Culture as a factor for economic and social innovation

EXECUTIVE SUMMARY

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CHAPTER 1. INTRODUCTION

1. CULTURE AS A FACTOR OF ECONOMIC AND SOCIAL INNOVATION. A VERY CURRENT THEME

The evolution of events has required a flexible approach to our research. Between now and when the project began, in spring 2009, we have seen a veritable flurry of new works published within Europe (technical reports, publications, scientific articles…). In a bid to bring added value to the field and to harness the creative and innovative spirit of the subject in question, we have adapted and modified the initial plan of work, taking the emphasis from a conceptual approach and the microanalysis of cultural organisations to its combination and integration with the macroeconomic perspective on the relationships existing between wealth and cultural employment.

2. THE CENTRALITY OF "CULTURAL AND CREATIVE ACTIVITIES"

The ambiguity surrounding the definition of the cultural and creative sector, and the increasing centrality of said sector for the development and competitiveness of the various territories are two ideas that we have drawn attention to. Moving beyond the conceptual and ideological debate, for our research we have adopted the term "cultural and creative activities" and use it indiscriminately to refer to both market and non-market activities. The object of our study, therefore, includes all those activities in which, motivated by more than simply filling their leisure time, human beings, as a consequence of their expressive, communicative and emotional needs, interact, whether creatively or passively, with the flows of symbolic information, pursuing a particular aesthetic, expressive, cognitive, emotional or spiritual experience and impact for themselves or others. These interactions can materialise in the form of one-off events or social spaces, and can be channelled through formal, regulated exchange systems (companies, organisations and institutes) or informal, unstructured systems as a natural consequence of social interaction.

CLASSIFICATIONS AND DIMENSIONS. THE CONVENTIONAL EXPLANATION

The increasing relevance of culture to the European economy can be explained in conventional terms by a paradigm shift characterised by the rise of the service economy, the digital revolution, globalisation and the restructuring of the value chain of many productive sectors. Proof of this is the increased presence of the cultural and creative sectors within the economic arena and the value placed on its functions within the social environment.

Meanwhile, the growing economic dimension of the cultural sector has led to increased efforts to define its scope, though a consensus has yet to be reached. Different organisations include different activities. The definition provided by UNCTAD strikes us as the most comprehensive, since it combines cultural and technological factors.

What cannot be denied is that the institutional vision of the concept of "culture" has become considerably broader, as presented in the latest UNESCO Framework for Cultural Statistics 2009, which reflects the paradigm shift in the perceptions and functionality of culture.

THE LEGITIMATION OF CULTURAL POLICIES

Traditionally, cultural policies have suffered from the what has been dubbed "buonismo", or do-goodery, which has had negative repercussions on their effectiveness, efficiency and fairness. If we remember that, as with all other public policy, the ultimate goal of cultural policy is citizenship, in a new context in which complexity and flexibility define the relationships between culture and regional development, there emerges a need to improve governance of the sector, to optimise the definition of objectives and the development of planning and evaluation instruments. The justification for cultural policies is based on the capacity of creativity, art and culture to affect us cognitively, aesthetically or spiritually and to transform our social, civil, economic or political dimension. This is development according to Amartya Sen. For him, these are the steps involved in the process by which we improve individual and social control of our symbolic universe –culture–, increasing our capacities to choose between alternative actions.

But it is also evident that culture is a broad spectrum vaccination and, consequently, enables the realisation of other development dimensions. Our research reveals that there exists a bidirectional causal relationship between culture and wealth. We also know that the centrality of creativity and innovation is changing the role of economic organisations and human resource management models, and we know that a liquid labour market is emerging in response to this state of affairs, one which combines liberating trends for the human workforce and enables enriching personal development experiences, as well as realities tending towards extreme precarious work situations and self-exploitation. Beyond this, we now know for a fact that the concentration of cultural and creative activities in a given territory changed the logic and inner workings of its economic dynamics in a much deeper, more complex way than we would have imagined until now, as a result of the tendency towards innovation.

The "field of culture" also exports a set of values to the other socioeconomic fields that entail an ethical repositioning, and which are more compatible with the concept of sustainable development.

However, none of these dynamics is independent of our individual and collective actions and decisions. Knowledge, together with greater levels of governance, should allow us to increase our social control over said processes, in a bid to optimise the thrust of culture towards models of development which enhance our levels of freedom, whether by satisfying our cultural rights, securing economic growth or achieving other social objectives, and to limit or control the risks inherent in the logic of markets, interest groups, inertias or mere incompetence or ignorance.

CHAPTER 2. INNOVATION, CREATIVITY AND CULTURE: DEEPENING AND WIDENING YOUR SCHEME OF RELATIONSHIPS

In the past 5 or 6 years countless numbers of academic publications, reports and statistics on European and international organizations have appeared discussing the role of innovation, culture or creativity in developmental processes.

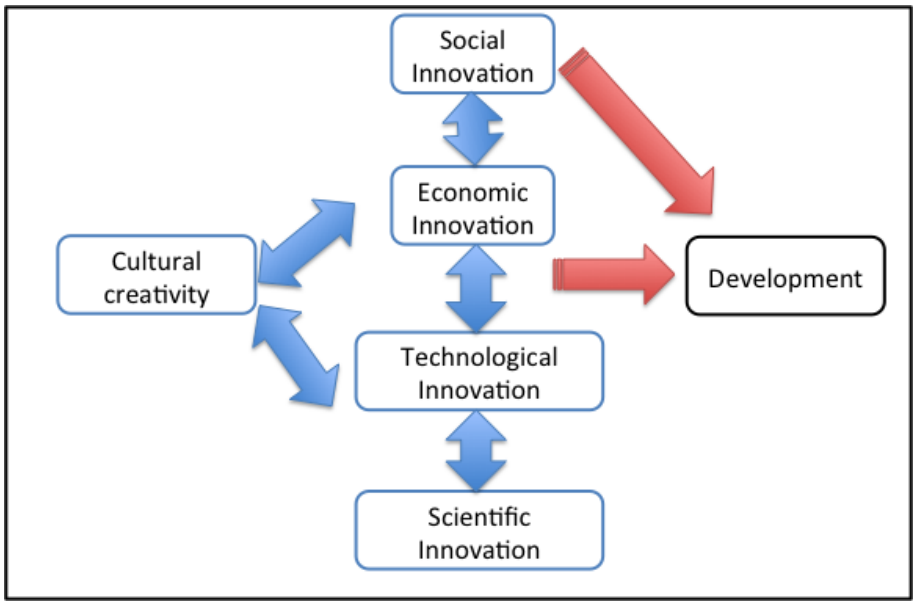
There is a growing recognition of how the combination of personal, cultural and creative skills, technical abilities and social relations can play a key role in stimulating research and development, and help optimize the management of human resources within the company and inspire society as a whole.

1. SOME NOTES ON CREATIVITY AND DEVELOPMENT.

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 atmosphere that can enable creativity to blossom. For its part, creativity is at the heart of innovation – understood as being the successful exploitation of new ideas, expressions and forms – and as a process that develops new products, new services, and new ways to do business and new ways to respond to the needs of society.

Thus, moving away from the restrictive concept of development in the economic sense leads us to culture, which finally reveals its ability to harness innovation and set in motion processes of economic growth, and hence development. But in addition, cultural creativity also has an influence on other spheres of cognitive production, affecting scientific, technological, economic and social innovation as well.

Figure 1. Cultural creativity and development. Source : Adapted from KEA 2009



All these approaches coincide in the difficulty of defining creativity without specifying, (even in the sciences where such studies are the norm) whether it is an attribute or a process. *In economic terms, creativity is a renewable fuel, which is constantly enhanced and replenished with use. Furthermore, rather than saturating the market, with creative stakeholders "competence" attracts and stimulates the participation of new producers.* (Fonseca, A. 2008).

The novel idea of re-adapting this concept is that cultural creativity also affects innovation processes, which when seen as simple mechanisms for the accumulation of human capital, social capital and relational capital, (Sacco, P.L, & Segre, G., 2009) are in themselves development processes.

2. THE ECONOMIC CONCEPT OF INNOVATION:

The concept of innovation draws considerably on the work of Josep A. Schumpeter (1883-1950), who defined his guiding principles and characterized innovation as being a driving force for economic development in the capitalist system, based on a process that, in his words, evolved from feedback gleaned from «creative destruction». Schumpeter worked out his theory by setting the neo-classical idea of natural market balance against its stationary state. For 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 balance and trigger phases of growth and development. We can talk about a historic dynamic expanding the number of stakeholders involved in creating innovation, moving from a hierarchical monopoly focused on specialized scientific laboratories to a scenario of increasing openness and interaction with other players (other departments, workers, consumers, etc.).

3. SYSTEMATISING THE PRODUCTION OF INNOVATION: FROM KNOWLEDGE AS A RESOURCE TO CORPORATE MANAGEMENT.

In keeping with the analyses conducted by Yproductions (2008, 2009), the emerging democratization of knowledge and the increasing relevance of integrating its various forms (scientific, implicit, symbolic, etc.) for the economy follow in their wake, as we have seen in the Toyota production model. The characteristics of the knowledge-based society and the influence of New Technologies of Information and Communication (NTIC) only serve to accelerate this trend, thanks to the growing importance of the productive activities associated with the creative economy and the recognition of talent and intangible values (significant symbols, experiences, emotions, etc.).

The implications of this dynamic geared towards expansion for organizing businesses is far-reaching. The analysis of the American model of corporate management showed a radical change moving from traditional pyramidal hierarchies to new models based on networking in horizontal open structures, which favours worker autonomy and involvement, and the promotion of talent is a determining factor if we want the company to be competitive.

Furthermore, if we consider the parallel deepening process set in train, we can show how the classic figure of the Schumpeterian entrepreneur is reconfigured and adapts to the new context of innovation production. As pointed out, the MARK 1 and MARK II theoretical models are not replaceable but complementary. Thus, the enterprising individual, leadership, experimentation and achievement of results take on a new role in a context of open collective interaction.

