holds complementary music workshops (song lyrics, scratching, sampling, computer music, etc.) run by artists who want to share their experiences and expertise. These workshops are also mobile, since they can be set up at the request of schools, associations and community centres. In addition, the annual international workshops held in Marseille and cities like Marrakech, Dakar, Osaka, Kinshasa or Damascus to provide a space for micro-enterprises to promote global cooperation networks and the exchange of best practices.

AMI also organizes artist residencies, which are articulated around a specific project defined by a guest artist and encourage the participation of young talent. Given its desire to act as an intermediary and penetrate new territory, AMI has participated since its inception in regional, national and international cultural networks. These networks have allowed the organization to participate in major cultural debate platforms like the European Forum of the Arts and Heritage (of which Richard was chairman for a while), FANFARE, etc.

The MIMI Festivals (International Movement for Innovative Musics), dating back to 1986, are the backbone of AMI's activity. Apart from the editions held in Marseille, there were at some point international editions in Northern Russia and the Democratic Republic of Congo. The format of these festivals is designed to complement the function of the workshops, providing exchange, support and training opportunities for musicians. Apart from these important festivals, AMI organizes frequent performances in clubs ("Concerts de Voyage", "Direct Usine") in order to promote new talent and music styles.

In the past, AMI also had its own record label (Stupeur et Trompette!), devoted to innovative music and guided by the principles of independence that are a constant feature of this organization. Although the label had its own store in Marseille and a certain international presence, it was forced to close down. AMI's funding model is based mainly on public resources. It combines various levels, although it primarily relies on the local and central government.

The laboratory: Cultural and creative business incubator

In general terms, a business incubator (which should not be misinterpreted as a cultural enterprises hosting platform), might be defined as an organization whose aim is to support the creation and development of small or micro-enterprises in their early stages. This is normally done by means of public initiatives designed to promote the creation of new businesses in a specific geographical area, in order to test their activities before taking the real step of registration. Incubators typically support new entrepreneurs in all the aspects related to business management (business plan, marketing, finance, etc.) and provide access to facilities and resources (premises, telephone, Internet, videoconference rooms, etc.) at very low cost, even free of charge. With this support, it is hoped to reduce the risk inherent to the establishment of a new business. However, there is no physical permanent hosting.

Since the purpose of the incubator is to create businesses in the long term, the incubator organizers establish certain criteria to select candidate projects: the technical, economic and financial feasibility of the project, sector of activity, quality of the training team, adaptation to the specific aims of the incubator, quality of investment, etc. The incubation period varies depending on the objectives of the incubation unit and the nature of the project. In the case of A.M.I., the incubator offers a pre-test period (3 months) followed by a 12-month test period, renewable once. If the company completes this incubation period successfully, it will move on to the expansion phase (in which it will need further funding and/or greater facilities), leaving the incubator. More and more frequently, the moment in which the company leaves the incubator is determined by the deadline established for its use of the facilities. The space is then taken by another project, thus safeguarding a fundamental feature of this type of infrastructure: the rotation of business projects with a maximum stay period. Overall, incubators generate an implicit subsidy for operation for the businesses housed in their installations. This subsidised funding for operation will also be supplemented, where appropriate, with other incentives, always depending on the territorial context of the subsidies available: direct incentives, subsidized interest rates, seed capital, venture capital, repayable subsidies or other funding arrangements.

In the case of cultural and creative business incubators, there are a number of specific features to bear in mind, since the key factors involved in entrepreneurship (business vision, market positioning, business skills, communication skills, teamwork and participation in networks) have a very peculiar idiosyncrasy, as we saw in Chapter 3: potential dominance of cultural values over business acumen, unpredictable nature of the cultural market, shortage of business management skills, SME dimension of the productive structure, ambivalent legislation, funding difficulties, etc.

If we recall the conclusions of the European Report "The Entrepreneurial Dimension of Cultural and Creative Industries" (HKU, 2010), it will be easier to

contextualize the strategic value of AMI's incubator. The main issue concerns the vital need to develop specific business skills for the cultural sector, often not covered in formal training programmes. Thus, the creation of areas for professional training and practical experience, particularly in the early stages of activity, is absolutely crucial.

By way of introduction, we can summarize the activities developed in AMI's creative incubator laboratory in the following chart:

ACTIONS OF AN ORGANISATIONAL NATURE	TRAINING FACILITIES
Creation of decision-making structures and mechanisms: selection committee	Training: workshops, field trips, etc.
Coordination of different territorial levels: networking with national and regional creative incubator structures (IRMA, ONPC, ARCADE, INNEF, etc.)	Individual counseling on a daily basis
Integration of different topics (e.g. culture and economy): incorporation of economic players (Marseille Chamber of Commerce, Social Economic Chamber, Platform for Local Initiatives-CPEM, etc.) as stakeholders in the project	Information and communication actions
International outreach and networking: Potlatch professional meetings	Research function: participation in forums, identification of needs and prospective trends

TABLE 23: Activities of AMI's creative incubator (CADO)

We should first draw attention to the fact that the project has its own decisionmaking structures and mechanisms, which are used to determine the criteria, evaluate and select candidates. The same mechanism is used throughout the whole process to make sure that the project is compliant with the working reality. Three main levels of action can be highlighted at the AMI Lab: daily support actions, networking and life inside the incubator.

Daily support actions

Daily support actions have an individual and collective nature and offer important educational content. Individual actions include incubator facilities, which last between 3 and 18 months and offer project managers continual support. Informative meetings include customized work sessions where solutions are found for practical problems. Collective training sessions are also held to improve entrepreneurial skills. The content addresses business administration and management skills, accounting, open source software and commercial communication, etc. There are also collective workshops on best practices.

In addition, AMI organized a half-day "speed-dating" session in the framework of the "Potlatch" professional meetings that consisted in 45 "interviews" with lecturers, participants and members of the CADO incubator.

Networking

Other notable activities involving training and the exchange of best practices on an international level are the Potlatch Professional Meetings, held once a year over three consecutive years, with each edition dealing with a single topic: culture and sustainable development, proximity circuits and territorial identity. These week-long professional meetings are structured in two plenary sessions, four workshops and 16 lectures. The Potlatch meetings enable participants to receive training and also establish contact with 75 professionals from other countries. They also facilitate the creation of networks through the so-called "speed-dating sessions", which consist in micro-interviews between speakers, participants and incubator members. Furthermore, the activities were included in the framework of hosting events like the MIMI and Babel Med Music festivals or the Midem Fair. Therefore, incubator users could make the most of their learning experience in a professional and practical context.

Regarding the collaborative work done on this project we can identify three key types of partners, who have facilitated the incorporation of three types of perspectives and professional activity:

- > The Syndicate of Incubators and its local network: among the activities conducted worthy of mention is the hosting of regional, national and international meetings and participation in its general assemblies.
- > The Resource Centre, composed of local and national collective platforms: ARCADE, AGESCA, UDCM, Phonopaca, IRMA (Paris), Observatoire National des Politiques Culturelles (Grenoble), INNEF.
- > Bodies supporting and promoting business incubators: Pôle Emploi (Marseille), Marseille-Provence Chamber of Commerce and Industry, Regional Chamber for Social and Solidarity Economy, CPEM (Platform for Local Initiatives), Chamber of Trades, Envie d'Agir (Youth and Sports Departmental Division). Meetings have been held with these institutions for the presentation of the project.

Other notable networking activities are the interregional initiatives organized by AMI in collaboration with Les Têtes de l'Art, the PACA Chamber for Social and Solidarity Economy, ARCADE, and regional federations of Youth and Culture Houses. Within this framework, a seminar on "Cooperation practices in the cultural sector" took place along with with other activities during the Month of Social and Solidarity Economy.

Life in the incubator

Within the framework of the "social life" activities, attention should be drawn to the Steering Committee (convened in May 2010) with the participation of 20 people from different local institutions (Conseil Régional PACA, Conseil Général Bouches-du-Rhône, Direction Régionale Jeunesse et Sports) and operational partners (Marseille Provence 2013, Couveuse Inter-Made, Pole Info Musique, les Têtes de l'Art, etc.).

Two seminars were also held offering training on territorial diagnosis with the participation of AMI's team.

