THE IMPACT OF CULTURE ON CREATIVITY

A Study prepared for the European Commission
(Directorate-General for Education and Culture)

June 2009

EXECUTIVE SUMMARY

« Il faut apprendre à juger une société à ses bruits, à son art, à ses fêtes plus qu'à ses statistiques. »

Jacques Attali

Creativity is a powerful catch phrase. In Western societies it epitomises success, the modern, trends for novelty and excitement. Whether linked to individuals, enterprises, cities or regions creativity establishes immediate empathy, and conveys an image of dynamism. Creativity is a positive word in a society constantly aspiring to innovation and "progress".

Culture is the general expression of humanity, the expression of its creativity. Culture is linked to meaning, knowledge, talents, industries, civilisation and values. The objective of the study is to have a better understanding of the influence of culture on creativity, a motor of economic and social innovation. Does music, visual art, cinema and poetry for instance contribute to creativity as a way to stimulate job creation, economic prosperity, learning and social cohesion? What is the impact of artistic creation on innovation? Why do companies want to be associated with culture and art? What is the social function of artistic and cultural creativity?

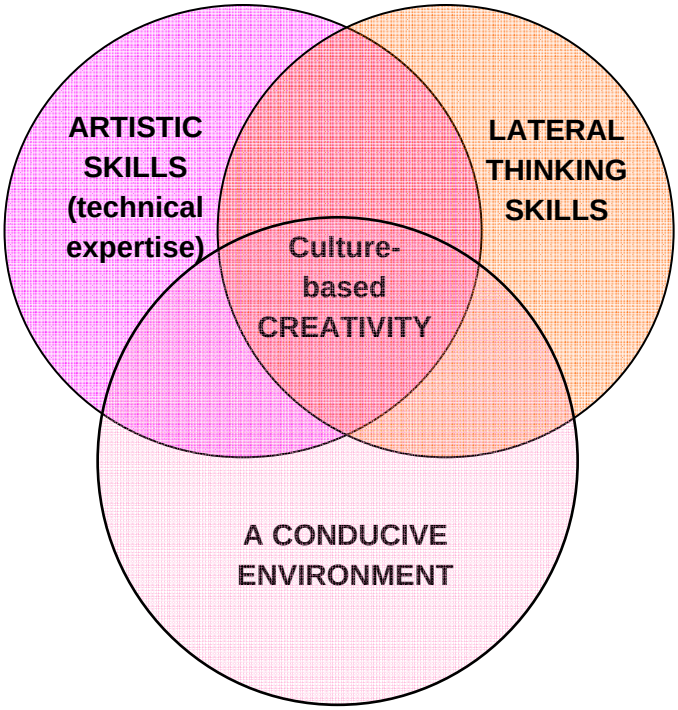
The report develops the concept of culture-based creativity, stemming from art and cultural productions or activities which nurture innovation, and going beyond artistic achievements or "creative content" feeding broadband networks, computers and consumer electronic equipments.

This culture-based creativity is linked to the ability of people, notably artists, to think imaginatively or metaphorically, to challenge the conventional, and to call on the symbolic and affective to communicate. Culture-based creativity has the capacity to break conventions, the usual way of thinking, to allow the development of a new vision, an idea or a product. The nature of culture-based creativity is closely linked to the nature of artistic contribution as expressed in art or cultural productions. The spontaneous, intuitive, singular and human nature of cultural creation enriches society.

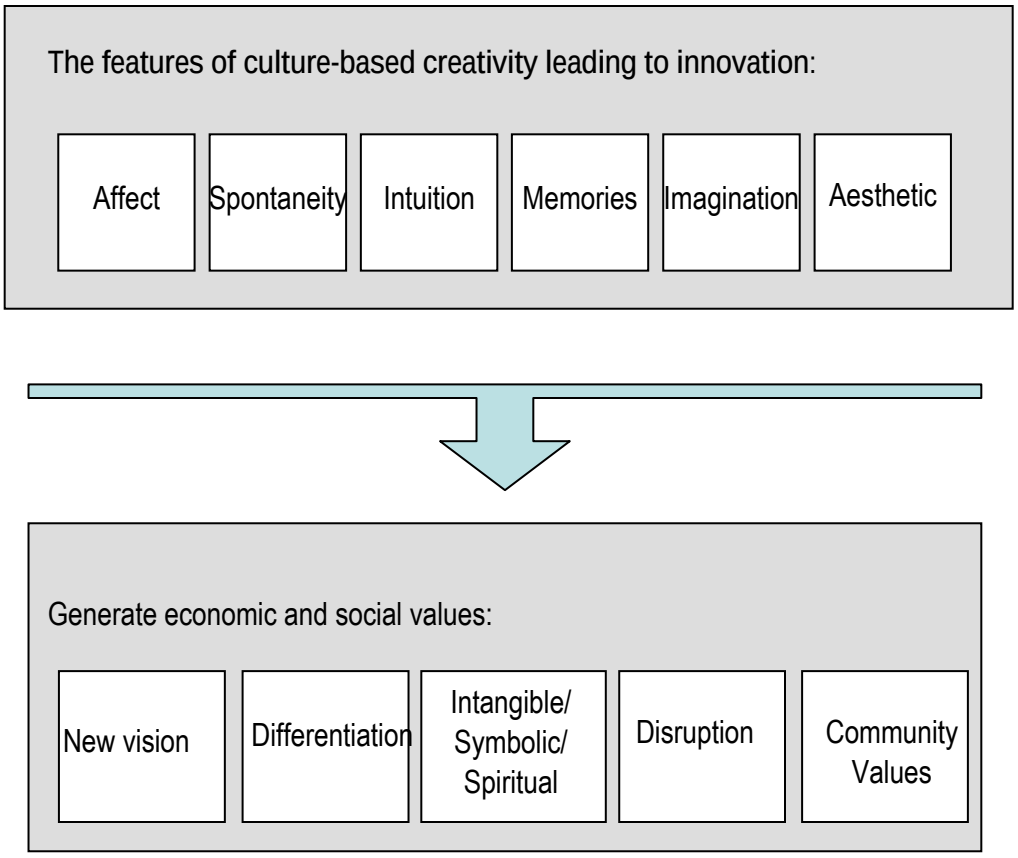
To emerge culture-based creativity requires:

- personal abilities (ability to think laterally or in a non-linear way, to be imaginative),
- technical skills (often artistic skills or craftsmanship),
- a social environment (a social context through notably education and learning that encourages, and appreciates creativity as well as an economy that invest in culture and culture-based creativity).

Components of culture-based creativity



The impact and value of culture-based creativity on the economy



The impact and value of culture-based creativity on the economy

The report illustrates the impact of culture in the development of new products and services, (including public services), driving technological innovation, stimulating research, optimising human resources, branding and communicating values, inspiring people to learn and building communities.

Culture-based creativity is an essential feature of a post-industrial economy. A firm needs more than an efficient manufacturing process, cost-control and a good technological base to remain competitive. It also requires a strong brand, motivated staff and a management that respects creativity and understands its process. It also needs the development of products and services that meet citizens' expectations or that create these expectations. Culture-based creativity can be very helpful in this respect.

Digital technologies play an important role in this intangible economy as they provide new forms of social exchanges and contribute significantly to new expressions of creativity. Of course cultural production (such as music, publishing and movies) makes new technology more relevant to consumers, enables the development of new markets and contributes to digital literacy. However the successes of free and open-source software and services, such as Wikipedia, are also trends that prefigure an economy in which sharing and exchanging knowledge and skills is not principally based on securing financial gain. These new forms of exchanges give more importance to social ends and therefore culture-based creativity. Art and culture (in particular music) is often the basis on which social networking takes place (peer-to-peer file sharing).

It therefore becomes an imperative for industry to meet and to create new kinds of demand that are not based merely on the functionality of a product but are instead rooted in individual and collective aspiration. In this new paradigm, marketing and services are as important as production. This requires creative skills and thoughts as productivity gains at manufacturing level are no longer sufficient to establish a competitive advantage. Culture-based creativity is a powerful means of overturning norms and conventions with a view to standing out amid intense economic competition. Creative people and artists are key because they develop ideas, metaphors and messages which help to drive social networking and experiences.

> *Apple's success is intrinsically linked to the founder's vision that technology, marketing and sales alone are not sufficient to deliver corporate success. A key factor is to have people who believe very strongly in the values of the company and who identify it with as creators and innovators – the ad campaign "Think different" featuring Picasso, Einstein, Gandhi was described by Steve Jobs as a way for the company to remember who the heroes are and who Apple is.*[1] *Apple has succeeded to create empathy for technology that other technology companies have failed to provide. The aesthetic of the product range, through innovative design, also yielded success.*

To succeed in a post-industrial economy, businesses across a very wide range of sectors must ensure that what they are selling offers a rich and compelling experience. Such experience enables differentiation from competing brands or products. These developments lead to the creation of the "experience economy".

[1] The seed of Apple's innovation, *Business Week*, 12 October 2004.

When Virgin Atlantic entered the airline business the differentiation came from entertainment services and the experience offered on transatlantic flights. Virgin was the first airline to offer massage on board or multiple choices of music and videos; a service that has now become a standard norm in air travel. It is no accident that Virgin founder, Sir Richard Branson, came from the music business and applied the "hip" and "cool" values" associated with the Virgin record label to the airline industry. Virgin Atlantic decided that it would do more than transport people from place to place.