4. EXPANDING THE SPHERE OF INNOVATION PRODUCTION: INCORPORATING THE SOCIAL DIMENSION

Expanding the sphere of innovation production means going beyond the idea that innovation concerns what is on offer and the ability to focus on the aspect that what eventually gives new things their value (whether they involve product or process or any other type of novelty), a certain degree of social consensus is arrived at, which accepts the fact that it is not only novel but that it also bears some kind of economic or social value. Furthermore, “social innovation” not only requires a particular creative process to be recognized as the result of a social construction process, but it also needs to have a use or value that can be appropriated by a social group.

To describe this reality, Jaron Rowan uses the expression «social creativity» with the idea of "Innovation in culture. A critical approach to the genealogy and uses of the concept” (YProductions 2009). Social creativity is considered to be a new **resource.**

The work of YProductions classifies the various approaches to social creativity which are summarized in Table 1

Table 1. Connections between the different types of innovation and the cultural sector. Source: prepared by the authors based on Yproductions (2009)

Types of innovation	Description and adaptation to the cultural sector
Creativity basins, (Corsani, Lazzarato, Negri, 1996)	Creativity basins contain a number of multiple subjects, ideas, knowledge, means of communication, sociability and values. 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 refers to the key role played by creative staff in bringing about innovation and three specific attributes of professionals in the industry that are particularly attractive: Technology, talent and tolerance.
Mass creativity and hidden innovation (NESTA, 2007) Miles, Green, 2008. Leadbeater, 2006)	Leading to processes generating research and the production of knowledge within society. The influence of cultural organizations affects three basic areas: promotion of social dialogue (channelled through a critical transformative will typifying the mission of cultural organizations), widespread use of new technologies (promoting them using creative content) and the need to rethink the educational model (inclusion of artistic ability and creative skills). All those types of innovation happening within society, but which, due to their reduced size and multiplicity, cannot be captured by traditional indicators of innovation. Open and shared production models, the Hacker ethic or the Pro-Am figure are three specific references for cultural and creative organizations associated with hidden innovation.
Consumer-driven innovation (Georghiou, 2007)	The interaction between production and consumption is an obvious risk facing cultural organizations from various standpoints: a role as avant-garde users with alternative lifestyles; the importance of culture being consumed for the benefit of production; the investigative role of cultural organizations and the experimental disposition that characterizes them.
Social innovation. (Mulgan, Ali, Halkett, Sanders, 2007)	«social innovation such as the development and implementation of new ideas (products, services and models) which aim to cover society's shortfalls» As opposed to the other productive sectors, cultural organizations are characterized by a corporate mission and vision that is relatively more skewed towards social goals and critical dialogue with reality, along with greater involvement in the immediate vicinity (local development). These organizations' scales of values are integrated in the dynamics of social change feeding such innovations.
Institutional innovation (Abeledo 2010)	The role of culture in promoting institutional innovation is reflected in general programmes such as the international movement of Agenda 21 for Culture, and also in specific activities aimed at modernizing public services. Culture is presented as a resource for local development and its management and planning procedures.

Basically, culture has considerable potential for its exploratory nature in a context characterized by a new interpretation of the concept of innovation, in which it is seen as the **creation of opportunities** (Rodríguez, 2007). From this perspective, a concept tied to the science of forecasting is of particular importance: futuribles. This concept refers to situations of likely or possible futures, highlighting their application both to innovation in products and services and also to alternative values and models of development. This reinterpretation of innovation means that economic science, and the determination of emerging trends and the future evolution of the markets, are cast in a new light. In this sense, legislation on intellectual property will have a crucial role to play.

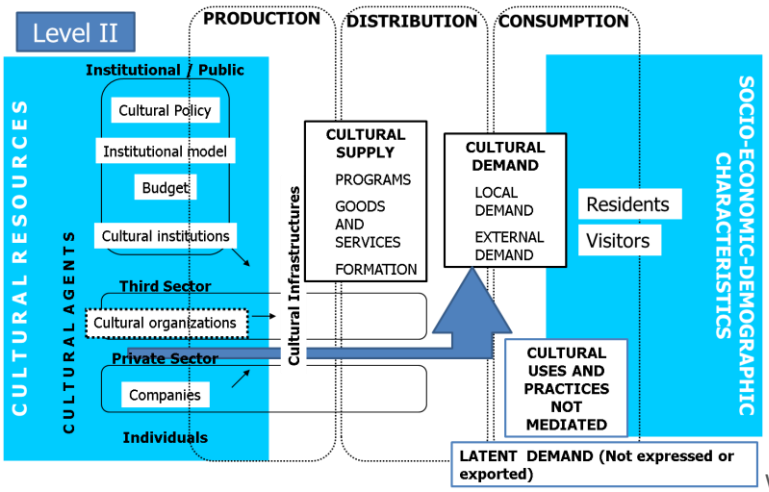
CHAPTER 3.MICRO-ECONOMIC APPROACH: MAIN CHARACTERISTICS OF THE PRODUCTION FUNCTION IN A CULTURAL ORGANIZATION.

1. INTRODUCTION

The first chapter introduced the scope of opportunities that open up for the cultural sector by widening and deepening the dynamics typically found in the historic evolution of the processes involved in producing innovation. The ability of cultural stakeholders to manage their implicit and explicit knowledge represents the crux of this matter. The challenges of socio-economic development in the 21st century (environmental sustainability, globalization, society and knowledge, etc.) define a scenario where the centrality of culture is reinforced for regional development by implementing the creativity-innovation-competitiveness-well being sequence.

THE LOCAL CULTURAL SYSTEM AND CULTURAL ORGANIZATIONS

Figure 2. The Local Cultural System



We thus begin by introducing the concept of a local cultural system as being a tool for the economic analysis of the complex relations existing between culture and region, and characterizing its various dimensions (offer, demand, institutions, etc.).

SOME CHARACTERISTICS OF CULTURAL ORGANIZATIONS

From the analysis of our own research in a group of more than 150 European cultural organizations, distribution [1] according to type of organization, would

[1] This is a sample in which the exact statistical significance is unknown since, due to the heterogeneous nature of the cultural

appear to be as follows: two-thirds private or non-governmental organizations, a mere 9% public/private consortia, and just over one fifth public entities.

These organizations showed different regional orientations, but most of them have a local sphere of action and influence. Although the high level of connectivity of the cultural organizations is noteworthy, since nearly 50% have a European sphere of action and over 25% have worldwide operations.

The main reasons for the creation of cultural organizations can be put down to demand factors - satisfying an obvious need for art and culture (39% consider this to be a very important reason to explain the creation of the organization). However, they can also be traced back to supply factors since 41% consider that they have been created as a result of the initiative of a charismatic leader and another 40% think that it is very important that there should be a convergence of interests of a group of professionals from the cultural sector. In contrast, the existence of financial incentives is only considered to be relevant by 13% of the organizations.

Cultural entities have a life cycle, in which they see themselves as emerging organizations during the first five years, and as stable or mature organizations when they have existed for 10 to 20 years, and there are always about 8-9% that are in the process of re-defining their objectives. When the organization is set up, the average age of its members is 34 years old, with women averaging around 45.6% of the workforce, although their current participation amounts to 52%, which means that there tend to be more male participants involved in setting up cultural organizations but women come on board throughout their development.

Almost 80% of cultural organizations are normally dedicated to more than two artistic fields or disciplines.

Regarding the perception of difficulties experienced by cultural organizations in their development, 11.7% describe such difficulties as almost insurmountable, 35.8% say that the effort required to keep the organization afloat is considerable, while the rest think that although it has required a lot of effort, it has not been any more difficult to maintain than any other type of organization, and slightly more than 5% even think that their development has been particularly easy.

Finally, it should be said that almost 70% of the cultural organizations begin their activities with a budget of less than 10,000 euros and another 18% do so with a figure that is somewhere between 10,001 and 100,000 euros.

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organizations involved, it is impossible to ascertain the dimension of the universe.

CULTURAL MARKET ORGANIZATIONS.

As far as cultural market organizations are concerned, the sectors with the largest ratio of employment in Europe are: fashion (31.41% of the sector's total workforce), design (20.12%), architecture (10.74%) and books and press (9.89%). These are followed at a great distance by the sectors of music (0.38%), the performing arts (2.43%) and visual arts (3.58%).

If we look at turnover, the largest figures are found in the following activities: fashion (247,189,494 thousand euros), design (157,115,932 thousand euros) and radio and television (155,192,531 thousand euros).

Considering the previous data and the model of the UK Technology Strategy Board (2009), suppliers of creative content and services are the CCIs that have benefitted most from the growth of the digital market.

Moving on to consider the business dimension of the CCIs, the statistics for culture available in Eurostat (2011) show that about **80% are SMEs or microenterprises**. **In fact, workers in the CCIs are twice as likely to be freelance as the average taken for the economy as a whole.**

Almost 60% of the majority of "microenterprises" are very small businesses (between **1 and 3 employees**). However, although the vast majority of CCI businesses are microenterprises (with fewer than ten employees), they are only responsible for a modest percentage of the turnover of such industries (18 %). **Large companies (over 50 employees) only represent 1% of the total number of companies but account for more than 40% of the annual turnover.**

This is the most significant feature of the cultural and creative sector in terms of its business dimension: the virtual non-existence of medium-size enterprises and the serious difficulties experienced by SMEs in reaching this status. The gap between the "large players" and the microenterprises hinders the growth of the latter and increases the difficulties experienced by the "small stakeholders" in penetrating the market, whilst also generating problems in adopting economies of scale for their projects, with power relationships between the various agents that are very one-sided.

2. THE PRODUCTION FUNCTION OF CULTURAL ORGANIZATIONS

A cultural organization is a structure that is driven by the initiative or will of a group of promoters using a number of processes (the production function) to transform a series of resources – input – into another series of services and products that are oriented toward a more or less determinate number of individuals, whether they are users, consumers or just ordinary citizens.

ANALYSIS OF ITS KEY PRODUCTIVE RESOURCES.

The principle resources considered are as follows:

- Human resources
- Infrastructures and physical equipment
- Economic resources

- Symbolic resources
- Relational capital

HUMAN RESOURCES IN CULTURAL ORGANIZATIONS

Creative activities establish their level of competitiveness from the innovation processes, which are based on the materialization of such creativity, talent, the detection of new opportunities and the search for solutions. Given that these attributes are in essence normally assigned to individuals (rather than to structures or organizations), the management of human resources becomes a key element in the strategies employed for economic and social activities as a whole.