Thirdly, a business trip to Brussels was organized from 27 September to 1 October 2010. A total of 11 development project managers took part in one week of professional meetings, networking and immersion sessions. The participants were current and former members of the CADO incubator, as well as operators from Italy, Spain and Slovenia sent by the Sostenuto partners. This business trip had three main objectives:

- Business objective: for the participants, this trip was an opportunity for professional networking. The participants contacted the people and organizations they wished to meet by themselves.
- 2> Educational objective: the programme included workshops and meetings about European institutions and European policy.
- 3> Group dynamics and mind opening objective: visits, collective moments of discovery, immersion in cultural life, meetings with the promoters of original and innovative initiatives.

» Bunker

Territorial context: Ljubljana, capital of Slovenia

Slovenia has nearly 2 million inhabitants. Most of them are Slovene and the biggest minority is formed by former Yugoslav nations (Serbs, Croats, Bosnians...). The official language is Slovene. The first book in Slovene was published in 1550.

The location of Slovenia has affected many historical, political, economic and cultural developments in the country, as well as the current political and cultural situation. Since the Slovenian nation was historically under foreign rules, national identity was constituted through culture and language. Still today, the popular political mythology is that the Slovene nationality has its roots in culture, especially in language and literature. In contrast to the popular belief, the measurable parameters of the value of culture do not support this assumption. As in most countries, the part of GDP dedicated to culture is under 1%², when the value recommended by UNESCO is 1.5%. Ljubljana is the capital of Slovenia, as well as its cultural, political, economic, educational and administrative center. It is located on the intersection of the two biggest transport corridors of Europe.

One of the goals of the past governments was the decentralization of Slovenia, but most of the content concerning culture is still focused in Ljubljana.

This section has been written in collaboration with Nevenka Koprivšek, Bunker's director, and Samo Selimović, project manager.
 www.mk.gov.si/fileadmin/mk.gov.si/pageuploads/Ministrstvo/Podatki/Statisticne_informacije/ISI_MK__Materialni_polozaj_kulture_ september 2011.pdf

The capital hosts around 10,000 cultural events every year, including more than 60 festivals. One of the problems of professional culture in Ljubljana (as in many other Eastern European cities) is the unbalance between public institutions and NGOs, mainly in terms of the distribution of financial and human resources, infrastructures, etc. The public institutions, which have not yet been forced to go through reform, are the biggest spenders of public money and very inflexible in operation. On the other hand, the NGOs work under "guerrilla" conditions because of the lack of money, which results from poor state financing and a lack of private money inflow. Also, there is no legislation (e.g. tax legislation) that encourages private businesses to invest in culture.

Regarding infrastructures, musician, cultural activist and researcher Bratko Bibič conducted a study in which he argues that "Slovenia, and Ljubljana in particular, is characterized (...) by a vast gap between public institutions and non-profit private cultural producers in terms of infrastructure accessibility"³.

Sectoral context: The performing arts

Just as it happens in the music industry, we find the same problem of the productive structure polarising the performing arts. The SME dimension is most widespread in the business fabric and there is a significant lack of mediumsized companies, hampering the organization of the sector. Furthermore, the few existing large companies corner a significant proportion of the volume of work.

TABLE 24: Distribution of number of employees in the performing arts sect	tor
Source: Eurokleis (2009)	

	NUMBER OF EMPLOYEES				
Sector	1-3	4-9	10-49	50-249	+250
Performing arts	63,01%	21,93%	12,52%	2,25%	0,30%
Average for the cultural sector	58,38%	23,75%	14,93%	2,49%	0,45%

According to this table, 63% of performing arts companies typically have less than 4 workers and 22% have between 4 and 10 employees. The aggregate earnings of this 85% of the companies (1 to 10 workers) account for 39% of the total earnings for the sector. Companies with 10 to 49 workers (12.5% of the total) generate 31% of the total earnings for the sector. For their part, companies with more than 50 workers (2.55% of the total) generate 30% of the total earnings in the peforming arts. Finally, the sector represents 1.31% of the total earnings of the cultural and creative industries in Europe.

According to the typology for the provision of goods and services, the per-

^{3.} www2.arnes.si/ffljmiri1s/slo html/publikacije/pdf/Ml politike hrup z metelkove.pdf

forming arts generate creative experiences. This characteristic is extremely important for the development of social innovation processes such as those promoted through the Bunker Lab, as we shall see below.

Other specific features of the sector concern the fact that, initially, performing arts companies do not possess the intellectual property rights of their work. In fact, they usually pay copyright for the work of others. This lack of property rights means there is a need for alternative mechanisms to be set in place to recognize creativity and talent (like the quality criteria applicable to the sociocultural added value generated).

Companies in the sector are largely subsidised and heavily involved in the cultural value of their work. There are serious problems regarding private funding (associated with symbolic and intangible output). Along with the criticism levelled at the system of subsidies, which is said to restrict the entry of private investment, there are those that defend the need to maintain the sector's cultural diversity. The current crisis brings this debate right to the fore.

According to the sectoral european organization, the sector is typically non-profit making, more oriented towards culture than business, and has many socio-cultural aims (facilitating access to culture, transmitting values, etc.). Thus, the entrepreneurial concept is relatively new. As it happens with visual artists (craftworkers, designers, etc.), many performing artists (scriptwriters, directors, etc.) have contractual arrangements based on freelance work, there being huge differences in pay scales depending on the person concerned, with below-average wages often being accepted. This is partly explained by the preferences for creative work. The sector is characterized by work methods that are heavily influenced by networking with other sectors such as music or the audiovisual industry. In terms of market access, micro-companies are faced with difficulties in gaining access to larger markets and converting their ideas and initiatives into productions. In general terms, the life cycle for a stage production involves long production processes (2 or 3 years) and much shorter periods of time for delivery of the product (season). The notion of growth in this industry is associated with a slow and lengthy process (lasting around 10 years), during which the market recognizes the talent and creativity of the company.

The sector lacks training in business skills, despite the fact that it is considered to be of paramount importance for a sector that traditionally works with public funding. New technologies are becoming increasingly important for the sector, particularly in relation to innovation in methods of exhibition, online dissemination of creative content, new business models or access to larger audiences.

Finally, the high interterritorial mobility of productions and companies is another of the sector's characteristic features. For this reason, any legislation in this respect will affect the industry (both online and offline). Double taxation represents a limitation for the development of new business opportunities such as the cross-border web-streaming of drama productions.

The Bunker human resources team

Bunker is a non-profit organization whose main aim is to organise and produce cultural events of the most diverse nature. Bunker produces and presents contemporary theatre and dance performances, organizes different workshops and educational programmes, carries out various research methods in the field of culture and puts together one of the most well-known international festivals, the Mladi Levi.

The long historical trajectory of Bunker (since 1997) has generated a space of activity characterized by the promotion of artists' mobility in and outside Slovenia, artistic exchanges between disciplines and professional dialogue on best practices and innovative experiments within the framework of local development and global sustainability.

Bunker's team is also characterized by the leadership of its founder, Nevenka Koprivšek, who acquired intercultural competences through her training in Paris (École internationale de Théâtre Jacques Lecoq) and later through professional development in New York (where she performed in the internationally acclaimed play "You the City" by Fiona Templeton). After returning to Ljubljana, she has successfully capitalized these international experiences in her first managing job. For eight years, she was the artistic director of the first experimental theatre in Ljubljana, the Glej Theatre. Under her leadership, it became known as an innovative and fierce art centre. In 1997, she founded Bunker and the Mladi Levi festival, both of which she continues to direct.

Nevenka has either been involved in or co-founded many international networks and consortiums such as Junge Hunde, DBM, Balkan Express or Imagine 2020. She occasionally writes, researches, lectures and advises on topics like programming and cultural policy. In 2009, she went to Paris to become a certified practitioner and trainer of the Feldenkrais Method of Movement Awareness. In 2003, the City of Ljubljana gave Nevenka Koprivšek a major municipal award for special achievement in culture and in 2011 she was honoured by the Government of France as a Chevalier d'Ordre des Arts et des Lettres.

Bunker began its activity with limited investment and Nevenka's and her collaborator Mojca Jug's will to succeed. Thanks to their knowledge and experience in the industry, along with their eagerness, professional contacts and efforts, the association developed until it reached its current status, with eight full-time staff members. Five of these workers have a regular contract and three have the status of a "self-employed cultural worker", which amounts to a monthly contract with social security contributions being paid by the Ministry.