Culture-based creativity is a fundamental means for industry and policy decision makers to adopt and implement more user-centred strategies (less about "making things" more about providing a service).

Jan Timmer – the former CEO of Polygram, the music and film subsidiary of Philips - turned the company Philips (on the verge of bankruptcy in the late 80's) around by developing a strategy based on the view that technology was not an end in itself but a means of improving life. This lead to a change in processes aimed at focusing on people, not technologies per se. The use-centred design approach called on new skills in the company including designers, sociologists and anthropologists. From its "Make things better" slogan Philips has moved to "Sense and simplicity" reflecting the shift to the experience economy.

Culture-based creativity helps to promote well-being, to create lifestyle, to enrich the act of consumption, to stimulate confidence in communities and social cohesion. It is increasingly used in the management of human resources, notably though artists-in-residence projects.

For instance AIRIS is a Swedish project based upon a programme in which artists join a company for a period of 10 months to work together on a cultural project. It was initiated by TILLT, an organisation set up by the region of West Sweden since 1973 to promote and support collaboration between artists and firms.

Culture-based creativity is therefore a key input for businesses or public authorities which want to communicate more effectively, challenge conventions and look for new ways to stand out. It contributes to product innovation, to branding, to the management of human resources and to communication.

Culture-based creativity and social innovation

Cultural productions, as communication tools charged with subjectivity and emotion, have participated in the expression of social life since the origin of human kind. Culture-based creativity plays a key role in generating social innovation.

Art and culture can benefit public service delivery and innovation in a variety of ways:

- public service broadcasters are an example of this and many make much of their reputation as 'trusted media providers;'[2]
- participation in cultural activities can emphasise a feeling of belonging in society, which also increases trust in the public realm and public services. Culture can therefore help to bring certain public services closer to their constituents;
- some public services have pioneered new methods of collaborative feedback and decision making by means of integrating creative media innovations – online discussion fora, social networking sites and online petitions allow the public to interact more easily with public services;
- Finally, some public services promote participation and involvement, often of marginalised groups – the development of community media and community arts, more generally, are good examples of this.

Culture contributes to strengthening social ties among communities and thereby nurtures individual as well as organisational self-esteem and ultimately well-being.

Social cohesion can be defined as a set of shared norms and values for society which also encompasses the diversity of people's different backgrounds and helps to ensure that those from different backgrounds have similar life opportunities. It is the ability of cultural activities to help express specific cultures, while also developing strong and positive relationships between people from different backgrounds in the workplace, in schools, and within neighbourhoods.

Culture can offer new approaches both in terms of tackling what are sometimes referred to as 'social problems', for which current approaches are deemed inadequate. Policy areas in which culture has successfully helped in this respect include urban regeneration, social cohesion, crime prevention, health and the fight against pollution.

Art and culture learning to stimulate creativity

Society plays an important role in developing and advancing creativity. A fundamental external factor that influences creativity is education and learning. Education and learning play a fundamental role in shaping a creative environment. Art and culture have the ability to stimulate people's imagination and creativity in schools, in colleges and universities and in lifelong learning.

Creativity in learning is about fostering "flexibility, openness for the new, the ability to adapt or to see new ways of doings things and the courage to face the unexpected."[3] Imagination, divergent thinking and intuition need to be considered as important characteristics of progressive arts education – by schools, universities and further education providers.

[2] Davies, G., *The BBC and Public Value*, London, Social Market Foundation, 2004.

[3] Cropley, *Creativity in education and learning, a guide for teacher and educator,* Routledge 2001.

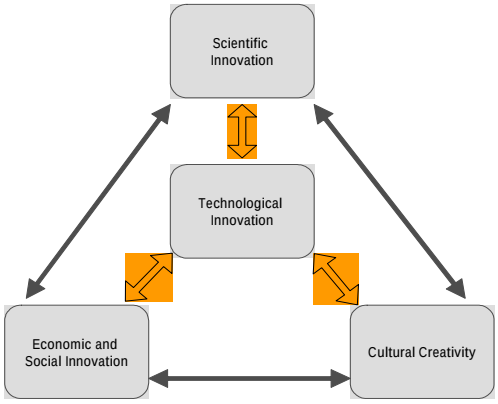
Undue emphasis on outcome rather than process is likely to frighten children away from originality. Taking risks without fearing failure is the cornerstone of creative endeavour. The "testing-culture" that holds sway in most EU countries militates against this idea of experimenting and taking risks without fears of failure. The mainstreaming of the arts is also a way to achieve high-academic results in other disciplines.
Arts schools specifically nurture creativity, as demonstrated in the way that art is taught and learned about. Their modes of teaching consist of promoting critical reflection, innovation, and the ability to question orthodoxies.

This makes a strong case for arts schools and arts-related disciplines to play an important role in this learning transformation in higher education. The education sector's response to the need for both business and technology to acknowledge the importance of culture-based creativity is to introduce inter-disciplinary learning across educational fields. Finland recently initiated a paradigm shift away from technology-driven innovation towards more human-centred innovation; with the ambitious Aalto University project (a private-public partnership) that brings together art, business, and technology studies on the same campus.

Policy making and culture-based creativity

Europe has enormous cultural and creative assets, a wealth of ideas, artists and creative people. European brands are amongst the best in the world in technology, luxury goods, tourism, media publishing, television, music, computer animation, videogames, design and architecture. European creators and artists in architecture, design, fashion, cinema, music, and modern art have worldwide influence.

However Europe does not harness this huge potential to the full in order to better serve the economy and society as a whole.
As part of the Lisbon strategy Europe has developed a strong policy framework to support innovation. However, "innovation policy has rather developed as an amalgam of science and technology policy and industrial policy."[4] Policies on innovation need to be developed so as to recognise the cross-sectoral and multi-disciplinary aspect of "creativity" which mixes elements of "culture-based creativity", "economic" as well as "technological innovation."



[4] Oslo Manual, *Guidelines for collecting and interpreting innovation data, a joint publication of OECD and Eurostat,* third edition 2005, p.15

Towards a EU creativity policy

The purpose is to create a Europe that stimulates and encourages creativity and provides individuals, society, public institutions and enterprises with incentives to build on culture for social and economic renewal.

The objectives are to:

- Encourage imagination and talent at school, in firms and public institutions, in life.
- Support the development of a creative economy by integrating creativity into EU innovation policies.
- Promote social innovation through culture.
- Encourage cross-fertilisation between regional identities and culture by clustering talents at European level to foster local development as well as multilingualism.
- Brand Europe as the place to create in the world.
- Move from cultural competition amongst Member States to cultural collaboration to make Europe's creativity visible internationally.

The study proposes a number of concrete measures to implement five actions:

- Raise awareness on culture as an important resource of creativity.
- Mainstream culture-based creativity in policies to foster innovation.
- Re-direct existing financial resources or create new programmes to stimulate creativity
- Brand Europe as the place to create.
- Question and tailor the regulatory and institutional frameworks to support creative and cultural collaboration.

Creativity is a process continuously shaped and stimulated (or constrained) by human, social, cultural and institutional factors. It is proposed to establish a Creativity Index (with a set of 32 indicators) whose aim is to assess the creative environment in EU Member States and to enable the development of a creative ecology in Europe through art and culture.

Culture lies on the fringe of the European project as a subsidiary competence whilst it is at the heart of innovation goals and the development of new economic and social paradigms. As a priority the European institutions as well Member States should review policies aimed at stimulating innovation in the framework of the Lisbon strategy to determine whether they stimulate culture-based creativity and engage the creative and cultural sectors.

Besides reviewing policies related to innovation the report suggests re-directing existing financial resources or creating new programmes to stimulate culture-based creativity. In relation to the EU, programmes and funds should aim to support:

- Creative entrepreneurs, enterprises and research centres that draw on culture-based creative inputs.
- Social innovation through culture.
- Territories using culture as a tool for development.
- Cultural co-operation across different territories.

A range of concrete policies and actions are also suggested to brand Europe as a place to create, to imagine, to express talent; a place that nurtures and values "singularity" and differences.

Art and culture can make a vital contribution to the achievement of objectives that reconcile wealth creation with sustainability and respect for common humanist values because one of the features of art and culture is that they help us to transcend purely economic or utilitarian constraints. We all have a role to play, both as citizens and consumers in drawing on the power of culture and creativity to help deliver new, more sustainable ways of living and working.

Europe's multiculturalism is a chance to stimulate creativity. Europe's diverse cultures, its history and geography are a significant source of its creativity. It is Europe's diversity and its patchwork heritage that has shaped its destiny and will determine its future. Pluralism and openness to influences are distinct features of the European model. This cosmopolitanism is an extraordinary resource of creativity.

The additional challenge for Europe is to make the best of its cultural diversity in the context of globalisation. To a large extent, Europe's future is dependent on its ability to transcend local identities to harness creativity but also to ensure the presence of diverse local identities in an international context. By asserting and developing its creative ambitions Europe can become a very significant force for the generation of innovative ideas and services which have both significant economic value and the capacity to improve the quality of life of its citizens. Europe should become a central place in the meeting of influences and ideas. At the confluence Europe increases its creativity and innovation potential. In this way, the power of creativity, art and culture could be harnessed to play an increasingly important role in driving economic and social progress in Europe.