The **human dimension** of productive activity is a concept that becomes quite apparent in the productive activities of the cultural and creative economy and extends to other economic and social activities.

On the whole, cultural employees are known for some of the following features:

- High levels of training, above average for the economy
- Better creative skills a talented imagination, divergent thought, aesthetic values, critical spirit, etc.
- Nature of a cognitive worker that turns management of implicit and explicit knowledge into their own livelihood. Lifestyles are complemented seamlessly with the way of earning a living.
- Work rated for pleasure, prestige and entertainment value.
- Better communication skills.
- Greater leadership and a will for independence from rigid hierarchies.
- A greater aptitude for team work, networking and cooperation. Social values.
- Greater geographical mobility and language skills,
- The ratio of freelancers is more than double that of the whole economy.
- The CCIs employ 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.

On the other hand, there are no significant differences in terms of age or sex.

Entrepreneurship

Due to their relevance as a vector for innovation, it should be mentioned that cultural and creative activities manifest differential types of entrepreneurial processes: "*Entrepreneurship in these sectors implies having creative ideas and developing them commercially 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".*

Creative competence

A creative person is known for their value of intuition, their capacity for abstraction and their ways of lateral, divergent and analogous thinking, which enable them to go about problem-solving in an alternative way. The cultural and creative worker, being heterodox in nature and critically minded, is more prone to disruption, which favours their ability to join up the seemingly unrelated or even contradictory dots of different realities.

According to the studies of Pérez and Vila[2] on the skills of workers engaged in creative activities, it is fairly clear that such workers demonstrate a special competence in *Ability to come up with new ideas and solutions*, *Use of computers and Internet*, *Knowledge of other areas or disciplines*, *Predisposition to question their own or other people's ideas, Ability to perform under pressure, Ability to identify new opportunities*. As we can see, these are the same skills required to generate innovation processes.

Mobility

Other characteristics of cultural and creative workers are related to their personal experience, specifically to a greater degree of mobility (albeit with some restrictions as we will see later) and cosmopolitan nature. In addition, we also need to consider their higher average academic profiles compared to other sectors, along with their relatively young age, and the fact that there is a greater proportion of women among their number. With respect to the role of mobility in the creative class, it is imperative to point out the conclusions of the recent European ACRE report (Musterd & Gritsaid, 2010), suggesting that the conceptual framework of R. Florida can only be taken as a useful preliminary hypothesis, but not as a robust theoretical construct. This is especially true for Europe, which is culturally and historically very different from the USA.

Organizational models

In culture, we place greater value on personal autonomy and professional independence is high in this type of activity. On the other hand, the level of implication and volunteering is higher than in other sectors, generating more resilience in business projects, usually defined as non-profit associations or microenterprises. In this regard, we can distinguish the figure of the so-called

[2] The skills profiles of young university graduates occupying cultural and creative posts are 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 posts. The research is based on a large database gathered from the results of a macro-survey carried out with 40,000 young university graduates in 14 European countries.

Pro-Am (Professional Amateur): activities carried out under amateur conditions but with high professional demands.

Creative work, innovation and social interaction

Creative workers are known for a high, differentiated level of participation in various kinds of social networks (local, cultural, political, social action). Relations between the social and voluntary ambits blend with occupational activities and they become spaces for experimenting and training in entrepreneurial and leadership skills and collective action. Creative workers bring their efforts to bear and give their human capital value in diverse social environments, participating in pre-commercial exchange models, outside the market, or in other informal circumstances, which represent spillovers into social areas of participation but at the same time also amount to learning processes and the accumulation of human and social capital.

Work spaces offer environments that foster creativity and innovation, with a game-like atmosphere that make it fun to work.

INFRASTRUCTURE AND PHYSICAL EQUIPMENT

The reason basically lies in two characteristics of the sector: the main characteristic of the microenterprise, which implies a limited ability to acquire resources

Managing unique spaces (both public and private) is a distinguishing feature with cultural organizations making the most of their capacity to generate cultural value, for instance, by publicizing the identity and memory of the region and its local heritage (old factories, historic farmsteads, public spaces, palaces, castles, etc.).

FINANCIAL RESOURCES

The most important source of financing for the CCIs is self-financing, as acknowledged in the report entitled “The Entrepreneurial Dimension of Cultural and Creative Industries” (HKU, 2010). Public subsidies, bank loans and private support have a residual role, while other sources are only of very minor importance.

There is a certain margin for innovation and diversification of sources of finance, albeit with considerable restrictions: apart from the limited capacity of cultural organizations to devote part of their business management to finding out about the possibilities available, the world of financial aid is a real labyrinth (involving various regional levels of government and a whole raft of different sectoral policies) along with the financial bodies’ aversion to risk and their poor sensitivity to the specific nature of this sector.

The needs of cultural enterprises regarding funding are slightly less than for non-cultural enterprises. Neither is there a marked difference in global terms. According to the studies of Greffe and Simonnet for France in 2003, the greatest difference lies in the group of enterprises requiring less than €2000 (in the period 1998-2003), which in the case of cultural enterprises amounted

to almost one quarter (23.89%). These percentages vary depending on the cultural sector, ranging from the visual arts (with 52.4% requiring less than €2000) to the audiovisual sector (where only 10.6% need less than €2000 to start up their business).

According to the studies by Greffee and Simonet, in the French case, the act of obtaining a bank loan, along with the fact that personal resources are also used, significantly improves the companies' chances of survival.

Nevertheless, once the loan has been obtained, it is no longer significant. This means that the need to repay the loan is equal to the company's chances of survival.

According to these same studies (Greffe, Simonnet, 2008, 2010), the larger the initial budget of a cultural enterprise, the greater their chances of survival, which raises questions about the view that the main capital of cultural enterprises is their symbolic capital.

In the same study we can also see that the most notable differences focus on less recourse to bank loans, a greater propensity to personal funding and, contrary to what might be expected, slightly greater reliance on public subsidies. With respect to subsidies, the activities carried out primarily by enterprises with subsidies are those in the handicraft sector and at roughly the same level, the visual arts, the audiovisual sector and the publishers. The performing arts and heritage have percentages that rank lower than those of non-cultural enterprises. It is rather surprising that the percentage of non-cultural enterprises receiving subsidies is only 4.5 points below the cultural enterprises.

SYMBOLIC RESOURCES

The use of symbolic resources on the part of cultural and creative organizations in their production function is one of its primary distinguishing features. This type of resource is incorporated in the new economic paradigm, characterized by the value of knowledge, experience and digitization (The Impact of Culture on Creativity, KEA 2009).

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

In this context, the debate existing between intellectual property rights and free access to the symbolic universe takes on a strategic dimension.

RELATIONAL RESOURCES AND SOCIAL CAPITAL

Valuing relational capital is another feature that distinguishes cultural organizations. We should remember that cultural and creative workers are characterized by the compenetration of 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 labour resource.

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 the resources all tie in with one another to convert inputs into outputs.

LEGAL AND INSTITUTIONAL FRAMEWORK

The existence of cultural organizations is determined by various regulatory frameworks, ranging from the basic education system, university education, cultural policies *per se*, 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, the regulatory framework for labour relations for artists and creators and intellectual property regulation.

The range of realities in Europe is extremely diverse, thus making it difficult to conduct a global analysis.

MISSION AND VISION OF CULTURAL ORGANIZATIONS

In keeping with Throsby and Withers (1979), cultural organizations are often non-profit-making enterprises, and are characterized by the multitude of objects that form part of their mission, many of which have a social nature. As we will see below, these characteristics often shape their organizational and business administration model, which are heavily influenced by the lifestyles favoured by cultural and creative workers.

These authors identify four dimensions for analysis.

1. Promoting artistic excellence, which means having a favourable attitude to innovation based on motivation (Patterson *et al*, 2009).
2. Facilitating access by potential clients to cultural goods and services and encouraging audiences to play an active role.
3. Generating educational services.
4. Developing research functions, an indispensable service for generating innovation in the organizations by opening up to ideas and creative problem-solving (Patterson *et al*, 2009).

Of course, given the diversity of activities forming part of the CCIs, the entrepreneur's **motivations** will vary from sector to sector. As a general rule, there may be two extreme situations: Orientation towards creation and orientation towards growth. The first is characterized by the **desire to give priority to the cultural value of creation and the lack of motivation to generate economic value. On the other hand, in the second case, priority is**

given to economic aspects instead of the cultural value inherent in production.

The will for social transformation along with a transgressive and critical disposition are typical of the cultural sector of the arts. This implies that there is a will to generate innovation in the CCIs. In the categories of values that basically give shape to the cultural organization, the following can be highlighted:

- Organizational values: independence and self-employment, doing voluntary work and working for pleasure, fairness, social initiative and non profit, etc.
- Transfer to work methods: participatory approach, transparent management, networking, fostering innovation and quality, etc.
- Personal growth: supportive of rights, values of mutual respect, promoting critical thinking, negotiation and agreement.
- Values and social liability: fostering the principles of solidarity, sustainability, equality, democracy and diversity.

According to Hubert *et al*, the combination of a cultural/creative attitude and an entrepreneurial spirit give rise to four different focuses on 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 career development.

In accordance with Eichmann (2007), these four personal sources of motivation can in turn be identified on the basis of five dimensions: personal aspirations, a focus of interest, degree of separation between one's work and personal life, occupational model (employee, freelance, etc.), the various sectoral activities and further typical features. Based on this basic outline, there is a spectrum of possibilities ranging from the most artistic and bohemian at one end (independence as an aspiration, aesthetic criteria, lifestyles) to entrepreneurial methods completely oriented towards the market.

ORGANISATIONAL MODEL

Given the specific characteristics of the sector in terms of corporate dimension and labour-intensiveness, the CCIs implement network-based organisation and cooperation processes. Smaller companies tend to adopt out-sourcing and clustering strategies, combining multiple projects in order to compete with bigger companies. This phenomenon is incremented by the high level of uncertainty associated with the demand for cultural goods and services, in such a way that content-producing industries tend to work on several projects at the same time to balance the risk of failure.