Various issues can be highlighted with respect to the work team, in which most of the members are female. The competences required are characterized by the importance of the creative skills (alternative discourses), communicative skills (languages) and organizational skills (cooperative strategies). The administrative and economic tasks are also managed by specialized personnel. Working arrangements are heavily influenced by the philosophy and lifestyles of the organization, with a high degree of mobility, coordination and partnership in the distribution of tasks.

All in all, we can describe Bunker as a mature organization with practically fifteen years of experience and a relatively young human resources team.

Regarding contracts, the organization is based on part-time work and a project management system.

Another one of Bunker's features concerns the management of a unique space: the Stara Mestna Elektrarna – Elektro Ljubljana. This old power station has an important historical and artistic value, therefore being considered part of Ljubljana's cultural heritage. It has been refurbished as a technical monument by Elektro Ljubljana and the Slovenian authorities for cultural purposes. The Ministry of Culture awarded Bunker this concession in a public tender in 2004 and the organization renewed this position for another two mandates, the second of which continues until today.

Bunker's programme at the Stara Elektrarna consists of contemporary theatre and dance productions, festivals, concerts and interdisciplinary events, as well as an educational and a rehearsal programme.

The annual contemporary arts festival Mladi Levi is one of the highlights of Bunker's activities. The festival started in 1998 as an international performing arts festival focusing on young emerging artists and new art genres (contemporary circus, documentary theatre, etc.). Nowadays, the focus of the festival remains the same, but the scope of the programme has broadened to include visual and public art, as well as many participatory projects, where international artists join efforts with local residents. From the very beginning, the Mladi Levi festival has also been the framework of a short residency in which the artists invited to the event, meet and exchange ideas with local practitioners and producers.

The laboratory: Non-monetary exchange systems

A Local Exchange Trading System (LETS) is a system in which goods and services can be traded without using traditional currency.

These systems are based in the use of interest-free local credit facilities in which direct exchanges are not necessary. For instance, a member can obtain credit by baby-sitting for another person and then spending it on carpentry with someone belonging to the same network. Transactions are recorded in a central platform (physical or virtual) open to all members. Since credit is offered by members of the network for their own advantage, local exchange trading systems are considered to be mutual credit systems.

The experience of the Bunker Lab was fully integrated in the so-called processes of social innovation. If we look at the six stages in which these processes can be divided (Open Book on Social Innovation, NESTA 2009), the Bunker lab can be linked to the first three stages. It should also be noted that the application already anticipated a concrete method of generating innovations through the LETS, so the second stage of the NESTA classification was predefined to a certain extent.

TABLE 25: The six stages on social innovation

1. Diagnosis. Highlighting emerging problems
2. Fostering creative methods to generate ideas and proposals
3. Designing prototypes and implementing pilot experiments enabling ideas to be tested
4. Achieving sustainability in the long term, making practice part of the routine
5. Disseminating and generalizing large-scale innovation
6. Causing systematic change

As the partnership had other partners in charge of achieving sustainability and dissemination of results (RCE and UVEG), Bunker was able to focus on producing better pilot activities.

As we shall see, developing organizational networks through activities such as the creation of platforms or the identification and integration of strategic players are pivotal in this type of process.

Bunker's pilot experience is part of a long-term process: establishing a permanent connection with the micro-level environment. The many efforts made in this direction culminated in the creation of the Tabor Cultural Quarter, whose name takes after the neighbourhood where Bunker is located. The initiative of establishing it stemmed from the fact that according to local studies (described later on in this chapter), residents, visitors and by-goers identified a lack of identity and sense of belonging in the guarter. As the concentration of cultural subjects in this part of Ljubljana is very high and the area has various interesting artistic and cultural spaces - including the Stara Elektrarna, Metelkova (a former military site reconverted into an alternative cultural centre) or the Slovene Ethnographic Museum - building the cultural guarter seemed to be the only natural choice to answer both the needs and wishes of the local population and the aspirations of cultural professionals from the same area who had expressed their will to create that kind of network. There are also a number of organizations that became part of the Cultural Quarter Tabor despite the fact that they did not fit the description of "cultural organization" because of their aspiration to work together on common issues and areas of interest. The local elementary school and the retirement home are good examples. The established Cultural Quarter Tabor is therefore a case of a "bottom-up" answer to the concrete needs of residents and local organizations, realized by Bunker through the use of inclusive problem-detection and decision-making methods. The initial Sostenuto plans envisaged the LETS as a tool that Bunker could

use to find a method through which art and culture could tackle economic and social problems. This assumption was put to the test at the beginning of the project with "Street Exchange" and "Line No. 10: The Book".

The Street Exchange was an attempt to modify the classic local exchange trading system to address the challenges and faults identified during the research phase. Bunker connected the idea of local exchange to a cultural event in order to mobilize more participants. Even though the team managed to involve a very large number of individuals in the exchange event (cca. 400), the subsequent analysis showed that a large percentage of the exchanges that took place remained unfinished. After several interviews, Bunker came out to the conclusion that the "Street Exchange" project was welcomed by the different festival audiences, hence the high participation, but failed to persuade participants to carry out the exchanges to the end or participate in other exchanges. This fact proved the constraints already pointed out by other LETS researchers, namely the fact that the successful LET systems eventually disintegrate into informal networks of friends and acquaintances that exchange services and goods, while the unsuccessful systems, the ones that are not able to mobilize a sufficient number of people, end up disappearing. These constraints are also the main reason for the shift of experimental focus detailed in the next paragraphs.

Another early experimental project conducted in the framework of the local exchange trading system laboratory was "Line No. 10: The Book" (Proga10: Knjiga). This initiative took advantage of UNESCO's designation of Ljubljana as the World Book Capital 2010 to promote a pilot experience that consisted in the public exchange of books. To this end, a free-exchange library system was set up at 23 bus stops of the public transport system in the capital. The initiative was carried out with the collaboration of the Municipality of Ljubljana, the private company Europlakat, as well as institutes, publishers, libraries and other institutions. The aim was to promote and standardize the free exchange of goods and services in a specific context (the dead time spent waiting for a bus), arousing curiosity and enhancing people's receptiveness. A broad selection of more than 20,000 books was made available to public transport users, who borrowed the books and (on a smaller scale than expected) returned them after reading. These exchange activities were complemented with specific actions for the priority audiences targeted by Bunker: namely, the youngest members of the reading public. Hence, a stand with a simpler and on-the-spot exchange was set up at the Metelkova Autonomous Zone to exchange books and promote values associated with this pastime.

Alternative exchange systems were also introduced to high-school pupils through a series of workshops. During the workshops, in which the alternative exchange systems were compared to the existing ones, the Bunker team realized that once again they had underestimated the possible contributions of the younger generation to the addressing of society's problems. Given the problems or deficiencies of the local non-monetary exchange, the Bunker team searched for other approaches from which they could address local problems in an engaged way through artistic interventions.

The team members adopted the general project premise that all the laboratories entail testing, namely how culture and art can positively influence the social sphere, which gave them the freedom to really experiment and be creative without being restrained by a specific approach.

The challenges that were to be addressed were not chosen arbitrarily. Bunker carried out two comprehensive studies about the local territory, its history, and the challenges, needs and aspirations of the local residents. The sociological study was focused on the identification of key issues in the local community and was implemented with the focus group method. This helped Bunker differentiate activities according to the specific characteristics of a certain age group. The most important findings of the study were the lack of green areas and community spaces, the lack of a sense of belonging and identity in the quarter, the alienation of residents and the general feeling of the interviewees that all the different cultural subjects should collaborate in some way. The anthropological study was conducted through interviews and data-gathering and provided material and references for the content of the activities, as it was mostly dealing with the quarter's history, stories and symbolic heritage.

Maybe one of the most important innovations that resulted from Bunker's laboratory was the adoption of a more scientific approach to research on the different problems. Apart from the activities, the method that led to them can be described as innovative for the arts sector as well as the Mediterranean area. A wide range of activities were carried out between 2009 and 2011 in order to prove the hypothesis of the project. Workshops, talks, events, happenings, and landscaping activities were all conducted with the collaboration of local and international experts and different stakeholders.