TABLE OF CONTENT

FOREWORD

The study on the contribution of culture to creativity was prepared for the European Commission (Directorate-General for Education and Culture). It demonstrates the impact of culture and art on creativity, a major factor of economic growth and a vector of social and technological innovation.

The assignment lasted 11 months between May 2008 and April 2009. It was managed by KEA European Affairs (KEA) a Brussels based consultancy which specialises in the cultural, media and entertainment sectors. For this assignment KEA set up a consortium composed of Burns Owens Partnership (BOP) and Professor Roberto Travaglini.

BOP is a UK independent research and strategy consultancy specialising in the role of culture and creativity in economic and social development. It participated in the definition of the scope of the study. Its main task was to identify a number of case studies across the EU illustrating how culture can stimulate:

- the development of creative competences of individuals in a life long learning perspective
- the development of creative solutions in environments such as the workplace, hospitals and prisons.

BOP provided a quantitative and qualitative assessment of the factors identified and notably supported KEA in drafting chapter 3 and part of chapter 4 of the study as well as policy recommendations concerning the impact of culture on social innovation.

Prof. Roberto Travaglini is a specialist in cognitive studies and psycho-pedagogy at the University of Urbino (Italy) and an expert in the field of creativity research. He has studied the dynamics of child and adolescent creativity, body language and carried out empirical and experimental education research on the links between art and creativity. His main task was participating in defining the scope of the study, providing bibliographical references and reviews sections of the study related to creativity stimulation in individuals and through education (essentially Chapters 1, 4 and 6 of the study).

KEA's responsibilities included managing the research, defining the analytical framework and the scope of the study, researching the links between culture and creativity (Chapter 1), researching and analysing the impact of culture- based creativity on economic success (Chapter 2), editing the final draft of Chapter 3 in coherence with the rest of the study, researching and analysing the role of art and culture in learning (Chapter 4) as well as the field of public policies in the field of creativity (Chapter 5). KEA developed the EU creativity index (Appendix 3) and drafted the policy recommendations (Chapter 6). It prepared the bibliography with the support of consortium partners, managed the contacts with the European commission as well as the coordination with members of the consortium. KEA would like to thank Neil Watson, an independent researcher in the UK for his help on the editing of a large part of the study.

The lead contractor also organised a workshop on 3 February 2009 in the premises of the European Commission in Brussels with a view to completing a stakeholder consultation and test some preliminary findings before completion of the assignment (list of attendees is available in Appendix 6).

Trade organisations, industry experts, public bodies, educational institutions and artists that were consulted in the framework of the study are listed in Appendix 5. In relation to chapters on policies and education we also consulted representatives of Member States essentially in ministries of culture and education. The list of national member states' representatives can be found in Appendix 5. We would like to thank all the interviewees for their interest, input and encouragements throughout this assignment.

INTRODUCTION

It looks as though the early 21st Century will turn out to be an era focussed on supporting sustainable development. Creativity and ingenuity will be the keys to addressing the challenges. The economic crisis triggered by financial upheavals as well as environmental concerns are forcing us to think differently and creatively about economic and human development.

Moreover, as a result of globalisation, Europe's position in the world is today challenged by the emerging economies of Brazil, China, India, and Russia. In the 1950s Western economies represented around 64% of world gross production. By 1980 this proportion had declined to 49%.[5] According to some estimates, it will represent only 30% by 2013.[6]

Europe's place will increasingly be determined by its capacity to keep innovating both economically and socially.

To address this challenge the European Union adopted the Lisbon Strategy in 2000 which is aimed at making Europe one of the most competitive economies in the world. For policy makers effective innovation depends on the ability to raise R&D investment levels to at least 3% of GDP but also on the translation of innovation into successful products and services.[7] The traditional framework invoked to succeed in making the economy more innovative and competitive includes:

- effective intellectual property regimes,
- better links between science and industry,
- improved access to risk capital,
- and less 'red tape' hampering the creation and development of businesses.[8]

Innovation and competitiveness are all too often not associated with investment in culture as a tool to stimulate creativity.

The policy priority on technology innovation is today reflected in the funding strategy of the EU; budgetary resources linked to regional development, research and information technology (ICT) programmes. The European Investment Bank (EIB), the EU's investment arm, has made support to technology its priority under its Innovation Programme. At the same time non-technological innovation is not given the consideration it deserves.

Significantly, the relevance of cultural and creative industries as a strategic area to drive the agenda for an Innovative Europe remains marginal. A study published by the European Commission in October 2006[9]

[5] Huntington, S. P., *Le Choc des Civilisations,* Odile Jacob, 1997.

[6] *Ibid.*

[7] A paper by the French, German and UK governments, *Towards an Innovative Europe,* 20 February 2004.

[8] In the 2002 Ecofin report on Research and Development, January 2002.

quantified for the first time at EU level the socio-economic impact of the cultural and creative sectors for the EU. The study concluded that the sector turned over €654 billion in 2003 (more than the turnover generated by car manufacturing or ICT manufacturing), contributing to 2.6% of the EU GDP, representing close to 6 million jobs.

There is clearly an extraordinary creative potential in Europe. Indeed, Europe boasts a remarkable cultural heritage, some of the best art and design schools, extraordinary artists, the most innovative museums, incredible festivals and art galleries, the best luxury brands, some of the most innovative cultural industries (music, cinema, publishing, computer games) and creative professionals (architects, designers, advertisers) in the world. Cultural productions and activities are intrinsically linked to the creativity process, a motor of innovation. Is Europe making the most of this creative potential?

The assignment

In its April 2007 Communication on a European Agenda for Culture in a Globalising World (COM (2007), 242 final), the European Commission highlighted the important links between creativity and culture and the need to promote cross-fertilisation between industrial sectors.

One of the three main objectives for a European Agenda for Culture is the promotion of culture as a catalyst for creativity in the framework of the Lisbon Strategy for growth and jobs. Through its Communication the European Commission acknowledged the contribution that culture could make to strategy for innovation.

The Commission's term of reference states that the objective of the study is to help the European Commission:

- to better grasp the notion of creativity as well as the various factors that can stimulate it,
- more particularly to have a better understanding of the effective and concrete contribution of culture to creativity,
- to better understand the links between factors that stimulate creativity and culture.

Presentation of the study

The world and the global economy are changing very fast. Collectively, we are faced with very significant economic, environmental and social challenges. The digital economy is transforming the economic and social basis of our society. We know that low cost production centres for manufacturing or service sectors will not be the key drivers of significant value in the global economy in the future. We also know that the "hyper consumption" model is not sustainable. Developed economies must compete on the strength of their skills base and their ability to develop a more "user-centred approach" closer to societal demands and new forms of exchanges.

[9] KEA, *The Economy of Culture in Europe*, European Commission, October 2006 – www.keanet.eu .

At the same time art and culture play an important role in moderating a purely technocratic vision of the world based solely on ideas about technological progress or economic goals. A more humanist vision is required to envision sustainable prosperity.

The study has been conducted within the context of the EU Lisbon policy. The principles of Lisbon are based on the view that industrial production is the real yardstick for economic success, expressed through the value of GDP. In this context the study attempts to link the concept of culture to enterprise, economy, competitiveness and management since it aims primarily to consider creativity as a driver of economic and social prosperity. The study highlights the complementarities of culture to innovation strategies and their crucial role in a post-industrial economy that is moving from manufacturing to a service based economy. It also considers the role of culture in society as a whole which is confronted with considerable social challenges. The study reviews the importance of education and learning in stimulating creativity through art and culture. It then addresses policy development and highlights public policy initiatives aimed at encouraging creativity through culture. Finally the study makes policy recommendations to establish through culture a creative ecology with a view to building a Creative Europe.

The study is divided in 6 chapters:

1. Towards Culture-based Creativity

This chapter proposes to characterise the link between culture and creativity. It develops the concept of culture-based creativity to highlight the elements of culture which trigger creativity. It proposes a distinction between culture-based creativity and innovation to highlight the specific contribution of culture.

2. Culture-based Creativity – the Economic and Industrial Dimension

This chapter looks at the impact of culture-based creativity on industrial and economic performance. First it characterises the importance of culture-based creativity in a changing economy and society. Then it considers the impact of culture-based creativity on the success of enterprises and economic development. It shows that culture-based creativity is an integral part of successful business strategies.

3. Culture-based Creativity in its Social Dimension

Chapter 3 looks beyond culture's economic potential and considers its effects on creativity in the social domain.

4. Creativity and Learning

This chapter considers the role of education and schools in stimulating creativity. It assesses the role played by art and culture as a means of stimulating creativity and highlight best practices.

5. A Review of Policies on Creativity

This chapter reviews EU policies on innovation and creativity.

6. Policy Recommendations

This chapter is about establishing the conditions that could stimulate creativity in Europe, setting out the objectives of a Creative Europe and proposing policy recommendations to achieve such goals.

CHAPTER 1
TOWARDS CULTURE-BASED CREATIVITY

Investigating the relationship between creativity and culture seems an easy prospect. After all, creativity refers to the ability most characteristic of artists or professionals that are active in cultural/creative industries. However in relation to the idea that creativity generates economic and social innovation, the link between creativity and culture becomes less evident. Indeed, traditionally, culture is not considered as a motor of better management or for honing a competitive edge in product development, learning or human resources.