The company's internal organisation is conditioned by the small dimensions of the business sector. Evidently, the organisational design of a micro-SME (1-3 employees) does not afford many opportunities to specialise by areas. This also results in internal organisation dynamics of multi-functional individuals.

Nevertheless, according to the European Commission's Green Paper (2010) Unlocking the Potential of Cultural and Creative Industries, larger companies take less risks than micro-SMEs. Small companies must be more flexible, dynamic and innovative to be able to compete with bigger companies that are unable to be so versatile. This allows entrepreneurs in charge of CCI micro-companies to be willing to take risks.

The fact that CCIs have disparities in terms of size and growth strengthens the tendency to outsource, especially in sectors in which automation of production enables outsourcing, such as the retail work in the fashion sector or in certain computer games. Further, to deal with the monopolistic tendencies of some CCIs, **a high percentage of freelancers and micro-SMEs rely on networks and personal contacts** in order to act as a group.

MANAGEMENT MODEL

As we have seen, many companies operating in the CCI sphere must integrate artistic freedom as an intangible value and entrepreneurial freedom has a tangible value that underpins intangible (cultural) values.

HUMAN RESOURCES POLICY: TRAINING, WAGES AND TYPES OF RECRUITMENT.

Cultural organisations have serious training shortfalls in business skills (planning, management and marketing) owing to their cultural orientation and small size.

With regard to aspects associated with 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. This leads to a blurring of the distinction between "employed" and "unemployed" that is fuzzy and problematic.

In general, creators accept the fact that they earn less than the average worker, which may be explained by their preference for creative work.

ECONOMIC PLANNING AND MANAGEMENT IN CULTURAL ORGANISATIONS

As a rule, to inefficient economic planning on the part of cultural organisations we must add a scenario of structural difficulties when it comes to funding the activities of CCIs, owing to the complexities of funding and a lack of awareness of the needs and potential of CCIs.

Primarily, business on a small scale is a determining factor, as in the case of human resource management. The sector is characterised by weak economic and financial planning: A significant percentage of organisations (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 reduced minority (barely 5 percent) 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.

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".

STRATEGIC PLANNING AND KNOWLEDGE MANAGEMENT IN A COMPLEX AND UNCERTAIN SCENARIO.

In the opinion of the sectoral experts consulted to draw up the report on "The Entrepreneurial Dimension of the Cultural and Creative Industries" (HKU, 2010), the most influential **knowledge factors** in an organisation's growth are related to information on market opportunities. CCIs point out the special difficulty of identifying **new markets** (19%) and lack of knowledge with regard to foreign markets (15%).

The main barriers to entering the market encountered by micro-SMEs are largely due to the exclusivity agreements reached with key distributors and access to information on market opportunities. The presence of many large scale competitors is an added difficulty.

As stated in the "Sourcing Knowledge for Innovation: The International Dimension" (NESTA, 2010) report, identifying sources of knowledge (especially at the international level) and belonging to a network are the keys to understanding the global market. Lowering trade barriers and the integration of the **global markets** has enabled all sorts of companies, new ones included, to exploit global opportunities. Globalisation processes induce enterprises to adopt outsourcing strategies and generate a strong counter position: large corporations that control a highly competitive market, on the one hand, and cultural and creative micro-SMEs and the entrepreneurs that manage them, on the other, must face their limitations with regard to knowledge of the opportunities afforded by their environment at start-up and throughout their companies' life cycles.

NEW TECHNOLOGIES MANAGEMENT

Providing services (as in the design sector), content (e.g. the music sector) and creative experiences (performing arts) has undergone a profound transformation due to the development of the New Information and Communication Technologies (NICTs). Digitization dynamics and the emergence of Internet have changed and diversified the methods of production, circulation, distribution and the exchange of cultural goods and services, making a significant contribution to increasing revenue and employment in the CCIs. The value change of cultural organisations has been completely redefined, affecting intermediation between stakeholders and users' relationship to the production process. *"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 of this. New technologies multiply and diversify the channels through which cultural works reach the demand. At first there is an incremental effect, which is followed by episodes of "cannibalisation" between old and new channels. The end consumer, however, has more opportunities to access culture, which brings about an increase in culture consumption.

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 in the level of citizens' participation in the arts via the digital and electronic media demonstrates the potential of digital media.

PRODUCTS AND SERVICES GENERATED.

The 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**.

In terms of materialism, we could mention goods (e.g. books, publications, DVDs, crafts work and accessories) and services (the use of space, events, training and research, for instance) which have an impact on a group of individuals or communities that could be considered audiences (those who are directly exposed to cultural goods and services) or non-audiences (those who have no direct, deliberate contact with such goods and services).

IMPACTS GENERATED BY CULTURAL ORGANISATIONS

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:

Impact on audiences:

- Meeting cultural demands.
- Entertainment, education.
- Development of cultural capital
- Cognitive and aesthetic values, development of significance, 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.
- Creation of employment and the quality thereof.
- Promotion of tourism and increased value of cultural and natural heritage, which are of special interest in rural development contexts.
- The potential for renewing neglected urban areas.
- Leisure and recreational use of public spaces and the promotion of social capital.
- Promotion of activities linked to the knowledge economy.
- Territorial branding and projection. Enhanced competitiveness.
- Incentive for attracting creative classes.
- Promotion of innovation at the social, economic and political levels.
- Relationship with social policies: diversity and intercultural dialogue, the fight against exclusion and the promotion of social capital.

Two impact dimensions can be considered for audiences and non audiences. In general, it could be said that the impact of cultural organisations is demonstrated at three levels. Level one refers to the individual transformation that takes place in expositions 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, communicative abilities and which primarily affect effectiveness and efficiency in the accumulation of human capital and social capital. Lastly, we would be alluding to the social and economic rewards arising from exposition to cultural experiences. Likewise, in reference to 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 addressed in the next chapter.

3. INNOVATION PROCESSES IN CULTURAL ORGANISATIONS: MAIN FACTORS FOR CHANGE

In line with Chapter One, 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 organisations. This is confirmed by the emergence of a new conceptual framework (soft innovations, hidden innovation, open innovation, etc.) that complements the classical perspective of technology and production-based innovation. Innovation is inherent to the productive and organisational mission and characteristics of cultural agents.

Firstly, if we consider the internal innovation dynamics in the CCIs, the table below gives a summary of the keys to innovation based on the production function studied in this chapter.

Table 2. Links with innovation. Inputs

INPUTS	
PRODUCTIVE DIMENSION	**LINKS TO THE INNOVATION**
HUMAN RESOURCES	High levels of training of cognitive workers, higher than the economy's average. Creative skills, talent and tolerance. Importance of divergent ways of thinking, critical skills and imagination. Technical know-how and ability to integrate several disciplines and languages. Leadership skills, independence and entrepreneurial attitude. Greater capacity for teamwork and enhanced value of their important relationship capital. Lifestyles integrated in professional activity. High geographical mobility and higher international protection (networks)
SYMBOLIC RESOURCES	The production of the CCIs is knowledge-intensive and intensive in the use of symbolic resources. Symbolic production presents a growing value for competitiveness and differentiation strategies in companies that come under the framework of the knowledge economy. High interaction between the aesthetic dimension of production and a company's marketing strategies and ethical values.
RELATIONAL RESOURCES	Social capital wealth and increasing the value thereof in production processes. The generation, interaction and use of social environments and physical spaces conducive to creativity.

Table 3. Links with innovation in the proceses

PRODUCTIVE PROCESS	
PRODUCTIVE DIMENSION	**LINKS TO THE INNOVATION**
VISION AND MISSION	Social responsibility values: principles of equality, diversity, solidarity, sustainability, etc. Basically, not-for-profit orientation (and beyond). Territorial implication and action from proximity. Artistic excellence criteria to promote continuous improvement through research and experimentation. An educational function and promoting access to culture.
ORGANISATIONAL MODEL	Organisational values characterised by independence and autonomy at work, voluntary work and working for pleasure, and transparency. Cultural entrepreneurship as a distinguishing feature. Importance of organisational behaviour based on hacker ethics: focus on the individual and networking as support. Open network cooperation through non-hierarchical structures. Interactive hyperconnectivity as a characteristic feature: potential use of Web 2.0. Clustering dynamics characteristic of the sector: concentration and territorial networks: effects on social innovation.
MANAGEMENT MODEL	The SME entrepreneurial dimension as a characteristic. The shortcomings of entrepreneurial skills as a consequence. Management skills affected by such relevant issues as intellectual property. Knowledge management is characterised by high levels of improvisation

	and very short-term planning, given the scenario of high uncertainty associated with cultural markets. Models of human resource training characterised by the importance of lifelong learning through personalised and informal methods.
COMMUNICATION	The communication function is a tool inherent to cognitive workers: the value of expression, of emotions, of producing meaning, etc. Information network management, hyperconnectivity and the use of NICTs.
TECHNOLOGIES	Interaction between creative content and promotion of the use of the new technologies. Favourable synergies between the organisational 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 digitalisation in terms of piracy.
BUSINESS AND FINANCING MODEL	Not-for-profit and beyond-profit organisations Entrepreneurship and innovative methods of funding: Crowdfunding, business angels, venture capital, etc.

Table 4. Links with innovation. Output

OUTPUTS	
PRODUCTIVE DIMENSION	**LINKS TO THE INNOVATION**
PRODUCTS	The cognitive nature of production: experiential, informational, intangible goods; symbolic and emotional production, aesthetic values
SERVICES	Spaces for creativity. Workshops on creative work methodologies. Cultural (meta) research, thought and experimentation. Critical analysis. Promotion of spaces for divergent thought. Educational and awareness-raising services. Creative content and communication. Cultural entertainment and social mobility (citizen participation). Internationalisation and integration in territorial networks.
	IMPACTS
DIVERSE TYPES OF IMPACTS	Audiences: diversity of impacts related to human development (educational, cultural capital development, entertainment, aesthetics, etc.) Promotion of self-employment through cultural entrepreneurship. Territorial impacts: Branding, the use of the cultural resource in planning regional development, interterritorial cultural cooperation, productive diversification, cultural tourism, promotion of creative environments (public spaces and participative 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-guided 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 marginalised groups (crime prevention, promotion of healthy attitudes, etc.) Institutional innovation and optimization of public services: Cultural participation can promote innovation in public services: promote attraction, communication and trust between the public and civil spheres; increase the involvement of groups in risk of exclusion; proximity and interaction with users; participative online systems for suggestions; creative methods of developing ideas; visibility of emerging problems; experimentation and pilot projects, etc. Innovation services in other sectors of the economy: design, innovation in products and services; branding (communication of values; human resource management (creative skills).