In 2009 the Bunker team decided to collaborate with the artistic collective prostoRož in the frame of the implementation of the Sostenuto project. Together, prostoRož and Bunker designed a project called "prostoRož09: Street". During the Mladi Levi festival, held in August 2009, the architects from the prostoRož collective stretched the boundaries of the public space: 10 parking spaces on Slomškova Street were transformed into a space for leisure, recreation, play and different events related to the cultural and educational field. The intervention addressed some of the problems that Bunker had detected in the study: the growing invasiveness of cars in cities, the lack of public spaces and urban furniture and the lack of quality community spaces.

Several small-scale projects were produced with the intent of resolving minor local challenges with the help of cultural content. Four interpretation routes were organized in the local quarter with help from Ira Zorko, Sašo Ostan, Maarten Roels and Zlatko Zajc (A Look By The Way, In Search of the Lost Garden, A Look From the Outside and Wild Seed), also with the aim of strengthe-

ning the identity of the local quarter. The aim of these routes was to work on the collective recognition of local problems and identify and discuss alternatives to solve them from different perspectives. It involved drawing attention to emerging conflicts (using creative and innovative methodologies such as Walkscape) and promoting alternative paradigms and values for development. National and international experts like the Slovene architect Aleksander S. Ostan or the Belgian Maarten Roels, specialized in innovative models of nonmonetary exchange and solidarity economy, have participated in some of these activities, rethinking issues such as the role of the consumer in production processes, the role of the green areas as a public space, or the ways in which the living spaces are perceived. During the summer, young people have very few non-commercial activities in which they can engage. Photography workshops were organized for children aged 10 to 16 from the neighbourhood. Under the mentorship of Slovene fashion designer Arijana Gadžijev, the participants learnt to print on fabric and made their own T-shirts. The youngsters also participated in another workshop to learn the basic skills of DJ-ing: spinning the plates, scratching and some other trades of this fairly new art genre. The mentors were Slovene DJs Borka and Bakto. The young DJs were able to present their newly gained skills at the closing party of the Mladi Levi festival, where they were in charge of the music. These are also examples of the ways in which Bunker, besides providing quality art programs for young people, promotes long-term relationships between the festival and the local residents. Paz!park (artistic collective) carried out the Paz!lonček action, in which the youngsters made pottery and distributed it for free throughout the quarter in order to improve the atmosphere and facilitate interconnections between neighbours.

"Beyond The Construction Site" and "Park Tabor" are two of the activities that deserve special attention. In order to create new spaces that encouraged collaboration between people in a broad socio-cultural context, Bunker tackled the transformation of deteriorated areas in the district, since there is a clear demand for more "green areas" and these areas were identified by the residents as one of the main problems of the neighbourhood. As these challenges proved to be too large to be addressed solely by Bunker's staff, they were tackled in collaboration with ProstoRož and Kud Obrat. The regeneration of the degraded (and according to some local residents, also dangerous) areas through cultural (and other) activities was achieved in a relatively short period, answering the need for more communal activities and non-commercial content in the quarter.

Concerning Park Tabor, by the end of the summer, Bunker already had positive feedback from the local residents and observed changes were clearly evident in a very short time frame. A total of 48 organizations and individuals produced 455 events in 131 days.

The local residents were able to take part in the transformation and beautification of their neighbourhood and discuss issues that interested them in both locations/projects, but no other project mobilized so many local residents and inspired so much volunteer participation and joint efforts as "Beyond The Construction Site". A lot of efforts were made in order to obtain an official permit for temporary land use from the Ljubljana Municipality. A degraded construction site was transformed into a collective community gardening area – the first of its kind in Slovenia. Apart from Bunker's engagement and the involvement of Kud Obrat, which consisted of coordinating the activities at the site, local residents spent countless hours of work to transform the space from 2009 on. The municipal authorities, as well relevant institutions like the Network for Space and other local decision-making structures, acknowledged the importance of that kind of problem-solving approach in urban areas. The project is still ongoing and is expected to continue after the formal end of the Sostenuto project. In addition, similar initiatives are emerging in other districts in Ljubljana and Slovenia.

Undoudtedly, these two activities clearly demonstrate the effect that culture can have in society.

The emergence of the Tabor Cultural Quarter, the projects "Beyond the Construction Site" and "Park Tabor" and small scale projects like the interpretation routes, workshops and spatial interventions serve as a basis for the fulfillment of Bunker's commitment to connect different local stakeholders (cultural and others) in order to enhance the quality of life in the immediate surroundings and beyond and provide the Tabor guarter with a cultural identity. The experimentation conducted through these activities has led to the emergence of a physical and symbolic space, providing a new (cultural) identity for the existing territory through numerous collaborations between different organizations and individuals. Participation and inclusiveness were both goals in themselves as well as the design of successful methods for choosing and implementing the envisaged solutions to local problems. All the projects were answering specific demands or observations identified in the two studies - be it the wish of some residents to spend more time with their neighbours, the absence of quality community spaces or green areas, the strengthening of solidarity amongst local residents or the strong will of the local professionals to collaborate in the creation of a structure that could habilitate the demands and initiatives of both professionals and residents.

Bunker also collaborated with other Sostenuto laboratories to help them achieve their goals. Expeditio's efforts to design cultural strategies for the municipalities of the Boka Kotorska area were supported through a three-day professional workshop addressed to Montenegrin participants. Bunker organized workshops and meetings with theoreticians and practitioners in order to present the cultural strategies designed and implemented in Slovenia and discuss different options for the Montenegrin case, analyzing the difficulties and proposing possible solutions.

Finally, the organization of the "Ready to Change Forum" turned out to be a

milestone for both the Sostenuto project and for Bunker. The purpose of this meeting was sharing knowledge and presenting the ways in which cultural actors are coping with social transformations, transformations of public policies and cultural and artistic practices. An open forum was held at the Stara Elektrarna venue (2 - 4 December 2010) with the participation of more than two hundred cultural operators mostly from Europe, but also from other continents. The forum's programme was based on three pillars:

- > The "Open University", which included lectures and debates among intellectuals, researchers, artists and professionals. The topics covered were: Cultural Rights, Economy, Ecology and Biodiversity, Wealth and Sustainability, Social Changes and New Urban Realities, New Communities.
- > "Exchange of Experiences", which included presentations of specific projects and programs dealing with New Collectives, Participation, Transformation, Art in Context and Spaces in between.
- > The third component were workshops aimed at the collective writing of the final Manifesto: "Towards Transformational Cultures: Ljubljana 1.0". Each afternoon, participants were invited to co-write the Manifesto and a draft Manifesto was presented at the end of the Forum to a panel of representatives of civil initiatives and politicians. This draft version included the following points: The ethical debate as a necessary condition for transformation and regeneration / Art as a critical process of recognition, transformation, and production of meanings and symbols / Freedom of artistic creation (expression) as a fundamental condition of emancipation and transcendence / New models of intellectual or artistic property (copyleft, the creative commons instead of the dominant model of copyright and intellectual property) as a new way of thinking about common goods.

We can also highlight the use of New Information and Communication Technologies for the documentation and dissemination of the whole process. The majority of lectures and presentations are available at:

www.bunker.si/eng/sostenuto-lectures-and-presentations

Bunker continues to work with the local community, spreading examples of good practices to other areas, defining the conditions and looking for the resources necessary to continue developing the initiatives launched in the framework of the laboratory. The local territory has benefited to a great extent from these initiatives and now there is a critical mass of local participants sufficient to extend them. On the basis of the Sostenuto experience, Bunker is also starting similar projects in Maribor, the second largest city in Slovenia and is planning further actions of territorial regeneration through culture in Ljubljana.

» Expeditio

Territorial context: Boka Kotorska, Unesco World Heritage Site

Kotor (or Cattaro) is a coastal town in the south of Montenegro, with a population of 13,310 inhabitants. This Mediterranean town is one of the biggest tourist attractions in the whole country, and is located at the bottom of a very secluded small bay on the Dalmatian Coast, seemingly part of the semi-collapsed crater of an old volcano that surrounds the town in a rim of high cliffs. The town of Kotor is also surrounded by an impressive wall that dates back to the Middle Ages.

Historically, the town and its environs belonged to the so-called Venetian region of Albania in the Republic of Venice for four centuries (1420-1797). This past has left a rich historical and architectural heritage, since it was during this era that the town became an important commercial and artistic centre, with its own schools of masonry and iconography. At that time, most of the inhabitants of Cattaro (as it was known back then) spoke Venetian and practiced Catholicism.

In recent years, the tourism industry has developed spectacularly and Boka Kotorska is currently a "sun, sand and sea" destination.