For the purpose of this assignment culture is taken to encompass traditional cultural and artistic activities (performing arts, visual arts, cultural heritage and literature) as well as cultural industries (printed works, multimedia, the press, cinema, audiovisual and phonographic productions, craft, design and cultural tourism). However the study considers culture also as knowledge that is indispensable to the act of creation: culture as a means to nourish the imagination.

In accordance with the terms of the assignment the study is not looking into the impact of culture as a way of life, as an identity or as a set of beliefs, customs or values on creativity. However, it will highlight the importance of culture, defining the identity of a group or a civilisation, because the interaction between cultures and identities is an important element generating creativity in particular in the European context, and its patchwork of culture heritage.

This section attempts to:

- better grasp the notion of creativity as well as the various factors that can stimulate it,
- more particularly have a better understanding of the effective and concrete contribution of culture to creativity.

To characterize the link between culture and creativity the study develops the notion of culture-based creativity with a view to:

- highlight the importance of creators and creative talents and organisations in stimulating creativity,
- recapture the meaning of creativity to the benefit of people who create or are creative,
- distinguish between innovation and creativity in order for innovation policy to take into consideration the specifics of culture-based creativity.

Culture-based creativity will help us characterise innovation within enterprises and societies that stems from culture in the subsequent chapters of the document.

1.1 Creativity

Creativity remains a very complex phenomenon which cannot be reduced to a formula. Invariably, artists and cultural practitioners – that's to say some of the people who most evidently display creative skills - find it difficult to describe.

With a better understanding of creativity as a process it is possible to better comprehend the fabric of creativity and its relationship with the arts and culture. Several scientific disciplines ranging from biology to psychology and sociology have contributed to the science of creativity. Under Appendix 1 there is a summary of the different scientific approaches to define creativity, which have influenced our vision of creativity.

The notion of creativity requires understanding at cultural, individual and social levels.

First of all it is important to acknowledge that creativity is a cultural concept that evolves with time and across countries. It also reflects a cultural constraint.[10] The concept of creativity presented in this study reflects the view of western scientists whose culture, according to Lubart[11], considers creativity as "product-oriented and a originality-based phenomenon aimed at solving problems". The Western view also emphasises individualism, a certain work ethic with a belief in progress.[12]

The prevailing view in Eastern philosophies, by contrast, emphasises the "emotional, personal and intra-psychic elements" of creativity. The goal of creativity in the East would not be so much to innovate as to provide a revelation of the true nature of the self, of an object or of an event. This study finds inspiration in this vision of creativity and comforts the idea developed below leading to the concept of culture-based creativity.

At individual level creativity puts in motion mental and psychic mechanisms which result in something, a discovery, a work of art, a performance. The mechanisms become the expression of the creative power. Creativity is a human capacity that comes into play in a variety of contexts, notably the production of culture. "It relates to the capacity of individuals to think inventively and imaginatively and to go beyond traditional ways of solving problems."[13] Thus the end result of creativity is something new and original (recognising that the perception of new is always context-dependent and always draws on what has existed before).

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[10] On the different cultural perspectives on creativity, see J.Kaufman and R.Sternberg *The International Handbook of Creativity*, Cambridge University Press, 2006.

[11] Lubart, T., *Creativity across Cultures*, in R.J Sternberg *Handbook of Creativity*, Cambridge University Press, 1999, (p339-350).

[12] Gorny, E., *The Dictionary of Creativity* (http://creativity.netslova.ru) – October 2007.

[13] Bryant, William D. A. and Throsby D., Ginsburgh V.A. & Throsby D, *Creativity and the Behaviour of Artists*,. Handbooks of the economics of art and culture, vol. 1, North-Holland, 2006, p.508.

Creativity can be contrasted with intelligence insofar as it is characterised by divergent thinking rather than by algorithmic or convergent thought processes. These characteristics of creativity imply an instability or unpredictability, suggesting that whereas intelligence is arguably measurable, creativity is likely to be far less amenable to standardised evaluations.[14]

Creativity involves a combination of cognitive elements that involve the ability to "connect ideas", "to see similarities and differences", be "unorthodox"," be "inquisitive" and "to question societal norms".[15] Creativity is also the ability to connect with senses and emotions expression of the human soul. Many of these personality elements are common to artists and creative people.

However it is important to stress the importance of contexts, place and social conventions. We would like to specifically highlight the importance of the social environment as it justifies to a large extent public interventions in the setting up of conditions likely to stimulate creativity through education (reviewed in chapter 4) or in relation to innovation policies.

Indeed creativity is often defined as a novel product that attains some level of social recognition. First of all, a creative idea or work must be novel. Yet novelty is not enough, because a novel idea may be ridiculous or nonsensical. In addition to novelty, "to be creative an idea must be appropriate, recognized as socially valuable in some way to some community."[16] This perspective has been developed by writers such as Teresa Amabile who proposed a consensual definition of creativity: "a product is creative when experts in the domain agree it is creative, meaning that the appropriateness is defined by social groups, and it's culturally and historically determined."[17]

Professor Csikszentmihalyi, when attempting to define when and how creativity emerges, stated:" creativity does not happen inside people's heads, but in the interaction between a person's thoughts and a socio-cultural context. It is a systemic rather than an individual phenomenon."[18] The artist Marcel Duchamp felt that the viewer was an essential part of the creative process.[19] The public, the audience or "specialist intermediaries" (for instance, film critics, for instance) have a say on what is creative.[20]

The different perspectives highlight that creativity comes from different combinations of ability and environment, in other words individual pre-disposition and a social context.

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[14] Ibid p.509 – see also chapter 7.

[15] Sternberg Robert J. and Lubart Todd I *The concept of Creativity: Prospects and Paradigms; Handbook of creativity*, edited by Sternberg Robert J., 1999, 2007.

[16] Sawyer, R. Keith, *Explaining creativity – the science of human innovation* , Oxford University Press, 2006, p.27.

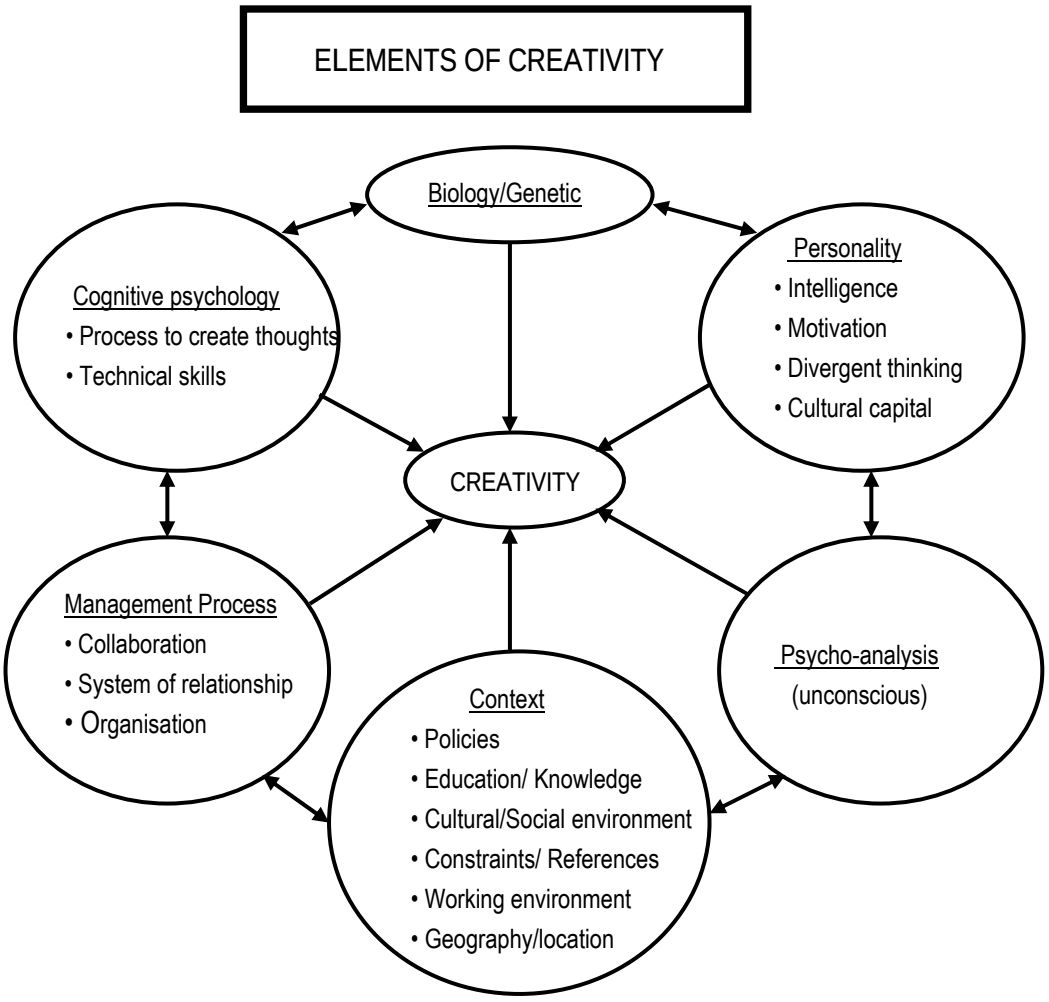
[17] Amabile T., *Social Psychology of Creativity*, NY Springer-Verlag, 1983.