In line with the value chain outline of the Bakhshi and Thorsby's cultural organisations (Bakhshi, Thorsby, 2010), three vectors stand out as determining factors in the dynamics of change faced by the CCIs.

- The **demand for culture as such** (user driven approach).
- **Technological and digitization developments.**
- Diversification and a rearrangement of the **sources of revenue and funding** that enable credit and investment.

A GEOGRAPHICAL AND TERRITORIAL APPROACH TO INNOVATION: CREATIVE CLUSTERS AND LOCAL INNOVATION SYSTEMS

This method includes three complementary aspects:

- **The creative city as a space for innovation:** encompassing theories already discussed by Richard Florida with respect to the creative class and urban creative management.
- **Creative Clusters:** Identifying the characteristics and training mechanisms for these activities and their relationships with the rest of the local economy and local innovation systems.
- **Cultural Activities and Local Creativity:** a proposal based on the social aspect of the concept of urban creativity, emphasising the importance of the role and participation of the general public, artists, cultural activities, the environmental factor, and the function of urban governance in planning an urban creative space.

The importance of research of this nature lies in how the cluster fosters the generation of new knowledge. How is creativity in the sector transferred to the other activities in the region? While processes are indeed becoming increasingly more complex and open, there are four types of analysis that are useful for examining this issue:

Identification of creative clusters: Cultural and Creative Industries (CCIs) tend to be more concentrated than in any other industrial sector (LAZZARETTI et al, (2011a).

Specific features of creative clusters: Cultural industry clusters are different from those of other sectors.

Relations of creative industries with the rest of the economy: **Input-output research** reveals that the economy's most innovative industries are those that set up more exchanges with the creative sector. The correlation between the geographical presence of the creative sector and other sectors reveals a *co-location* between creative companies and innovative companies

On the basis of this analysis, it is considered that the cultural and creative sectors are part of **local innovation systems**. Creativity is construed as a participatory process, and communities are encouraged to take an active interest in it. 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 consumers' creative capacities.

In this group of processes and relationships, it is worth pointing out the leading role cultural mediators play in the activation of the process and as creative agents capable of imagining the potential future scenarios of a community's symbolic universe.

CHAPTER4. THE CONTRIBUTIONS MADE BY CULTURAL AND CREATIVE ACTIVITIES TO THE CONFIGURATION OF THE EUROPEAN SOCIOECONOMIC SPACE

"Better then to acknowledge the arts for what they are: namely, forces for change. Economic systems need this too, of course, and they pay for it fairly"

1. THE CONNECTABLE DIMENSIONS EXISTING BETWEEN CULTURAL AND CREATIVE ACTIVITIES AND THE REST OF THE SOCIOECONOMIC SPACE

RECONSIDERATION OF THE NEEDS THAT THE SYSTEM MUST SATISFY

The field of culture is a value-producing field, and values are one of the factors that dictate our behaviour and shape our vision of the world. Seen from the analytical standpoint, it becomes clear that satisfying our cultural needs ought to be the primary goal of any economic system. Analysis also reveals how the set of values emanating from the cultural field have a modelling influence on the rest of the economic space.

CULTURAL RIGHTS AND THE GOAL OF THE ECONOMIC SYSTEM

Ultimately, the function of an economic system can be no other than that of fulfilling the hopes, dreams and objectives of a community. Once basic material needs have been met, the next group of needs has its roots in the individual or collective cultural dimension. In practice, this idea manifests itself in the formulation of cultural rights[3], which can be summarised as the right "to be", the right "to express oneself and to communicate" and the right "to participate", through culture and the various forms of artistic expression. Cultural rights, as a substantial part of human rights as a whole, constitute the intrinsic dimension of the value of culture, independently of any of its other values.

CULTURE BRINGS VALUES INTO THE EQUATION

The field of culture externalises values which spread throughout the whole of the socioeconomic space and, in the context of the current economic climate, we are seeing how these values are much more compatible with the concept of sustainable development. From copyleft to the commons, new universes of values are being mapped out which impact upon the economic and social space. They respond to a new hierarchy which includes factors such as the explicit desire to innovate, relational (as opposed to transactional) consumption and free exchange, critical thinking, personal development,

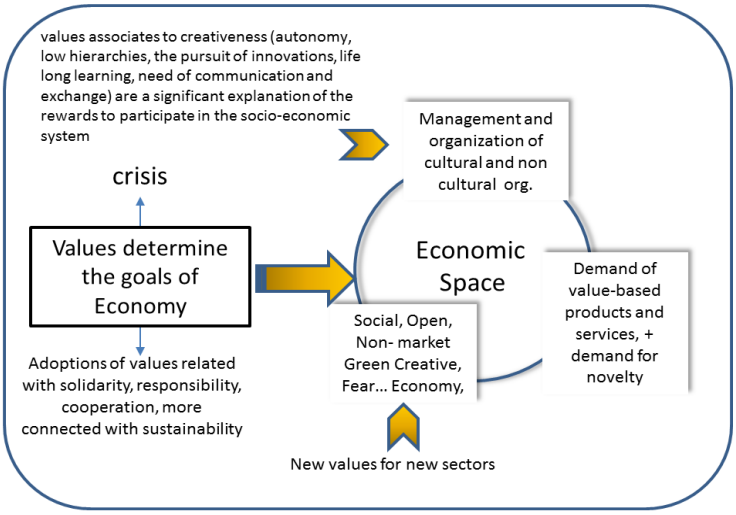
[3] Fribourg Declaration. 2007

solidarity, cooperation, working in networks, the value of diversity and aesthetics, participation, the importance of the play dimension and life experience in contrast to an exclusively chrematistic, reductionist philosophy.

These values from the cultural field prescribe a broader range of rewards upon which to base the optimisation of the individual decision-making process within the economic setting.

Figure 2.

Figure 3. Cultural values and the economic space



THE NON-NEUTRALITY OF THE SPACE

One of the fundamental characteristics of symbol production is that the attributes of the space itself are in some way involved in the production of creative goods and services.

The space is not simply a geographical “collection point” for cultural resources, whether material or immaterial, but in fact becomes a resource in its own right.

The dimension and organisation of the territory is a necessary precondition in terms of supply, enabling serendipitous discovery, cross-fertilisation, creative friction and chance encounters. But it is also, from a demand perspective, the space in which critical masses are achieved in the adoption of innovations; a space in which new values and attitudes are observed, imitated, replicated, communicated and spread. Therefore, territory is the space which sanctions economic, social, institutional and political innovations, making them visible and driving their dissemination. In this sense, space, culture and economy present themselves as existing with a very high degree of symbiosis and, in the modern capitalist setting, this symbiosis is re-emerging with considerable force within the economic dimension of culture in some cities. The more specific the cultural identity of a city, the more this city enjoys a “monopoly of place", which translates into specific economic configurations and competitive advantages on the global market (Scott, J.A., 2000).

THE RELATIONSHIPS EXISTING BETWEEN CULTURE AND DEVELOPMENT

Recent literature explicitly outlining the role of culture in the promotion of economic development does not delve very deeply into the relationships existing between the various variables involved. Potts and Cunningham talk about 4 possible scenarios for placing cultural and creative activities within the dynamics of development:

Table 5. The four models expressing the relationship between culture and economy. Source: Potts and Cunningham, 2010

Welfare model	Culture is a net burden on the economy, but one that it is worth paying for, since the overall effect on well being is positive. This is due to the production of commodities with high cultural but low market value. The intervention of cultural policy is justified by the notion of "public goods" or by the theory of "market failures", since the market itself is unable to assimilate the cultural value of the good.
Competition model	Culture is a sector like any other. Therefore, though any changes to the size of the creative industry do impact upon the economy as a whole, they only do so in proportion to its size, and in a way that is structurally neutral in relation to the overall dynamics. Its effects on income, productivity and well being are no different to those of any other sector. In terms of public policy, culture warrants neither more nor less assistance than other industrial activities.
Growth model	In this model, the creative industries are a driver of growth in the same way that agriculture was at the start of the twentieth century, or the manufacturing sector was in the 1950s and 60s. There are many possible explanations, all of which are in some way derived from the notion of creative industries as generating externalities or spillovers that lead to variations in the productivity levels or competitiveness of other sectors (for example, design-led innovation), or which facilitate the adoption and retention of new ideas and technologies in other sectors (for example, new ICTs).
Innovation model	The creative industries are not a sector in their own right, but rather constitute a structural component of the innovation system of the economy as a whole. Culture leads to the process of economic change. Culture is a public good, but for dynamic reasons.

The implications for cultural policy are diverse. While the first model outlines a framework of intervention that is purely protectionist in nature, model 2 drives us towards a conventional, industrial policy, and model 4 points to cultural policy as a strategic element in regional innovation policies.

The capacity of cultural and creative activities to influence a territory's potential for growth can be linked to several factors.