The town is well communicated by the Adriatic Motorway and the Vrmac Tunnel. Inland, Montenegro is also accessible via the detour through Budva or Sutomore through the Sozina Tunnel. It is also possible to take the road bound for Centinje along a historic route with spectacular views of Boka Kotorska. Tivat Airport is just 5 kilometers outside the town, with regular flights to the airports of Belgrade, Paris and Moscow. There is also Podgorica Airport, which is located 65 kilometers away and offers flights to major European cities.

The activity of Expeditio is intimately bound up in the regional development model. In this sense, the responsible management of Boka Kotorska's heritage assets will, amongst other things, determine how sustainable tourism fares in the long term.

The architectural sector

The peculiarity of this sector, apart from its heritage and artistic assets, is that it forms an essential part of our daily routine and shapes our environment through many services.

The sector contributed 762,714 jobs in Europe in 2007, accounting for 10.7% of the total number of jobs generated by the Cultural and Creative Industries and ranking third in importance in this industrial segment. The total revenue generated by the sector amounts to 8.19% of the total earnings for the CCIs. On a structural level, the sector is mainly composed of SMEs. In 2007, 62% of the companies in the sector had between 1 and 3 employees, while 23% had 4 to 9 employees. This means that 85% of businesses concerned with architecture have fewer than 10 employees.

As far as financial support is concerned, the sector operates mostly with private funding. Recognition through awards and public contracts is deemed to be more interesting than subsidies.

The professional activity of the sector is regulated by the general rules governing the European Union (occupational mobility, public procurement). In this sense, the European Council Resolution of January 2007 acknowledges the need to improve mutual recognition of qualifications in architecture among the various members of the European Union. In the past, the EU has promoted cooperation between the institutions devoted to cultural heritage and architecture. New Information and Communication Technologies are widely used by this sector. Design, virtualization, exchange of information, etc. increase efficiency and enhance collaborative efforts between the various disciplines intervening in these processes. Such technological uses have shortened the production phases, although the sector is still very labour-intensive.

The Expeditio human resources team

Expeditio is a politically independent NGO based in Kotor. Founded in 1997 by six architecture students from Belgrade University, the organization was formally established in Kotor two years later by two of its founding members: Aleksandra Kapetanović and Tatjana Rajić. The mission of Expeditio is promoting sustainable planning for Montenegro and the South East European (SEE) region through green architecture, urban planning, landscaping and cultural heritage, always with the participation of the general public.

Among the activities conducted by Expeditio to achieve this mission, we can highlight its training courses and its research and consulting services: informative publications, workshops, research projects, diagnosis and action plans, all of them aimed at identifying problems and raising the awareness among the general public and the institutions about the principles of sustainable planning for the region.

To carry out these activities, Expeditio encourages networking among public authorities, institutions, private companies, NGOs and the general public in a bid to foster mutual cooperation.

Another important action is the promotion of social capital, which Expeditio enhances by offering NGOs from the region of Boka Kotorska training sessions focused on practical matters related to aspects like administration, organization and communications.

Expeditio is member of Europa Nostra, the most extensive Pan-European network for the protection of architectural heritage along with the SEE Heritage Network. Since 2005, it is also part of the National Council for Sustainable Development in Montenegro.

Expeditio has four full-time workers and many temporary contributors. Its organizational structure is characterized by a clear formal definition that includes the Steering Committee (with a supervisory function), the Executive Committee, regular members, honorary members and volunteers. The General Assembly includes the Steering Committee, the Executive Committee and honorary Members. Apart from architects, the organization also has sociologists, economists, art historians, journalists and lawyers among its members.

Cultural volunteering is another important activity promoted by Expeditio since 2002. Today, the organization has more than 400 volunteers, ten of them are honorary members. Volunteer translation work is particularly significant, considering the organization's involvement in international networks such as Europa Nostra. In this regard, Expeditio has developed workshops on architectural restoration which have been attended by volunteers from Montenegro, Serbia, Bosnia-Herzegovina, Sweden, Slovakia, Australia and Canada. Until now, membership has been free, although there are plans to introduce a fee to assist with the organization's funding.

The laboratory: The cultural development of Kotor, Tivat and Herceg Novi

The Expeditio Lab pursued the design and implementation of a cultural planning process with the participation of the local population. The intervention strategy was shared by the various municipalities. The purpose of this planning was promoting and ensuring the sustainable management of the heritage and cultural assets within the context of regional development.

Theoretical and conceptual research

- > Analysis of the reference framework on a European, regional and local scale.
- > Translations of interesting materials like the "Guide for Citizen Participation in the local Cultural Policies of European Cities" (Jordi Pascual and Ruiz Sanjin Dragojević).

Territorial diagnostics

> Compilation of a complete database of the cultural stakeholders that operate in the Boka Kotorska region and diagnostic of their training needs. The database of cultural stakeholders, which was compiled during the whole project, contains contact information of around 400 actors from different cultural fields in Boka Kotorska (municipalities, cultural institutions, cultural ope-

rators, associations, artists, youth representatives, etc.).

During the focus groups organized to identify the training needs, some cultural stakeholders expressed interest in training in project proposal writing, especially for cross-border cooperation and EU-funded projects. In addition, many stakeholders pointed out the lack of cultural management skills among the people responsible for the operation of cultural institutions.

Research and preparation of the report on the Cultural Needs of Youth in Boka Kotorska

The specific features of youth culture, the needs of young people, the challenges they face to access cultural events and their willingness to participate in the creation of a cultural segment intended for youth, has not been sufficiently explored in the Boka Kotorska region. The research on "Cultural needs of Youth in Boka" seeked to contribute to a better understanding of young people's challenges and the possible roles they could play in the cultural sphere in the Boka Kotorska region. The study was conducted using a set of focus groups and individual interviews with young people and different actors dealing with youth (teachers, youth activists, etc.).

Youth culture should be a separate segment of cultural activities and events, but in the area of Boka Kotorska it has not been treated that way. The kind of culture offered by institutions is mainly intended for older people, and young people generally associate culture with elitism and elites. Both young people and those who are in touch with them think that the development of culture should be the responsibility of the state or local government. Young people do not usually attend cultural events, which can be explained by the lack of information and the poor communication between cultural institutions and young people. Most young people also believe that culture is not adequately treated in education, especially local culture. They think that the way in which culture is presented in schools is not meaningful for young people.

The research also proposes the following measures in order to develop and promote youth culture in coordination with schools: organize open discussions, establish a youth mediatheque, encourage youths to volunteer in the cultural field, increase the number of cultural events tailored to the age and interests of young people (especially outside the tourist summer season), create opportunities for young people to organize their own cultural events, etc.

Expeditio also participated in an international research project on the participation of non-institutional cultural stakeholders in national policies in Serbia, Montenegro and Macedonia.

With respect to the technical tools used for diagnostic purposes, we can highlight the elaboration of maps of Boka Kotorska's cultural resources. This tool contributed to the identification and characterization of all manner of tangible and intangible cultural assets (monuments, churches, old industrial areas, public spaces, legends, traditions, craft worker's trades and expertise, etc.).

This mapping activity was very important for strategy design and demanded great effort from Expeditio, since it entailed the identification of over 170 locations in three towns. The mapping technique included the analysis of the resource and the evaluation of issues like accessibility, potential public and social use, physical characteristics, and the availability of infrastructures and equipment for the enjoyment of the general public. The promotion of public spaces that favour quality of life is an area of particular interest for Expeditio.

Training activities for the association's cultural fabric

- > Organization of a workshop for cultural stakeholders oriented towards raising awareness of the strategic cultural planning process already in motion and the technical skills required to take part. This basic training provided a grounding that was essential to move on to the next course.
- > Organization of a second workshop in the town of Herceg Novi designed to enable the cultural stakeholders in the region to draw up action plans. This course featured the participation of Predrag Cvetičanin, a national expert on the matter of cultural planning. In this session, group discussions were set up to prepare the 2011-2015 Local Cultural Development Programmes for the towns of Kotor, Tivat and Herceg Novi. This workshop addressed the needs identified by the cultural stakeholders in the region.
- > Another interesting activity was the presentation of models developed in other countries. In this regard, the experience of the Cultural Strategy of Istria (Croatia, IPA MED region) was seen as an interesting best practice to be introduced in planning with respect to Boka Kotorska.
- > Promotion of mobility as a tool for the exchange of best practices stands out among the training activities. Thus, ten representatives from the Montenegrin cultural scene participated with Expeditio in the "International Conference of Cultural Initiatives" held in Ohrid, Macedonia.
- > Expeditio also organized a study visit to Ljubljana in collaboration with the Bunker team to help ten cultural stakeholders from Boka Kotorska get acquainted with the best practices in cultural resources management implemented in Slovenia.