[18] Csikszentmihalyi Mihaly*, Flow and the psychology of discovery and invention*, Harper Perennial, 1996, p.24.

[19] Tomkins Calvin, *The Lives of Artists*, Henry Holt publishing, 2008, p.212. The artist initiates the creative act, said Duchamps, but it is up to the viewer to complete it, by interpreting its meaning and its place in art history.

[20] Csikszentmihalyi uses the term "field" to refer to the group of intermediaries while Pierre Bourdieu, in Les Règles de l'Art, analysed the field as a market transaction between producers and consumers.

The table hereafter summarises the different factors which influence creativity.



The table shows the importance of culture to feed creativity through cultural capital (personality), cultural environment including education (context) and skills (cognitive psychology and technical skills).

1.2 Culture as a source of creativity

Theories and scientific approaches provide helpful tools to understand creativity but are not sufficient to comprehend the cultural dimension of creativity. Research on creativity in relation to culture has tended to focus on the understanding of artistic achievement.[21] As a result the meaning of creativity is indiscriminately applied and has been largely affected by business management literature setting rules to help the emergence of "creative organisations".[22]

Indeed creativity is very much a catch phrase, which means different things to different people. A football player or accountants can be creative. We want children to be creative. Management literature for businesses considers creativity a key asset to stimulate productivity. In the context of this assignment we will propose our own definition of creativity.

The interaction between culture and creativity is complex and culture cannot always be associated with creativity. Culture is also about accepted conventions when expressing for instance heritage, traditions or when it relates to cultural productions that build on the successful and the "tested" (sequels, catalogue exploitation, folklore). Cultural values may also feed intolerance and extremism which hinder creativity.

However without creativity there would not be music, poetry, paintings, literature and all creative activities associated with art and cultural industries. Creativity contributes to the making of culture.[23] Whilst acknowledging the complex interactions between culture and creativity this report is about examining the impact of culture[24] on creativity with a view to contribute to better understand its contribution to the goals of the Lisbon strategy.

Creativity requires conditions to emerge. Let us consider these conditions which are linked to cultural and artistic activities, cultural identities and ecologies. Indeed the main sources of creativity stemming from culture are people (artists, craftsmen, "creatives"), cultural and creative industries, territories and society:

- People (artists, craftsmen, "creatives")

  "*Les artistes – Ils sont d'une autre race et ne le savent pas …. Ils peignent le chagrin dans les coquelicots… ils font la loi demain quand tu vivrais hier … ils décident de tout quand tu veux les soumettre…. ce sont des gens d'ailleurs*"

  Leo Ferré (French Poet)

[21] See in particular Howard Gardener, *Art, Mind and Brain*, Basic Books 1982 or the works from Prof. Csikszentmihalyi.

[22] Glow, H., Minahan, S., Gahan, P., *Definition in Dying in the Arts: Creativity as Metaphor* from – Bowater School of Management, Deakin University, Australia, 2005, p. 19.

[23] Csikszentmihalyi, M., *Creativity*, Harper Perennial, 1996, chap.13, p.317.

[24] For the purpose of this assignment culture is taken to encompass traditional cultural and artistic activities (performing arts, visual arts, cultural heritage and literature) as well as cultural industries (printed works, multimedia, the press, cinema, audiovisual and phonographic productions, craft, design and cultural tourism).

Whilst before the Renaissance, artists were essentially craftsmen (and this did not prevent them from creating significant works of art[25]), the idea of what constitutes an artist today encompasses people as diverse as the art conceptualist (expressing through an artistic vision a new reality or new things, a Picasso), the creator of products or strategies (supporting an industrial or commercial vision, a Philippe Starck or a Richard Seymour – "I am a wrapper of commerciality"[26]), an art professional (mastering the art techniques to express a style – a Cezanne), an entrepreneur of artistic vision (an artist turned entrepreneur, an Armani, Paul Smith, Takashi Murakami) and an individual mastering new technology to invent a new form of communication and artistic expression ("a user generating content").[27]

Therefore the idea of what constitutes an "artist" (or a "creator") is elusive and has evolved significantly with time. The difficulty of defining artists today is illustrated by the following. When asked whether an architect like Franck Gehry (architect of the acclaimed Guggenheim museum in Bilbao for instance) is an artist, Richard Serra stated[28] that architects such as Gehry or Koolhaas (and we could add, by extension, designers) are not artists because they have to answer to "the client, the programme and that everything that goes along with the utilitarian function of the building." By comparison artists would only be concerned by the symbolic and poetic.[29]

This study will not adopt the narrow definition proposed by Richard Serra[30] nor will it attempt to define the term "artist". Artists and creative professions share in common: the ability to think laterally, to communicate (establish friendly "user interfaces" for instance), to challenge traditional solutions and visions. They often

[25] For Plato only poets and musicians could be tolerated as artists to the exclusion of painters for instance because poetry is not only pleasant but also useful (like philosophy).

[26] Interview with Richard Seymour, Designer, CEO of SeymourPowell a designing company, in June 2008 (London).

[27] Thoughts on artistic creativity and its meaning date only from the 18th century. It coincides with the idea that creation is not only of divine essence but can also emanate from human action. It took a long time however to admit that imagination, intuition, emotions and passions can be creative forces. A major evolution came with Descartes in the 17th century who acknowledged the importance of individuals "autonomy" and who showed the subjectivism in assessing beauty, which cannot be captured by reason. However the same Descartes in *Discours de la Méthode* made scientific method and rationalism the only source of knowledge to the detriment of imagination, fantasy or taste. The century of classicism, or the century of reason, is defined by the research of the reasonable, where the source of all ideas stems from the thought that is in the reason, rational mind. Romanticism was the birth of the contemporary notion of creativity. Friedrich von Schiller took the view that art plays a role in the evolution of human kind and that artistic creation is a factor of transformation of society whilst criticising that his time was subordinated to utilitarism, market imperatives or that scientific progress was marginalising the art. He denounced in "*Briefe über die ästhetische Erziehung des Menschen"* (1794) utility as the idol of the epoch.

[28] Op.cit Tomkins, Calvin, 2008.

[29] However Serra also noted that Gehry "is one of the few architects of this century who has bought the procedures and thought processes of contemporary art into the world of architecture".

[30] According to Rich Gold: "Artists are not supported by corporation, so as much as they are part of the corporation, and they rely on the corporation for manufacturing, advertising and distribution" asserts Rich Gold who distinguishes between three classes of artists, represented by different hats: the beret wearer who seeks a kind of truth (integrity), the baseball cap representing popular art that focuses on pleasing audiences and the straw hat artists who make art for themselves or friends. Rich Gold, *The Plenitude, creativity, innovation and making stuff*, MIT Press, 2006.

follow the same educational path with a strong emphasis on artistic skills. They are constantly inspired by art and culture as a source of ideas. In our view what characterises an artist and a creative person is talent and imagination coupled with often a capacity to think and see differently in a non linear way (or in a disruptive fashion). These persons drive creativity and personify the influence of art and culture on creativity.

The emphasis is put on persons (artists or "creative professionals") as the main source of creativity because without such talents cultural and creative industries would not exist. It is important to acknowledge the different and varied means of creative expressions or inputs whilst at the same time respecting the motivation triggering a creative act.

It is should be stressed that creative people are often brokers across disciplines whose skills and attitudes are conducive to creativity because of their ability to think laterally, and to express abstraction and symbolism[31] . They are interlopers.[32] Given the importance of technology in enabling expression in a digital world, artists and creative people are also turning into polymaths[33], a person with varied knowledge and skills. It is 'a new Renaissance', a time which considers men and women's capacity to mix technical and creative knowledge like Leonardo da Vinci. Art works increasingly like a laboratory; contemporary creation is making use of new technologies (in fashion, performing arts, cinema, music, videogames, architecture, design). Computer animation requires both artistic and technical skills. It requires knowledge in art, design and computer science. The frontiers between culture, business and technology are even more blurred. Designers work at the intersection of industry and culture.

At the same time creative expressions are the heart of the digital economy in which millions of people cut and paste, mash, exchange digital files through the internet to invent new forms of social relations and modes of expression that are interactive and participative. These cultural expressions are also a powerful source of creativity. They often exist through social networks on the Internet. The latter has become a new place for "creators" to share their visions and seek social recognition, independently of traditional production and distribution infrastructures. *In the Wealth of Networks*, law professor Yochai Benkler notes that the masses have now the means to distribute new forms of goods: "We can make the twenty first century one that offers individuals greater autonomy, political communities greater democracy and societies greater opportunities for cultural self-reflection and human connection."[34]

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[31] Rothko, M., *La réalité de l'artiste*, Flammarion, 2004. For a distinction between artists and creative people based on the motivation of the act of creation. He compares the artist with philosophers in their capacities to deal with reality as a whole as opposed to science focusing on specific phenomena (p.77).