The following table presents an attempt to synthesise the various formulations of the relationships existing between cultural activity and development:

Table 6. Models expressing the relationships between a territory's cultural and creative activities and its economic development

Relationship	Description	Authors
Direct impacts of cultural and creative activities. Increase in the system's direct productivity	Culture and creativity show greater levels of productivity than the economy's average, meaning they have an instant impact on the capacity to generate wealth.	Rausell, Marco, 2011
Increased competitiveness in other sectors	Spillover as an additional source of supply with the capacity to improve the attractiveness of a given territory, attracting visitor flows, and physical or human capital.	Florida
Increased productivity across other sectors	Creativity and culture as input for other productive processes, leading to increased productivity and innovation.	EXPERIAN 2007; Bakhsi et al., 2008
Interaction with and enrichment of human capital	Endogenous growth models where the cultural and creative dimension interacts with human capital	Mellander, Florida, 2009; Sacco, Segre, 2009; Bucci, Segre, 2009
The cultural and creative sectors as drivers of the demand for and spread of innovation	That is, these sectors drive, enable and generate the creation, adoption and maintenance of new ideas (the innovation process) within 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, development and the evolution of the socioeconomic system	Creativity and culture contribute to the evolutionary process of growth within the economic system. They also impact upon the institutional dimension and play a key role within the innovation system.	Potts, 2011
Culture as a means of enhancing capacities	Culture, the satisfaction of cultural rights, becomes the central means of enhancing the individual's level of personal freedom.	Sen, 1999

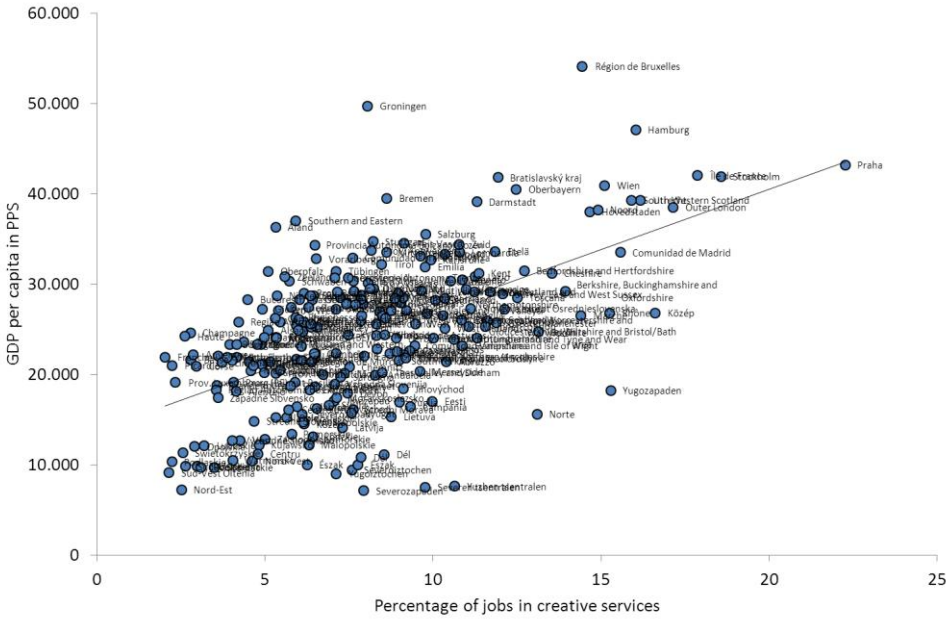
2. Culture and development in European regions

But, is there any evidence to support the idea that engaging in cultural and creative activities really does have a measurable effect on the structure and workings of the economy? Is it possible, however indirectly, to assert that a greater engagement in cultural and creative activities improves productivity, competitiveness, and the capacity to innovate or grow in any way? And, as put forth in a recent document published by the ESPON programme: are those European regions with higher creative worker contingents the continent's most successful regions? Do workers from the creative sector have any impact on regional growth capacity? Several very recent works approach this issue from different perspectives (ESPON, 2011; Russo, A. Quaglieri, 2011; Rausell, P. Marco-Serran, F. Abeledo, R. 2011; Power D. Nielsén, T., 2010; De Miguel, B, Hervás, J.L., Boix, R, De Miguel, M. 2012; Mellander, Florida, 2011).

SOME EMPIRICAL EVIDENCE

The first source of evidence is the strong correlation between GDP per capita in PPS and employment within the creative services sector, already presented in works produced by the European Cluster Observatory.

Figure 4 Correlation between the share of jobs in creative industries and GDP per capita in the EU regions, 2008 (Inner London has been removed from the sample) 250 regions



Furthermore, all creative services present high correlation coefficients with GDP per capita. The highest such correlations can be observed in computer programming, advertising, publishing and the audiovisual sector (all above 0.6).

THE MODELS

We have used two different models. The first is a structural model, used to compare the effects of clusters (the number of regional specialisations) and the productive system, in terms of their know-how and creative intensity, on GDP per capita in European regions.

This is an empirical model not based on a formal, theoretical model and assumes that the differences in GDP per inhabitant between European regions can be ascribed to these two components in linear and additive combinations.

The second model is a more elaborate proposal, achieved by adopting the principles of endogenous growth models. The Romer Model (Romer, 1990; Jones, 1997) is particularly useful for explaining cross-country and cross-regional income and growth differences, and is based on the differences in idea production.

Table 7. Results for the enhanced structural model and the complete version of the Romer-Jones model, both including technical change. Parsimonious model with statistically insignificant, collinear variables dropped.

	Structural			**Romer-I**	
	Robust OLS			OLS	
Dependent variable	GDP/POP			GDP/L	
	Coefficient	Elasticity		Coeff. & Elast.	
Constant	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)	
% Non-knowledge-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 in 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 tested using 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, productive diversity), 3Ts (patents per million inhabitants, percentage of tertiary graduates on population, cultural endowments elaborated from the Michelin guide); dummies for n-1 countries.

The main results can be outlined as follows:

1. The impact creative industries have on the wealth of a region is of a causal nature.

2. However, we should distinguish between the behaviour of the creative services, on the one hand, and creative manufacturing on the other:

2.1. Creative services have a positive impact on GDP per capita and GDP per employee. An increase by 1% of the share of jobs in creative services in a given region translates into a response of between 0.27%, according to the Romer-Jones model, and of 0.43% according to the structural model. This, in turn, sees wealth increased by between 1000 and 1,600 euros.

2.2. Meanwhile, creative manufacturing impacts negatively on the wealth of a region. According to the Romer-Jones model, this result, though also negative, is slight and statistically insignificant.

3. Other variables representing the structure of employment, in terms of levels of know-how, give no clear outcome. They are statistically insignificant in the structural model when the effects of technical change-external economies are factored in. However, using the Romer-Jones model, these same variables are revealed as having a significant, positive effect, particularly in the categories of other knowledge-intensive services and non-knowledge-intensive services.

4. External economies play a very different role in each model and, in some instances, give rise to disagreements between the estimated coefficients. In the structural model, only the following categories are statistically significant: diversity in the productive chain (the existence of internal suppliers within the chain), which reports a negative impact; productive diversity, reporting a positive impact; patents per capita, positive impact; and cultural endowments, positive impact also.

Meanwhile, according to the Romer-Jones model, most of the variables related to external economies yield statistically and economically significant results, though their coefficients tend to be small. Scale economies (firm size in the creative industries) and urbanisation economies (productive diversity) have a negative impact, as predicted by the theoretical model. Localization economies (diversity in the creative chain) present with positive coefficients,

as do some of those related to the creative class (patents per million inhabitants) and cultural endowments. The latter two variables, together with the low coefficient for R&D expenditure per capita and their lack of statistical significance, and the share of jobs in creative services, point to the relevance of the Doing, Using and Interacting[4] models of knowledge (in particular, symbolic knowledge) to the wealth of European regions.

Another important outcome is that there are no statistically significant differences between regions with a greater or lesser presence of the creative industries. We have ranked the regions from high to low in terms of share of jobs in creative industries, and divided them into five groups: high creative regions, medium-high creative regions, medium creative regions, medium-low creative regions and low-creative regions. None of the five groups exhibited a differential outcome that was statistically significant with respect to the regions' average. The results using n-1 dummies show the same behaviour, as do the fixed effects of the structural (naïf) model. We can conclude, then, that there is no significant difference between high, medium and low creative regions in terms the results of the model.

The results can therefore be considered as robust and remarkably consistent.

DYNAMIC ANALYSIS USING STRUCTURAL EQUATION MODELLING (SEM)

There is a methodology that works well with the concept of causality, and which takes into consideration the possibility of both direct and indirect relationships: structural equation modelling, or SEM. This is a statistical technique which allows a confirmatory approach to the analysis of theoretical structures using a series of simultaneous equations. Obtaining a significant adjustment will give us indications as to the plausibility of the proposed structure. In this way, causality is tested from both a theoretical (and logically reasonable) standpoint and an empirical (and statistically reasonable) one. For this reason, SEM seems to enjoy a better reputation in scientific literature, although a debate as to its capacity to evaluate true causal relationships has been opened.

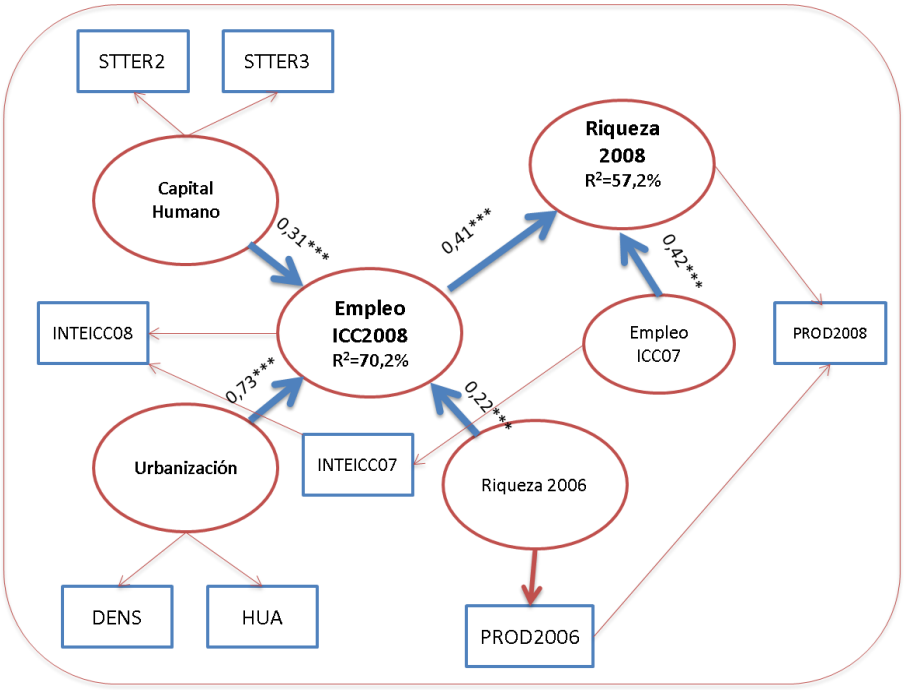
The variables we have used for defining the various models are those indicated below.