Participatory design of cultural strategies for the towns of Kotor, Tivat and Herceg Novi

The working methodology included two workshops set up for ten working groups, using qualitative data gathered from fifteen interviews.

Three additional workshops were subsequently organised in which the cultural stakeholders indicated the activities that were most useful for each town. These results were reflected in the respective 2011-2015 Local Programmes for Cultural Development. Furthermore, proposals were put forward nationwide through the 2011-2016 National Programme for Cultural Development under the auspices of Montenegro's Ministry for Cultural Affairs.

Communication

Communication was extremely useful throughout all the phases (diagnostics, animation, diffusion) of the Expeditio Lab. From awareness-raising activities to the distribution of information among cultural stakeholders and the launching of different campaigns to attract more participants and communicate the results of the initiatives, the socio-institutional communication strategy was essential to achieve the desired aims.

Apart from creating a specific mailing list for publicizing the activities of the

Sostenuto project on a regular basis both in and outside the region, promotional materials were also designed in Montenegrin for dissemination purposes. Expeditio also created a website to explain the process and disseminate the results obtained in the different towns: *www.strategija.bokabay.info*/ The main priority projects recognized during the process for the three muni-

The main priority projects recognized during the process for the three municipalities were:

Municipality of Kotor

- 1> Conferring a special status to the Municipality of Kotor within the culture of Montenegro.
- 2> Strengthening cultural infrastructures and the capabilities of cultural policy stakeholders in the municipality.
- 3> Researching, protecting, evaluating and presenting the tangible and intangible cultural heritage of the Kotor area and its use in a sustainable social and economic development.
- 4> Supporting contemporary art production and attracting creative professionals to Kotor.
- 5> Developing cooperation between different fields (culture, tourism, education, business) and sectors (public, private, NGO and media).
- 6> Developing international, national (Montenegro) and regional (Boka Kotorska) cultural cooperation.
- 7> Improving accommodation in the Kotor area to make it appropriate for visitors interested in cultural tourism.

Municipality of Tivat

- 1> Improving the functioning of the local governments in the field of culture.
- 2> Transforming the system of public cultural institutions.
- 3> Establishing and improving international events organized by the town.
- 4> Supporting the work of non-institutional cultural stakeholders.
- 5> Activating cultural heritage and natural resources for the town's development.
- 6> Attracting creative industries to the town (design, fashion, advertising, software, computer games, etc.).
- 7> Developing regional cooperation in Boka Kotorska, cooperation in Montenegro and international cultural cooperation.

Municipality of Herceg Novi

- 1> Place branding restoring the image of Herceg Novi as an artists town.
- 2> Improving the management of the local cultural system.
- 3> Improving the functioning of public cultural institutions (infrastructure, equipment, programmes, developing the capacity of cultural managers, etc.).
- 4> Supporting contemporary cultural production.
- 5> Developing regional cooperation in Boka Kotorska, in Montenegro and international cultural cooperation.

» CITEMA, la Città Europea dei Mestieri d'Arte

Territorial context: The Chiana Valley

The area of operation of the Città Europea dei Mestieri d'Arte (CITEMA) is located in the Chiana Valley, composed of twelve municipalities: Cetona, Sarteano, Città della Pieve, Montepulciano, Chianciano, San Casciano, Torrita di Siena, Chiusi, Trequanda, Pasciano, Pienza and Sinalunga. Ten of these districts belong to the region of Tuscany and two to Umbria.

The municipalities inside the territory are typical of rural areas and, in keeping with the general norm in Tuscany and Umbria, relatively small: the largest ones have a population of 12,000 inhabitants, compared to the 700 of the smallest districts. As it happens in most rural towns, the depopulation and aging processes are the prevailing demographic trends in the Chiana Valley, although it is somewhat mitigated by the influx of new residents attracted by the values and image of the region, with its combination of quality and tradition.

Infrastructures in the territory are below average and their development constitutes one of the priorities of regional action, specially in Tuscany. Historically, the territory has been singularly interesting in terms of attractiveness and quality, although the dynamics of recession are threatening these traditional values. The project's administrative geography is a matter of particular interest. Italy is a heavily decentralised state, which means that coordinating activities between territories is very complex. In the case of the Sostenuto project, the high degree of specificity on the part of the local authorities (different priorities, individual strategies, lack of leadership for coordinated actions, etc.) is compounded by the fact that the Association of the Chiana Valley, the key authority for the territory involved in this project, is not fully operational, since it is currently under construction. The functions of this organisation include promoting exchange, coordination and communication among the municipalities of the Chiana Valley, for the purpose of broadening the offer of public amenities through joint projects, reducing costs and encouraging the use of economies of scale.

The productive structure is characterised by the dominance of agriculture and the agro-industrial sector. The production of wine is very important in the region, particularly in some municipalities such as Montepulciano. The services sector has an important role to play in job creation, especially those with a social, health or administrative slant. Agritourism is a very popular activity in the area and represents a source of additional revenue that is of great importance for local households. There are also structural problems, such as its marked seasonality, which hinders the stability of the sector as a source of revenue. The business dimension is relatively smaller here than for the rest of the country.

Citema's activity hinges on providing vocational training in a sector closely bound up in the local community, its interaction with other disciplines (design, new technologies, and heritage), international outreach and link-up through processes of rural development (tourism).

Sectoral context: Challenges and opportunities for arts and crafts

Arts and crafts represent an economic activity that stands out for its contribution to the preservation of cultural and ethnological wealth. Its relevance as an integral part of the collective identity is an indisputable fact. Thus, arts and crafts have an importance that goes far beyond their mere contribution to the economy as a productive sector primarily for three reasons:

- 1> Arts and crafts embody the traditions that make up the essence of the cultural identity of the territory where they are created. Hence, they play a part in preserving the ethnological and cultural heritage.
- 2> In many cases, particularly in small rural towns, craftwork is virtually the only manufacturing activity, thanks to its being easily reconciled with farming and cattle-raising.
- 3> It fosters other activities that generate wealth and employment, such as cultural activities and tourism.

Despite the current economic climate, characterised by technological change and increasing globalisation of the markets, and the fact that consideration of the craft sector as an activity capable of creating jobs has declined in importance, it is still a significant source of employment.

TABLE 26: The craft sector in Europe

Source: "The craft sector and SMEs in Europe". European Economic and Social Committee

COUNTRY	TRAINING FACILITIES
Germany	9,6
Spain	0,3
France	5,1
Greece	3,0
Italy	12,0
Luxembourg	15,0

If we consider the strengths and weaknesses the sector has to overcome in Europe, the following points of interest can be indicated for our analysis of the CITEMA Cluster:

Weaknesses

- Diversity of activities forming part of the craft sector and a lack of consensus about how to define it by its various stakeholders. This affects the availability of reliable statistics, comparative analysis between countries, the visibility of the sector and social and institutional awareness of its relevance, etc.
- Micro dimension of the businesses in the sector (between 1 and 3 employees). This profile affects the inability to generate economies of scale and hence

productivity gains are difficult.

- > It is seen as an extra activity on top of the other productive activities, and thus there is an obvious lack of dedication in a fulltime capacity.
- > The dispersion and low level of organisation in the sector hinders the forming of associations, affecting strategic planning capabilities, causing flaws in internal coordination, with the inexistence of pressure groups that can defend common interests, etc.
- > We can also see an absence of professional qualification standards, with prescribed vocational training being very limited in the formal educational system.

Threats

- > Risk of fragmentation due to the absence of a unifying core (the association) and a strategic focus for action (the common work plan).
- > Aging of the sector and lack of transfer between generations. Tendency towards the disappearance of certain traditional trades.
- > Increasing competence: of industrial products, appearance of pseudo-craft fairs, imports from countries with low production costs, etc.
- > Uncertainty about the concession of aid and institutional support due to the lack of bargaining power.
- > Presence of the underground economy and encroachment by other professions.
- > Risk of not taking advantage of future opportunities, e.g. interaction with the tourism sector, due to inefficient business management, lack of resources, skills, etc.