[32] "Interloper" (from English to interlope) means: To intrude, or trespass in others' affairs. Expression used by Fabrice Hybert to characterise artists (Interview carried out in Paris, December 2008). For Fabrice Hybert, the artist is a catalyst, an enabler of solutions, in the chemical sense of the term. He crosses the knowledge and technologies (physics, psychology, crafts, and astronomy). See also video on www.untitled-sanstitre.eu .

[33] A polymath is a person with varied and deep knowledge in particular in art and science (from Greek polymaths) - Wikipedia. Examples of famous polymaths: Copernic, Descartes, Leonardo Da Vinci, Averoès, Darwin, Goethe.

[34] Carr, Nicholas, *In The Big Switch*, W.W Norton 2008, p.141.

- Cultural and Creative industries[35]

It is crucial to associate cultural and creative industries as a source of creativity because such structures enable the expression of creativity and its distribution. They are the main financier of creativity (often together with public institutions) and therefore important risk-takers. They play an important role in promoting and marketing creativity. They also trigger creativity by developing projects, putting trust in talent, advising or by fostering creative collaborations. The use of services from the creative industries helps other firms to increase their innovation potential.[36]

- Territories as a source of creativity

Richard Florida[37] showed that conventional assumptions about the relationship between investment, technology, human capital and growth are not the same as traditionally argued. He says that creative firms will increasingly follow the talent (which he labels "the creative class") because creative people look for cultural amenities. A virtuous circle can then be nurtured, because these creative people once gathered in a specific place will create synergies and fruitful collaborations, thereby fostering further creativity. The model of interaction is given a new dimension through new technology and internet which enables this interactivity to become global.

Europe is such a territory, providing many cultural offers and amenities that foster creativity. However, it is somewhat ignorant of this asset's potential (perceived in the field of art rather as a tourist attraction than as an innovation stimulator). Europe and its regions have yet to make the most of exploiting this creative circle.

Europe has developed a model of social interface and communication between people with different cultures. Nurturing this interaction between cultures is a vital means of stimulating creativity and innovation. It remains a challenge at a time of resurging nationalism linked to globalisation concerns. To a large extent Europe's future is dependent on its ability to transcend local identities (whether national or regional) to harness creativity but also to ensure the presence of multiple local identities in an international context. Asserting a creativity ambition would give Europe a central role in the meeting of influences and ideas. Europe would increase its potential for developing both creativity and innovation.

- Society as a source of creativity

Social and political recognition legitimises the role and influence of culture in the process of creativity. This remains largely true today where culture is considered to be on the fringe of economic and societal development. The capacity of artists and creative professionals to cross boundaries, to think laterally or their entrepreneurial spirit remains to be appreciated as creative forces in innovation policies for instance.

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[35] For a definition see KEA, *Economy of Culture in Europe*, October 2006, p.43. (www.keanet.eu)

[36] Bakhshi, H., McVittie, E. and Simmie, J., *Creating Innovation. Do the creative industries support innovation in the wider economy?*, NESTA, March 2008. See also p.68 of the report.

[37] Florida, R., *The Creative Class*, Basic Books, New York 2002.

The school system still often illustrates the importance given to mathematical reasoning over other sciences as a tool to measure intelligence and to determine social success. The place given to art and artistic expression in the curriculum reflects on the other hand the lack of importance granted to the stimulation of creativity through art and culture. Thoughts on artistic creativity and its meanings date only from the 18th century in Europe. It coincides with the idea that creation is not only of divine essence but can also emanate from human action.[38] It took a long time however for society to admit that imagination, intuition, emotions and passions can be creative forces.[39]

By stimulating the adoption of digital technology, by supporting the arts and cultural industries or by nurturing tolerance society contributes to the expression of creativity. Society increasingly recognises that creativity mixes elements of "artistic creativity", "economic innovation as well as "technological innovation". Creativity is a process of interactions and spill-over effects between different innovative processes. Innovation cannot be encouraged without acknowledging the importance of cultural creativity in the overall process.[40]

Society also influences creativity through regulation by protecting creators or promoting investment in cultural activities (through intellectual property for instance). The Creativity index described in Appendix 3 is an attempt to list policy measures providing an environment conducive to creativity in a society.

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[38] Jimenez, Marc, *Qu'est-ce que l'esthétique ?* Gallimard,1997.

[39] A major evolution came with Descartes in the 17th century who acknowledged the importance of individuals 'autonomy" and who showed the subjectivism in assessing beauty which cannot be captured by reason. However the same Descartes in *Discours de la Methode* made scientific method and rationalism the only source of knowledge to the detriment of imagination, fantasy or taste. The century of classicism, or the century of reason, is defined by the research of the reasonable where the source of all ideas stems from the thought that is in the reason, rational mind. Romanticism was the birth of the contemporary notion of creativity. Friedrich von Schiller took the view that art plays a role in the evolution of human kind and that artistic creation is a factor of transformation of society whilst criticising that his time was subordinated to utilitarism, market imperatives or that scientific progress was marginalising the art. He denounced in "*Briefe über die ästhetische Erziehung des Menschen* (1794)" utility as the idol of the epoch. (Marc Jimenez, *La Querelle de l'Art Contemporain,* Folio, 2005, p.171)

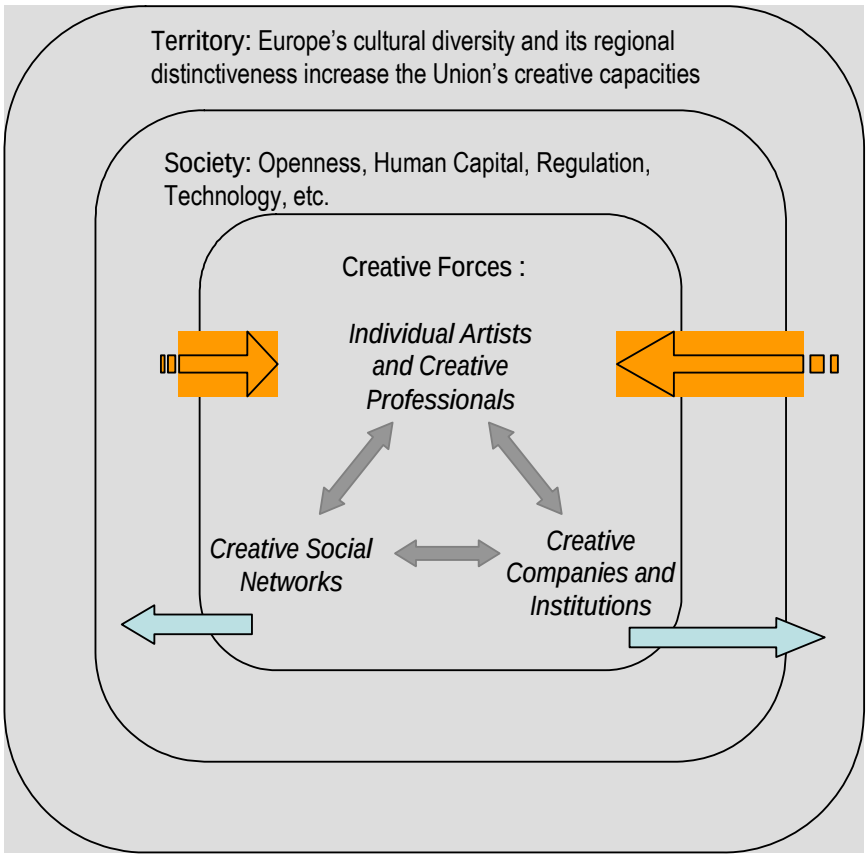
The whole world of representation and of knowledge underwent a fundamental transformation at the end of the 19th century. The history of aesthetic modernism is very Euro-centred with Paris, Vienna (the military defeat of Austria in 1866 made Vienna a capital without empire but which attracted talents from throughout Europe: Karl Popper, F.Hayek, Wittgenstein, Schönberg, Freud, Gombrich, Lorenz, Schnitzler, Schiele, Klimt ….) and Berlin the dominant world centres. The publication by Taylor in 1911 of "*The principles of scientific management"* coincided with the breaking down of the mode of representation set during Enlightenment. An incredible diversity of thoughts and experimentation by the modernists emerged: Proust, Joyce, Lawrence, Mann, Baudelaire, Flaubert in literature, Matisse, Picasso, Brancusi, Duchamp in painting, Stravinsky, Schoenberg, Bartok in music for instance. The changes were affected by the loss of faith in the ineluctability of progress. The philosopher Nietzsche (1844-1900) placed aesthetics above science and rationality.[39] The barbarism of the two world wars is putting an end to unwavering faith that technology and rationalism are the only force of progress. It should be remembered that Einstein published its theory on relativity at the same time as Picasso painted "Les Demoiselles d'Avignon" (1906), they were both 26 years old. Cubism and relativity are born at the same time. They both contributed to enable a different representation of space and time.

[40] KEA, *Economy of Culture in Europe*, European Commission, 2006, p.41.

The following table aims to summarize the various cultural interactions which are sources of creativity. It distinguishes between three sources:

- Territories, as expressions of identities.
- Society which nurtures a creative ecology conducive to creativity through regulation, education or investment in technology and culture.
- Creative forces represented by "creators and creative professionals", creative companies and institutions as well as creative social networks.