[4] There are two ideal modes of learning and innovation. The first is based on the production and use of codified, scientific and technical knowledge, known as the Science, Technology and Innovation (STI) mode, and the second is an experienced-based mode of learning based on Doing, Using and Interacting, the DUI mode. (Jensen et al, 2007)

Table 8. Variables used for the SEM model

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 km2.
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 of 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/Km²) - % households
STTER1	Students in tertiary education (ISCED 5-6) - as % of the population aged 20-24 years at regional level
STTER3	Ratio of the proportion of students (ISCED 5-6) over the proportion of the population by NUTS 1 and NUTS 2 regions
STTER2	Students (ISCED 5-6) at regional level - as % of total country level students (ISCED 5-6)
PROD	Labour productivity
INTEKIBS	Employment in knowledge-intensive services, by NUTS 2 region; % total employment
INTEICC	Employment in creative industries, by NUTS 2 region; % total employment

Figure 5. Structural equation modelling explaining the circular causality between employment within the culture sector and the wealth of European region



With structural equation modelling we can confirm in detail the existence of a circular effect between wealth and the creative sectors. Employment in

cultural sectors can be explained by three effects: the **urban model**, measured based on population density by km² (DENS) and the percentage of total population living in densely populated areas (HUA); the level of **human capital**, based on the percentage of people aged between 20 and 25 currently in education (STTER1) and the percentage of students currently in education in a given region in relation to the national average; and finally, the **effect of the level of wealth**, with a delay of 2 years.

The wealth of European regions can be clearly explained by the instant positive effect creative sector employment has on overall productivity. This means that an increase in the proportion of workers engaged in cultural and creative industries will have an immediate impact on regional wealth by increasing productivity.

But at the same time, a delayed effect of practically the same magnitude has been observed, deriving from employment within cultural sectors during the previous year. This can be interpreted either directly, as a result of the demand effect, or as a consequence of spillover, whereby innovation percolates through to the rest of the sectors.

Present-day variations in wealth will generate jobs in the cultural sector within a period of two years.

The urbanisation factor has the greatest impact when explaining employment within the cultural sector, reinforcing all concepts regarding the importance of cluster economies and the 'clusterisation' of creative and cultural activities. Some 32% of the creative workforce is concentrated in urban regions accounting for just 25% of the active population (Russo, Quaglieri, 2011). Literature on the subject, for example the European Competitiveness Report 2010, highlights various reasons as to why creative industries are concentrated in urban areas. The main factors include: (i) the importance of specific, local labour markets and tacit knowledge; (ii) spillovers from one creative industry to another; (iii) firms' access to dedicated infrastructures and collective resources; (iv) project-based work; (v) the synergistic benefits of collective learning; and (vi) the development of associated services, infrastructure and supporting government policies. However, other studies based on estimates by least squares (European Competitiveness Report 2010) show how the elasticity of the 0.26 location quotient with respect to population size suggests that the degree of urban specialisation of the creative industries rises less than proportionally with an increase in population size.

Another issue that we should highlight is that the working variables for the "human capital" construct are those related to the current proportion of students aged 20-24, which corresponds to the proportion of the population at university at any given time. This in turn leads us to consider the importance of the amount of young people with higher education qualifications and the existence of universities. This approach would call into question the relevance of the attractiveness of the creative class, because what seems to be important here is the proportion of students, rather than

the proportion of professionals. It would also point to a correlation between "youth" and creative sector employment, thus confirming the stylised fact that creative sectors employ a greater proportion of young people. In this case, we are linking the condition of "youth" both to the creative dimension and the capacity to spread innovations. Young people participate in greater numbers in both physical and virtual networks, and it is also more feasible for them to combine more flexible labour models (and cope with the correspondingly greater levels of precariousness), conducive to certain "lifestyles", which fuse and confuse with unstable labour models.

3. THE DYNAMICS OF THE MED SPACE WITHIN THE FRAMEWORK OF CULTURAL AND CREATIVE ACTIVITIES

A more simple way of identifying whether or not the behaviour of MED regions is significantly different from that of other regions is by introducing a dummy variable into 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, but is in the Romer-Jones model, where it presents with a value of 0.10. This indicates that GDP per employee in MED regions tends to be higher than the average in other regions. We can also introduce a dummy for each region in the estimation. By doing so, we observe, in the structural model, that most of the dummies are statistically significant, while their differential impacts were either positive or negative depending on the region in question, counterbalancing each other. This goes some way to explaining why the MED dummy was not statistically significant, but likely feels the effects of the institutional framework for each region, which enables or hinders the relationship between culture and regional wealth. This interpretation gives us a body of regions in which the institutional framework encourages a relationship between culture and regional wealth, another where the outcome is not differentially significant, and a third where said institutional framework has a negative impact on the relationship.

Table 9 Effects of the institutional framework in the MED Area

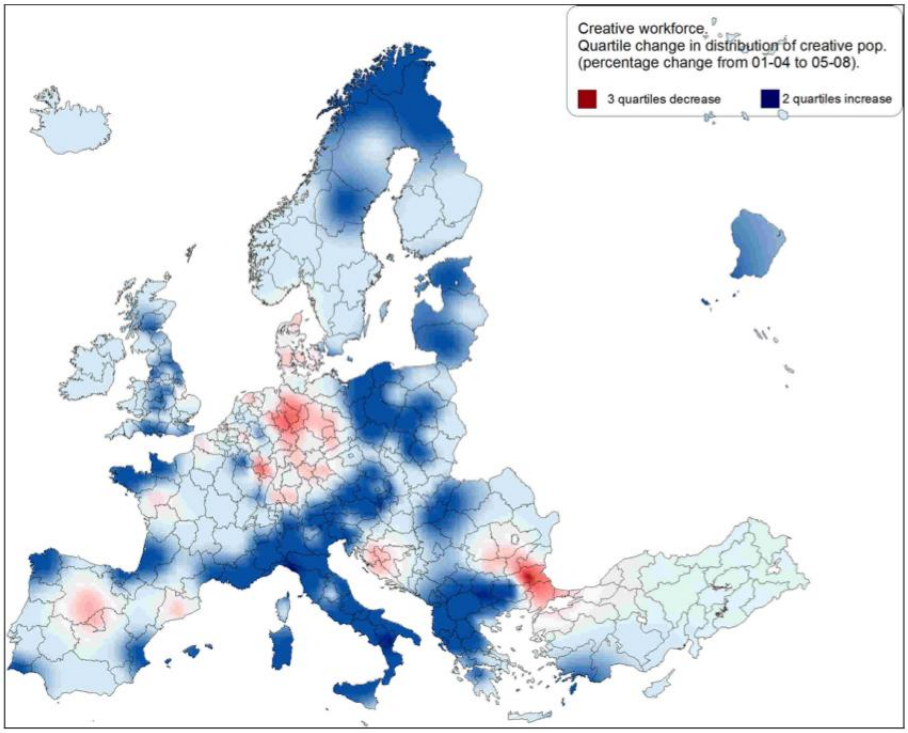
List of regions where the institutional framework improves the relationship between culture and wealth	List of regions where the institutional framework is not significant in the relationship between culture and wealth	List of regions where the institutional framework worsens the relationship between culture and wealth
Marche, Tuscany, Veneto, Lombardy, Emilia, Catalonia, Aragon, Piedmont, Lazio, Slovenia except except Osrednjeslovenska, Umbria Friuli, Provence, Abruzzo, Valencian Community, Vzhodna Slovenija, Kypros/Kibris, Region of Murcia	Molise, Balearic Islands, Languedoc, Liguria, Apulia, Corsica	Andalusia, Basilicata, Alentejo, Sardinia, Campania, Algarve, Calabria, Sicily, Rhône

With the Romer-Jones model we essentially observe the opposite. The dummies are statistically insignificant for most individual regions, but the average effect for the full sample of MED countries exhibits as significant.

THE CONVERGENCE OF THE MED SPACE

Interpretation of this issue can vary if its analysis is approached from a dynamic perspective, looking at where the most significant changes have taken place over the first decade of the twenty-first century. As Russo and Quaglieri (Russo, Quaglieri, 2011) point out, this analysis becomes more nuanced if we look at the dimension of the changes. The following map indicates which regions which have experienced significant change, as identified by the quartile change in distribution of the creative workforce indicator. In contrast to the usual European "banana" formation, this figure shows us that a progressive catching-up process is taking place among the sometime geographically or ideologically peripheral regions of Europe, including some MED regions that were lagging behind in terms of the creative professions.

Figure 6. Evolution of the creative workforce. Quartile change in the distribution of creative jobs per 1,000 heads of active population, 2001-2004 to 2005-2008. Source: Russo, A., Quaglieri, 2011



It is unlikely that the differential behaviour patterns can be attributed to the Mediterranean dimension, since we can observe how other peripheral areas are also participating in this convergence process. As indicated in 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). Using other datasets, we can confirm that, both in

terms of wealth and creative sector employment, a catching-up process really is underway between the Mediterranean regions and Europe as a whole.

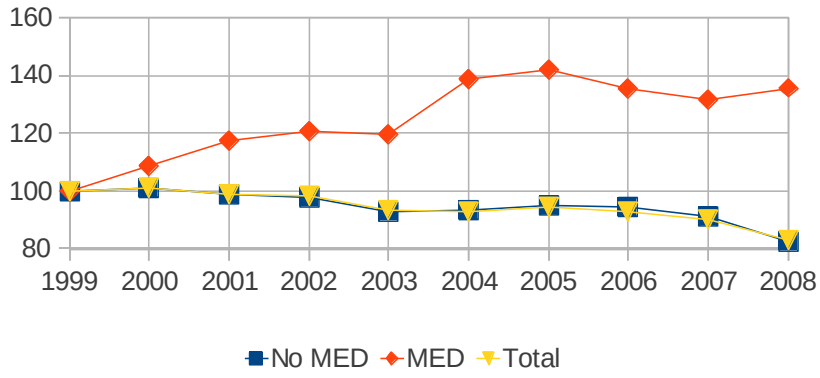
EMPLOYMENT: SCIENCE AND TECHNOLOGY

Average growth rates for indicators related to employment in the fields of science and technology are greater in MED than non-MED regions, again perhaps as a result of this process of convergence.