Strengths

- Strong link with the territories where the activity is conducted. This attachment to the local community strengthens resilience in the face of unfavourable dynamics.
- > Specialized know-how of the craftworkers and added value in the form of craftwork (creative, manual, original, non-industrial, etc.).
- > In general terms, this concerns a wide range of high-quality products. They have something to offer as a product that gives them a distinguishing factor.
- > It is a markedly vocational profession.
- > Sensitive, growing improvement of collaboration between craftworkers, particularly in the exchange of information.
- > New technologies have contributed to the growth of the sector, for example, using electronic catalogues and internet sales.

Opportunities

- > New consumer trends and renewed appreciation for crafts.
- > Potential creation of jobs through the recovery of traditional trades.
- > Added value to be gained from crafts through the synergies generated with local development processes: promotion of tourism, new appreciation of heritage, recovery of local identity, etc.
- > Ease with which handicrafts can interact with design and generate added value.
- > Potential of New Information and Communication Technologies to innovate in marketing techniques.

With respect to the characteristics of the craft sector in Chiana Valley, the territorial diagnostics developed by CITEMA shed light on several interesting issues. Firstly, craft activities are seen in all the towns in the area, with various specialities being worked on in ceramics, jewellery, iron, paper, etc. The average age of the craftworkers is 35 with roughly ten years' professional experience. Some new residents are attracted by the development of this activity even though very few actually work in this sector. The learning processes are local and of a traditional nature, with business entrepreneurship being strongly supported by family structures that fund the initial stages of the business. In most cases, the businesses are family run. Most craftworkers describe their economic and professional circumstances as being precarious, indicating a horizon of revenues and social visibility of great uncertainty.

Craftworkers take full responsibility for all the activities required to run the business (selection of materials, product design, transport and administrative tasks). These multitasking duties mean a high cost in opportunities for creative work, and also have low productivity due to the lack of technical expertise in business management. In this regard, digitisation of these management processes is traditionally very low and the sector has had various problems of computer literacy, even though in recent years new generations have made greater use of new technologies.

With respect to the local market, the commercial prospects also show significant distortions, making it difficult for the global market to adapt. Competition from cheaper products of inferior quality, from countries with lower production costs, affects the strategies used to position the product on the local market. In this sense, there is a negative impact on the quality to price ratio of local production oriented towards sales to tourists from Germany and the USA.

The CITEMA human resources team

As explained below, CITEMA is an organisation in which voluntary work, networking, charismatic leadership, use of new technologies, lifestyles and activities with social goals are examples of its original work dynamics.

CITEMA is a non-profit cultural and heritage association that was established in 2006. Amongst others, it has the following aims:

- > To form a European pole for professional encounters and the exchange of knowledge among craftworkers, designers, professional networks and institutional stakeholders.
- > To provide a link between future and tradition, integrating the dynamics of new generations of craftworkers with the experience of their seniors.
- > To foster cultural and economic development in the craft sector, by encouraging preservation of its values and appreciation of its activities within the overall context of local development.
- > To promote innovation processes in the sector with the aim of adapting to the new worldwide technological, commercial and cultural realities, and also to the socio-economic needs of the Chiana Valley.

With these objectives in mind, the activities organised by CITEMA are structured around four basic lines of action:

- > Residency center: CITEMA is a meeting point, where all professionals from the craft world are invited to exchange expertise and to engage in collaboration concerning creation and experimentation.
- > Resource centre: A place of resources for all the interlocutors involved in the economic, tourist and cultural development of artistic handicraft.
- > A space for exhibition and dissemination: open to local, regional, national and international creations and productions.
- > A space for reflection and discussion: CITEMA is a platform for exchange, research and sharing experiences (organising symposiums and manifestations, provoking improbable meetings on a European and international level between: researchers, etc.).

The case of CITEMA is also characterized by the fact that it concerns a very personal, charismatic project, in which careers and lifestyles are closely intertwined. Maïté Mazel, its director, shows evidence of a unique and varied life and professional career, combining top-flight academic training with intense international experience. Following her studies in the performing arts with the Moscow Theatre company in Paris, she did two years of voluntary cultural work in Africa (Namibia and Dakar), where she designed activities and developed cultural cooperation networks for the French Ministry of Foreign Affairs. When she returned to Paris, she continued to specialise academically with a Master's degree in cultural management and cooperation (Paris III Sorbonne University). The final project for her Master's would form the embryo for the CITEMA project in Tuscany, a place she knew well from holidays spent there during her childhood.

Born in Canada, Mazel also has an undeniable capacity for networking, thanks to her ability to pass on her enthusiasm and involve everyone around her in the CITEMA project. Thus, there is a large group of professionals working voluntarily on a part-time basis with the association in a collaborative capacity. Attention should be drawn to the first-rate professional qualifications of such people, notably experts in local development, managers specialising in human resources in multinational companies or personnel from the diplomatic corps.

Another item to be noted concerning CITEMA's structure is how some of these collaborators are coordinated from a distance thanks to the use of new technologies, with Mazel acting as the link throughout the territory. Paris, Rome, Tolosa or Liguria are some of the places where members of CITEMA work on a daily basis, coordinating their tasks for the partnership by email, skype, etc. In addition, they also hold physical meetings every four months or so for coordination purposes, The reduced air fares generated by low-cost airlines have made pursuance of this dynamic feasible.

Furthermore, CITEMA works with local collaborators such as the team of graphic designers, volunteers for staging exhibitions, or members of the organic structure itself (President, Vice-President, Treasurer, etc). Analysing the experience of the cluster, CITEMA's international vocation and the high mobility of its members are transformed into a related asset in the form of participation in formal and informal networks that are of particular value to the performance objectives of the association.

A final point to note concerns the management of emblematic spaces. As we saw in the case of AMI and Bunker, CITEMA is also characterised by its use of unique infrastructure. In this case, it is Borgo Dolciano, a farmstead dating back to the sixteenth century, located in Chiusi (Tuscany) that has belonged to the Bologna family since the late nineteenth century. Appreciation of its historic assets is in close harmony with the founding objectives of the association, given the close relationship that exists between crafts and heritage. This space is the perfect embodiment of the philosophy espoused by CITEMA and its restoration has respected its cultural and architectural values, having formed part of the official historic heritage of the region for the past three years. Altogether it covers an area of 850m² divided into four apartments, meeting room, administrative offices, reception and exhibition hall. In a symbiotic way, use of this space by CITEMA favours its outreach as a cultural and tourist/ residential centre on an international level.

Laboratory: The CITEMA crafts cluster

The concept of "cluster" was first described in the 1990s by US economist Michael Porter as a tool for analyzing the factor that enable a specific economic activity to generate comparative advantages through processes of territorial concentration. In this sense, it is worth noting the interest of issues such as the incorporation of new links in the productive process, identifying the factors that determine the use of new technologies in their processes, and promoting the determining factors for generating agglomeration economies.

In this context, the cluster is defined as a concentration of interconnected businesses and institutions in a specific area for competitive purposes, with a large variety of clusters being observed in the world in sectors such as the car industry, information technologies, tourism, business services, energy, agricultural products, transport, manufactured goods, logistics, etc.

Based on this definition, we can characterise the handicraft cluster developed by CITEMA in the Chiana Valley as a networked knowledge organisation. In this way, CITEMA generated a space to mediate between craftworkers and designers, targeting local audiences (neighbours, children, public authorities...), encompassing various territorial levels and dealing with different issues related to culture and economy.

The following table summarises these issues and enables us to structure the territorial capabilities that will determine the shape of the CITEMA cluster in keeping with the SWOT analysis defining the craft sector:

TABLE 27: Citema characteristics

ORGANIZATIONAL ELEMENTS OF INTEREST	PROMOTION OF KNOWLEDGE
International outreach of the Chiana Valley handicrafts	Research and educational activities Formation of work teams
Staging of events, trade fairs, etc.	Development of communication strategies for the cluster in collaboration with the local media
Participation in European sectoral networks. Coordination between various municipalities and territorial levels (regional, national, etc.)	Preparation of publications such as "La Lingua delle Mani"
Promotion of artistic mobility through artist residency services	Establishment of a resource centre
Multidisciplinary perspective for mediating between handicraft, design, and historic and artistic heritage	Social and institutional sensitization activities
Holistic perspectives for mediating between sectoral activities in the complex context of local development Synergies with other sectors such as the tourism industry	Promotion of innovation in the sector for the enhancement of arts and crafts

The CITEMA cluster has the following aims:

- > To increase territorial dynamics.
- > To develop cooperation among craftworkers and the different actors in the area on topics, events, promotion and dissemination.
- > To work on skills and creativity.
- > To provide more visibility and promote market development on local, national, and European networks.
- > To promote the quality products and services generated in the territory.