Culture: sources of creativity



Creative activities are also the most advanced expression of new methods of production and new social relations linked to the evolution of capitalism. The artist and people working in creative sectors epitomise the new worker: mobile, motivated, autonomous, flexible, and well educated.[41]

1.3 Culture-based creativity

Creativity is usually defined "as a product oriented phenomenon aimed at solving problems."[42] This study aims to highlight another dimension of creativity and stress that creativity is first and foremost a quest, a risk, a sketch, an approach rather than a solution. This form of creativity is intrinsically linked to creativity which finds its source in art and culture. As a result our study aims, with a view to understand the impact of culture on creativity, to characterise creativity stemming from culture. Indeed creativity is not the monopoly of artists or creative professionals, hence the concept of culture-based creativity.

What characterizes culture-based creativity is encapsulated in the following definition: "creativity is a process based on intrinsic value and motivation that is often spontaneous, rebellious and chaotic"[43] and that can be stimulated whether in early life, at home, school or work by nurturing exploration. We would like to add that culture-based creativity is essentially an act of imagination relying on memories.[44]

1.3.1 Origin and functions

Culture-based creativity is creativity which originates from creative people as defined in the previous section. This form of creativity embodies a large number of features of cultural productions:

- It is the realisation of a vision that results in something new that is not necessarily functional or dependant on a pre-existing theory or scientific integrity.
- It is both abstract and concrete. It can have a symbolic, prophetic, aesthetic or spiritual dimension.
- It is a non-linear and uncertain process which does not follow a predictable timetable.

To emerge culture-based creativity requires:

- Personal abilities (ability to think laterally, to be imaginative, to think "out of the box").
- Technical skills (often artistic skills and/or craftmanship).

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[41] Boltanski Luc and Chiapello Eve, *The New Spirit of Capitalism*, Verso, Paris 2005 as well as op.cited KEA 2006 p. 70-98.

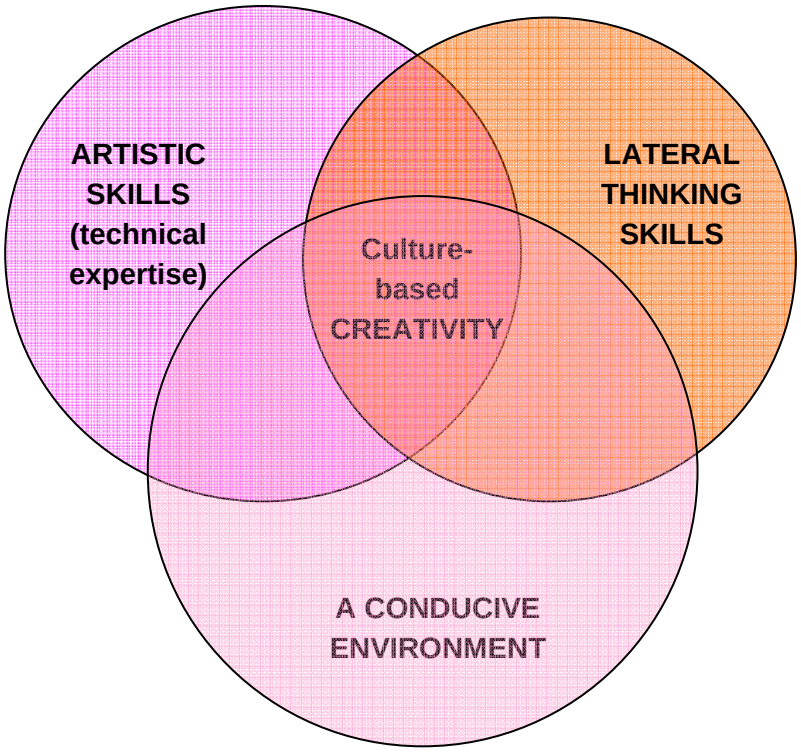
[42] Op.cit Lubart, 1999.

[43] Collective paper with Glow, H., Minahan, S., Gahan, P. – Bowater School of Management, Deakin University, Australia, 2005. Conference paper.

[44] Very well illustrated in Julian Schnabel's film on Jean Dominique Bauby's life in "*The Diving Bell and the Butterfly*" – Best director Cannes Film Festival and Golden Globe 2008, Pathé Production.

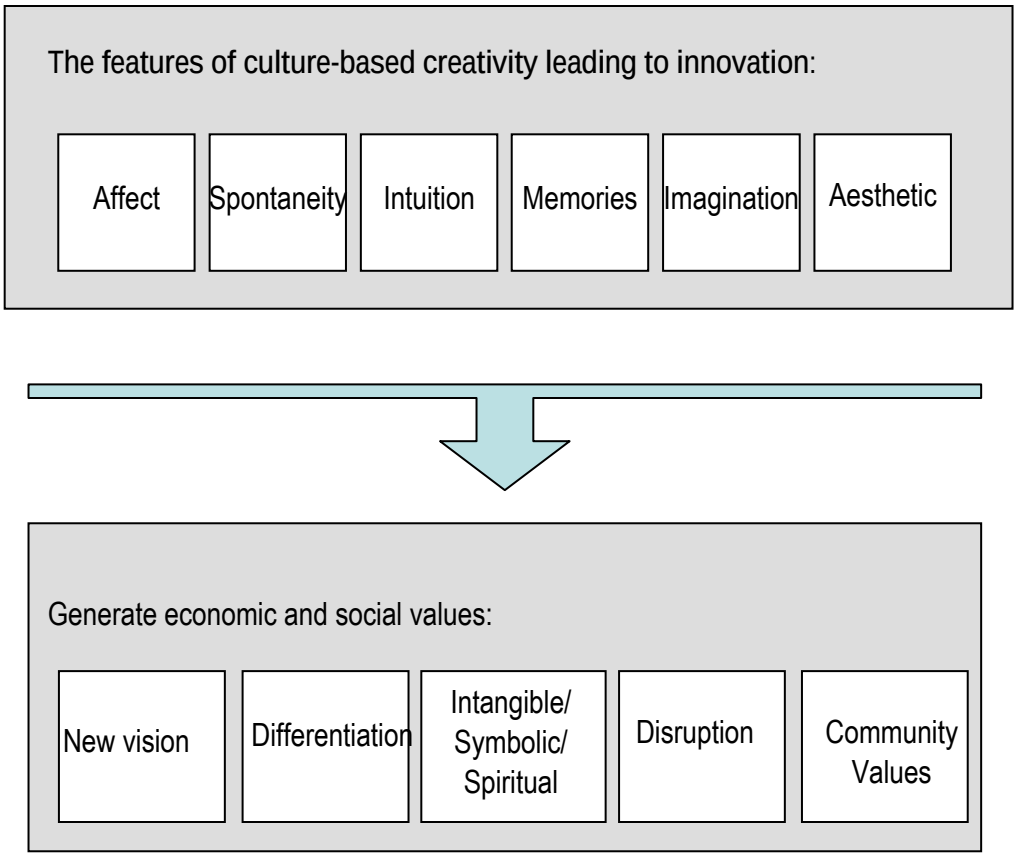
- A conducive social environment that for instance encourages creativity (notably through art education), promotes investment in art and culture or citizens' cultural participation etc. The Creativity Index in Appendix 3 considers some features of such an environment conducive to culture-based creativity.

Components of culture- based creativity[45]



[45] This chart is inspired by the three components of creativity from T.M.Amabile in *How to Kill Creativity*, Harvard Business Review, 2000, www.hbrreprints.org.

The features of culture-based creativity which generate economic and social values are described below.



It is when creativity is the expression of human sensibility (such as imagination, intuition, memories, affects) that it becomes culture-based creativity. Creativity then becomes the privileged expression of the being, values (territorial, social, theological, philosophical), the aesthetic, the imaginative or the meaningful.

As a result, culture-based creativity:

- Nurtures and generates innovation (cultural, economic and social),
- enables innovation to be more user-centred,
- essentially refers to the work of artists and creative people,
- is a process that is essential to cultural and creative productions, to marketing-driven industries and often helps give meaning to the act of consumption (as will be demonstrated in Chapter 2),
- provides means to stimulate social cohesion (Chapter 3),
- can be stimulated by the environment (society, institution, family, education etc.) (Chapter 4).

1.3.2 Creativity and innovation – The features of culture-based creativity

From science one expects discoveries, from technology one expects progress. For creativity the outcome may not be as apparently useful or productive. But creativity is an intrinsic part of innovation and supports innovation. There cannot be innovation without creativity. Culture-based creativity is creativity calling on art and culture for its emergence. It is "essentially about the passion and love or connecting with one selves as human beings."[46] Culture enables one to make this connection or surrender to the unexpected source of creativity. Therefore creativity as an outcome is often about the art of expressing the traditional, the emotional, the spiritual, that which is visionary and inspirational.