EMPLOYMENT: CREATIVE INDUSTRIES

The same phenomenon can be observed in employment in creative industries.

Figure 7. Evolution of the employment in creative industries variable, by NUTS 2 region; % Total employment Index 1999=100



HIGHER EDUCATION

In terms of higher education indicators, the greater annualised average growth rates of these variables have succeeded in closing the gap between MED and non-MED regions. As with other projects, (ATTREG, 2001). "Another indicator in this category is the number of students at university in the region as a proportion of all young local residents, revealing areas which enjoy a "creative environment" stimulated by student activity and the intensity of the educational output. This indicator exhibits high values in central Italy, northern Spain, northern Greece, Poland and Scandinavia, and surprisingly lower scores in core European regions, possibly indicating that it is those areas with higher rates of unemployment that push a larger share of young people to obtain higher education diplomas".

URBANISATION

One of the factors that can be linked to both economic development and the evolution of cultural and creative industries is the level of urbanisation. The cultural and creative phenomenon is an urban one, which is why it is useful to assess whether these factors are decisive in or explicative of the level of development of the regional economy at the European level. The differences between both regional groups, MED and non-MED, are not significantly different for the average population, POPU (t=-1.52, p-value=0.1352),

population density, DENS (t=-0.35, p-value=0.7274), level of urbanisation, HUA (t=0.46, p-value=0.6493).

Table 10. Population and urbanization variables. MED and non-Med regions

2008	Regions		
	Non-MED	MED	Total
POPU (Population in thousands)	1.755,54	2.296,33	1.868,78
DENS (Inhab/km²)	306,09	354,70	316,27
HUA (% households in densely populated areas)	48,54	46,81	48,18

SOME INTERPRETATIONS

Analysis of the above data leads us to believe that the catch-up process currently taking place within the MED space in terms of employment within the culture sector has been kick-started by the accelerated rate of access of young people to university within the Mediterranean area (perhaps due to demographic composition and increased pressure from immigration) and by a process of urban growth and concentration. However, its negligible effect on variations in regional wealth makes us think that the forms taken by this impact on culture and creativity within the MED area are significantly different to the forms taken as standard within Europe as a whole. As the works by Russo and Quagliari (2001) conclude, "Mediterranean regions seem to have been "catching up" with respect to the creative workforce when compared to core regions. It is possible that the increasing levels of quality of life and successful policies focused on valorising and branding localised assets of place (be it environmental quality, cultural heritage, social diversity, or the quality of the tourism and leisure infrastructure) have begun to invert the trend of migration of creative talents to economically thriving regions, and have managed to make the best of their creative workforce as a strategically fundamental component of their transforming economies".

In summary, these results suggest that MED countries have a different economic structure and that the way in which their processes of creation and innovation, and their externalities or spillovers, work is different than in other European regions. Although the issues being invoked here require further and more detailed investigation, we are able to propose one or two plausible research hypotheses:

In Mediterranean Europe, the connection between wealth and culture can, to a greater extent that within Europe as a whole, be explained by the creative class (people) rather than by players within the creative industry (economic organisations). This suggests that the mechanisms by which innovations percolate emerge in more informal, less structured networks within the economic logic, conferring greater importance on social capital and reticular models. In this context, the models that make most sense are those that chart the interrelatedness of human and social capital, by Sacco and Segre (2009) and Bucci, Segre (2011).

The greater relevance of cultural resources (endowments) might have to do with either the more advanced relative specialisation within the tourism sector in MED regions, in so far as it bestows cultural resources with a greater capacity to broaden demand, or with the role played by cultural resources as infrastructures for the development of cultural services. However, on the basis of other studies (Rausell, Marco-Serrano, 2011), we can infer that regions more specialised in the tourism sector present weaker links between employment in the culture sector and GDP per capita, perhaps because cultural activities are turned into provider or supplementary services for economic activities with low levels of productivity, such as the tourism sector. This interpretation would weaken an argument much cited throughout the MED space on the role of culture as a "complementary supply" for tourist demand.

4. FINAL REFLECTIONS CULTURE AS A FACTOR OF ECONOMIC AND SOCIAL INNOVATION

The current state-of-the-art, as well as our own research, is conclusive: cultural and creative activities are one of the most important variables for explaining the wealth of European regions. Consultation of just one of our sources of evidence confirms that it is the most significant variable.

On the basis of the various analyses of causality, we can confirm that the relationships are circular, and that variations in wealth impact upon the activation of cultural and creative experiences, which translates into increased employment rates within the sector.

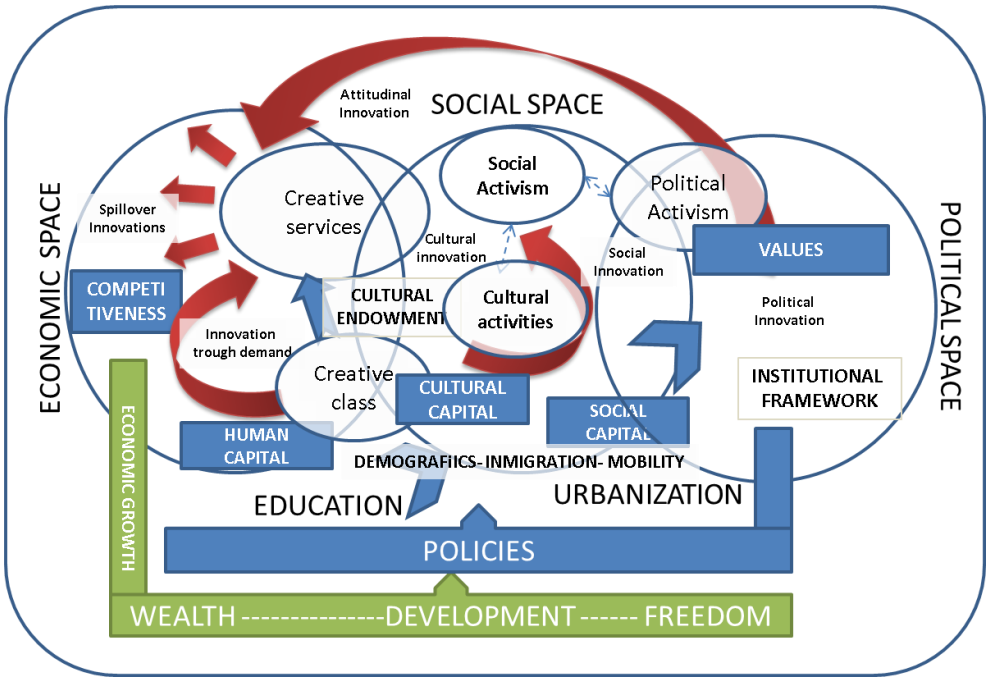
Thus, if creative services essentially impact upon wealth and their effects are highly localised, they constitute a relevant focus for regional-driven policy. Where the geographical impacts are supra-regional, then national policy or inter-regional coordination could play an important role. Where the effect is focused on specific segments of firms, then the scope of the policy is radically changed. On the other hand, if the impact of creative services essentially depends on supply-side wealth, public policies ought to establish conditions for their development and interaction, rather than provide subsidies and price policies for industry protection. Finally, where their effects on innovation percolate to the rest of the local economic system, various strategies, such as financial support for creative services firms, could be effective.

Though our analysis has focussed primarily on the relationships between the creative sectors and economic growth, and not solely on their systematic effect on the innovation model, our indicators lead us to believe that the creative ecosystem affects innovation across the whole of the economy. The routes of causality are complex and include direct impacts deriving from the more flexible nature of working relationships within the culture sector, which implies high levels of sensitivity to the innovation needs of the rest of the economy. Their complexity is also the result of the stronger tendency towards innovation and greater productivity of the cultural sector. Finally, we suspect that the dynamics of the cultural and creative sector lead to far-reaching

alterations to the productive model to the style of the most sophisticated models on the transformative role of culture as a factor of economic and social change.

Bringing together both micro and macro dimensions in our analysis, we would conclude that that the effect of culture as a component of economic and social innovation is undeniable, as much for reasons related to supply as to demand. The cultural space is not simply a generator of innovation in the form of new products and services or the use of new processes within the economic space to improve its competitiveness.

Figure 8 An overview of culture as a factor of economic and social innovation



The cultural field is also a 'demander' of innovation (as user or participant). The resulting connections have to do with the porosity of the creative class as an economic agent and as cultural players within the social space. The individuals that work in the 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, serve as catalysts for the expansion of social innovation.

Finally, all of these interactions, which include cultural, social and political activism, lead to a set of values and an ethical reconsideration of the needs of individuals. Such needs are connected to the desire to participate, communicate, share, contemplate and express emotions and opinions. The field of culture externalises values which spread throughout the whole of the socioeconomic space and, in the context of the current economic climate, we are seeing how these values are much more compatible with the concept of sustainable development.

These new values percolate from the cultural field via the social space, but also in the form of a new ethical code which radiates out from social movements coordinated online. From copyleft to the commons, a new attitudinal innovation is being mapped out which ultimately impacts upon the economic environment, the institutional framework and the social space alike.

Politicians are left with the task of preventing these processes from running out of steam and ensuring the incorporation of said dynamics into broader groups of the communities, kick-starting their development and enhancing their levels of freedom.

The impact of policy has to be that of promoting and enhancing these dynamics. It must generate a regulatory framework, for rights recognition and governance, whereby the increases in income generated by cultural and creative activities become an inclusive process not limited to the "creative class". In this way they can be considered as development in the sense put forward by Sen, and the spread of innovation within the economic, social and political spheres will expand the individual's spaces of freedom and the communities' possibility frontiers.

The opportunities for European competitiveness in this time of global change centre, with few plausible alternatives, around the positioning of activities related to creativity, innovation and talent. The role of cultural policy, understood in its broader sense, ought to play a less peripheral role than it has up until now, and the knowledge system should be made capable of presenting interpretations and rigorous, tried-and-tested visions for this new possibility frontier for territorial development.