We shall now look at the different activities that have given shape to the work plan carried out by the CITEMA cluster:

International outreach of arts and crafts in the Chiana Valley

- > Participation in events such as the International Arts and Crafts Exhibition in Florence, organising a stand for the diffusion of local handicraft selected in collaboration with Artex. Signature of the "Charter of artistic handicraft: towards a European dimension of the sector", promoted by ARTEX within the framework of this event.
- > Presentation of the Sostenuto project to the French town of Beauset in the

context of hosting the Twinning Town ceremony with Cetona.

- > Participation of CITEMA and selection of guest craftworker to the Ready To Change Forum held by Bunker in Ljubljana.
- > Participation of CITEMA and selection of guest craftworker at the "Potlatch" professional meetings organised by AMI three years in a row, along with the selection and invitation of a local craftworker to go on a business trip organised by AMI to Brussels.

Organization of events and trade fairs

Apart from participating in trade fairs such as Salon Terra Futura (Florence) or ARTOUR in various places (Cortona, Montepulciano, etc.), CITEMA organized exhibitions like *La Lingue delle Mani*, which included crafts produced by members of the CITEMA cluster and the craftpeople associated in the ARTEX network.

Two events particularly stand out: *Volta la Carta* and the Seminar on "Artistic handicraft as a factor of social and economic innovation".

Volta La Carta (Cetona, 18-19 June 2011)

This event, set up together with some of the Sostenuto partners and many local actors proposed a playful and convivial approach to the social changes that CITEMA supports, promotes and organises. CITEMA proposed this event together with the SCEC (local currency), GAS (Group of Sustainable Purchase) of the Chiana Valley, the fair shop Bottega del Monde Equo Soledale, the CCR (historical town centre of Cetona) and the "Cantinonearte" theatre in Montepulciano. CITEMA explained the event in these terms: "In these times of deep change, CITEMA has committed to making our projects converge, by gathering and transmitting our know-how and competence and pooling our thoughts on a common future for our regions. Produce and consume differently; create, sell and diffuse differently. These are the proposals that we would like to share in a pleasant atmosphere to rediscover our area, to meet and rethink our exchanges, to place value on our heritage and think of our impact on the environment".

CITEMA expanded its cluster and networking to include new local and national members (organic farming of the GAS – Group of Sustainable Purchase, SCEC for alternative currency – associations offering alternative models, like the CCN (Natural Commercial Centre – association of the shops in the historic centre in Cetona), centre for elderly people, a music band working on the topic of climate change, or a local kindergarten proposing alternative education. The plurality of partners participating in the event reflected the will of CITEMA to involve a large number of stakeholders in the region and develop the area through a participatory and alternative vision.

This event, cutting through the fields of economy, culture, social, education, associations and art invited the citizens, consumers and pupils, stakeholders in

the local area, to think, discover, meet and participate. The event was dedicated to discovery (round tables, alternative perspectives for the region, educational activities for children, etc.). The objective was to experiment, exchange ideas at the market-meeting, discover a route around the region and practise crafts.

Sostenuto project final event "Artistic handicraft as a factor of social and economic innovation", 6-7 October 2011 (Florence)

Two workshops ("Which new spaces to share for artistic handicraft?" and "Learning and Training: a new approach to discover") were organised in order to share views on "The future of artistic handicraft". These two research workshops focused on successful activities and projects in order to validate models and tools that will support the objectives, bring to the fore common working perspectives among partners and institutions in line with CITEMA's orientations, and reinforce and develop a national and international partnership.

Participation in European sectoral networks. Coordination between various municipalities and territorial levels (regional, national, etc.)

The nature of the partners forming part of these networks enables us to consider the criteria that serve to guide the CITEMA Lab. The lab features a multilevel and multidisciplinary approach, because it integrates the territorial perspective, combines global and local elements and promotes the linkage between handicrafts and local development.

- > ACCR (Association des Centres Culturels de Rencontre). Since its creation, CITEMA has been a member of this European network, which aims to foster cultural exchange between heritage-rich territories. It is formed by 43 cultural centres spread over 12 countries, with its main offices in Paris.
- > CNA (Confederazione Nazionale del Artigianato) and Confartigianato, both syndicates of craftworkers. They were involved in the project at the local and regional level (communes). Actions started: meeting organised with CNA, who was ready to help and provide assistance for diagnosis, and help in terms of events.
- > Camera di Comercio di Siena (Siena Chamber of Commerce).
- > Artex (Florence), a research and economic development structure for craftworkers that organizes events, exhibitions and fairs.
- > Sfinge and Cefoart, training centres, specially oriented for professionals and adults. Cefoart is the training centre of Confartigianato.
- > Centro per l'impiego (Employment centre): it provides a range of trainings and services, and is a very long-standing partner of CITEMA.
- > Other types of partnership: organizations that are not directly involved in the core project but provide help and participate occasionally in some of the activities - ARTES (Centro di Ricerca e di Consultazione per lo Sviluppo, Bologna), Centro Arti Applicate (Biella), Cantinonearte Theater, etc.
- > Sostenuto network: the rest of the Sostenuto partners shared their expe-

rience with CITEMA, provided the organization with resources to manage the project and participated in its events. Zunino e Partner Progetti (ZeP) was especially involved in the CITEMA Lab.

- > Municipalities: the 12 communes that make up the territory where the Sostenuto activities were carried out after CITEMA signed an agreement with their representatives.
- > Target group: more than two dozen craft workers specialized in ceramics, jewellery, cooper, leather, iron and wood.

Coordination and communication activities have played an important part in the strategy that has been developed by CITEMA in this territory. Tools such as the presentations of the cluster by taking advantage of local events ("Cetona in Fiore") in collaboration with associations tied to local development such as Pro-Loco; participation in local TV programmes presenting the project; dissemination of information through the website or Facebook and the design of an attractive graphic image (leaflets, posters, etc.) have facilitated communication and networking with other organisations, users and the general public.

Finally, we should draw attention to CITEMA's close coordination with another Sostenuto partner: Zunino e Partner Progetti (ZeP). This engineering and architectural practice based in Albenga (Italy) was involved in the design and analysis of the handicraft cluster from the perspective of territorial governance. The topics researched by ZeP were:

- > Feasibility study of the activities to be developed in the CITEMA perimeter.
- > Study on local and global strategic positioning of artistic handicraft as an economic, social and cultural lever.
- > Issues linked to the sector's future and related themes for reflection.

ZeP assisted CITEMA in its approach to expand the cluster to include stakeholders in the social economy as part of the suitability analysis of the dynamics of governance induced by the cluster and the Sostenuto activities in the territory.

This expansion could not be done without a thorough analysis because it was necessary to create a greater crossover between all the stakeholders in the territory and identify the goals and interests of the different categories of players involved.

For example, the target market of the craftworkers / artists at the heart of the CITEMA cluster is located outside the territory and includes temporary visitors and tourists who were there not so long ago. The main customers are no longer sufficient to ensure the economic viability of local crafts. A key objective of the cluster was to create new opportunities for local production through the establishment of specialized circuits that incorporate interior designers and decorators.

ZeP has also participated in the main activities developed by CITEMA:

- > Elaboration of document on artistic handicraft ("La Lingua delle Mani") to be distributed to potential partners; discussions with these partners about their role in future events (patronage, sponsoring, etc.).
- > Participation in the development of the event "Volta la Carta" organised by CITEMA in Cetona (Tuscany-Italy) from 8 to 19 June 2011.
- > Participation in the organization of the CITEMA final event "Thinking culture as a factor for social and economic innovation", held at l'Institut Français in Florence (Tuscany) in early October 2011.

The ZeP Lab was focused on a "Methodology for the Implementation of Territorial Governance". In order to illustrate this methodology, two experiences were presented. The first one was dedicated to the Ligurian "Golfo Dianese" space and the second one analyzed the induced effects of the CITEMA cluster, a concrete example of a work-in-progress type of governance.

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