"Creativity is the essence of being" stated Vaclav Havel at the Forum for Creative Europe in Prague in March 2009 (*http://www.forumforcreativeeurope.cz/en/*), highlighting the importance of human creativity to convey the emotional, the spiritual (the writer and former president of the Czech Republic referred to Cathedrals as an example of the expression of the human genius). Creativity is about experimenting, interrogating without necessarily producing a tangible result. According to French artist Fabrice Hyber: "It is a way of being that often challenges determinisms and values to multiply the possibles."[47]

Culture-based creativity is not necessarily "useful" (capable of being put to use or in the economic sense of "utility" or "efficiency"). In innovation and often creativity, the notion of usefulness is rather linked to the production of new products or services or the idea of servicing a productive end or finding a solution whether through technology or processes and methods.[48] "The inventor solicits patents."[49]

In our view the distinctive features of culture-based creativity are:

- Intuition / imagination / utterance of a vision, a phantasm
- More individualistic (especially in art)
- Express spirit of life, a skill / talent, an optimist act
- A language on its own,
- Often related to aesthetics
- New expression of the tradition

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[46] Reid, D., *Poetry as Paradigm Shifter*, presentation at the Creativity World Forum in Antwerp, 20.11.2008
"Poetry has a tendency to transcend the tangible and the intangible. It reaches deep into your core and speaks to that part of you which is often a small voice wanting to be known, often pushed aside by business, by ego, by wanting to fit it. Innovation and creation are about surrendering, surrendering to your deeper will, surrendering to what wants to shape itself through you, surrendering to your own beauty."

[47] Hybert, F., *Hyber,* Flammarion, Paris,.February 2009

[48] Runco, M.A, *Creativity.Theories and Themes :Research,Development and Practice*, Elsevier, 2007. He presents several authors defining creativity as involving the creation of something new and useful. See also Ernesto Villalba, *On Creativity*, JRC Scientific and Technical Reports, European Communities, 2008, p.12 and R. Sternberg, *Handbook of Creativity*, Cambridge University Press, 1999, p3.

[49] Steiner, G., *Grammaires de la Création*, Folio Essais, 2001, p.222. On the distinction between innovation and creation in particular in relation to mathematics, see Chapter IV, p.213.

- Mean of innovation/disruption
- Spontaneous[50] and disinterested
- Not directly traceable to established laws[51]
- Difficult to measure (copyright is not subject to registration and design application results rarely in patenting)
- Expression of values and human spirit.

[50] Emmanuel Kant emphasises the unprecedented, spontaneous nature of the creative act or process. Source Kant E., *The Critique of Judgment*, Oxford University Press,1952.

[51] In general scientists seek to understand the basic laws of nature to express these laws as mathematical equations in Gold R., *The Plenitude*, the MIT Press, Cambridge, 2007, p.9.

CHAPTER 2
CULTURE-BASED CREATIVITY – THE ECONOMIC AND INDUSTRIAL DIMENSION

"We are going back to the renaissance model in which artists could work in any discipline"

Frank Gehry [52]

In the 21st century the globalised economic market requires technological innovation to increase productivity. But it also needs other forms of innovation that are non-technological which are linked to enhanced services to consumers, the development of a brand, new forms of labour organisation, or the discovery of a new design. The economy is increasingly innovation lead. Innovation has become a key competitiveness indicator.

There cannot be innovation without creativity. In Chapter 1 we have circumscribed creativity that is culture based. In relation to the economy culture-based creativity is a form of innovation that essentially helps businesses and institutions (whether public or private) to drive marketing, communication, human resources or product/service innovation. Culture-based creativity is that which enables innovation to leave R&D laboratories and create or find its market. It contributes to making companies - whether in manufacturing or in services - stand out from competition, through branding, better design or user interface. Culture-based creativity enables going beyond the mere functionality of the product. It is a resource capable of adding another meaning to the act of consumption, giving a sense or ethical or aesthetic value to production and facilitating product or service differentiation.

The economy is more and more about creating the "unexpected", the "emotional", the story that will connect people or the improved "user interface". This "experience" or "entertainment" economy is more marketing-driven than the manufacturing economy. The economy is also about "word of mouth" and creating a more and more elaborate dialogue with consumers, in particular in order to get increased feedback. This socialisation bias is a major characteristic of the digital economy. The ability to create social experiences and networking is a factor of competitiveness. It is an economy that can also better reflect people's concerns for the environment, the crisis of values and their cultural identities. The market requires imaginative skills as much as technical competences.

Quite apart from the economic importance of creative industries themselves, creativity which draws upon art and culture is recognised as a tool to create emotional experience, to empathise and influence human behaviour. It contributes to increased economic value through innovative design or branding for instance. "Art" is creeping into everything from toothbrushes to cars (the "Picasso" car from PSA). It is the age of

[52] *Financial Times,* 22 November 2008.

aesthetics[53] in which art and culture are of paramount importance, as goods made or promoted with creativity are soulful, funny, entertaining, ironic, inspirational, and insightful. Independently of its aesthetic value, culture-based creativity more importantly is also required to inject visions, values, establish emotional attachment and bonds. It can also contribute to disrupting routines and linear thinking in business management for instance.

This section is designed to demonstrate how industrial processes are using what we have characterised as culture-based creativity to generate or satisfy demand as well as to trigger economic growth and how this phenomenon will gain in importance while the nature of the economy both in Europe and across the world is fundamentally changing.

This chapter considers first how creativity is one of the main drivers of the new economy; an economy in which change is being driven by both social concerns around sustainability and well being as well as by commercial pressures from emerging economies. It then shows how industry requires culture-based creativity to succeed in this new paradigm. The chapter considers how culture contributes to creativity at an industrial level and highlights the impact of creativity on the competitive strategies of businesses. Finally the chapter examines ways to measure non-technological creativity in firms and illustrates the steps taken to stimulate or "manage" the process of creativity in companies drawing from the management of creativity within the culture and creative sector.[54]

2.1 The characteristics of the new economy

The importance of creativity is intrinsically linked to the development of the economy in developed economies.

The new economy is characterised by:

1. New forms of consumption with features including:

- Speed: the product life cycle is shorter (in particular in the ICT sector). As a consequence:

[53] Postrel Virginia, *The substance of style,* Harper Collins, 2004.

[54] This chapter associates art, culture with commerce and business strategies. This is likely to create controversy; the fear being that the study contributes to the "instrumentalisation" of art and culture by the market. The fact that art has very long been associated with religions or wars does not pose any problem in our societies but linking art with commerce still remains an issue. Andy Warhol created controversy when stating that the ultimate in art is the art of business (and before him when Marcel Duchamps in 1919 designed the "ready-made" as work of art). Art and culture have always been associated to commerce and the expression of economic power (a feature of western culture). The risk is rather to reduce the contribution of art and culture to economic goals or that the market (and short term vision) on its own determines creativity (hence the need for public policies).

- collaboration in research and development is essential to share the costs in a fast-paced economy,
- being first to market is an imperative, in particular in the digital economy,
- it is important to differentiate products and range;

- Customisation: Products are now individualised for a variety of market segments. This requires strategies to differentiate goods and services;
- Intangible values (meanings, experience, aesthetic, user interface) are given as much importance as the functionality of the product. The cultural value of a product is, in some cases, becoming as important as its economic value.[55]

2. New forms of organisations of economic activities:

- where equal importance is given to access and ownership or where people attach as much or more importance to sharing than to selling,
- which give pre-eminence to the expression of talents in the organisation of companies by valuing freedom and autonomy as well as divergent thinking.

The transition from a manufacturing-based economy to one in which intangibles are a key source of value is also marked by the increasing sovereignty of the consumer. Very often, consumers are no longer looking simply for products but for a brand which is associated with a set of values.

In this new paradigm, marketing is as important as production. This new economy requires creative skills and thoughts as productivity gains at manufacturing level are no longer sufficient to establish a competitive advantage. Culture-based creativity is a powerful means of overturning norms and conventions with a view to standing out amid intense economic competition. Creative people and artists are key because they develop the ideas, metaphors and messages which help to better interact with society.

The following sections consider some characteristics of this new economy which are very much linked to cultural features (aesthetic, power to disrupt, ability to connect (identity), meanings). They show the importance of culture-based creativity in addressing new opportunities and challenges.

2.1.1 An economy of experience

According to economists and sociologists the economy has entered a new phase "where immaterial value will determine material value". The relationship between the sign and the object is being reversed according to French sociologist Leo Scher: "the sign is becoming more real than the object and the object more virtual

[55]Throsby, David, *Economics and Culture*, Cambridge University Press, 2001. The book reflects on the distinction between economic and cultural value (aesthetic, spiritual, social, historical, symbolic and authenticity).

than the sign." We have entered the "all cultural" age where the value of meaning will prevail over material value. It is the cultural value of the product that will determine its meaning and value.[56]

Likewise, Scott Lash and John Urry [57] show that "what is increasingly produced are not material objects, but signs." These signs can be content and informational goods or they can have primarily an expressive (aesthetic, symbolic or social) content (post modern goods). Some business management specialists have identified the "Experience" as a new source of value, distinct from services. According to B.J Pine and James Gilmore "the service economy is peaking. A new emerging economy is coming to the fore, one based on a distinct type of economic output. Goods and services are no longer enough."[58] In the experience economy people no longer buy a service, but an experience which provides memories or sensations. Experiences are events that engage individuals in a personal way. The ability to engage people in a personal way is a strong feature of culture-based creativity as it is capable of generating emotions, values and vision.

"Word of Mouth" – The "experience" in the food business

In the marketplace for food, the way to sell food is to sell the sense of well-being and nutritional benefits which are associated with it. Retailing may be as important as the food itself. The incremental return is lowest at the product level so what matters is the experience around the product. The emphasis is with connecting with "hearts of consumers", creating brand loyalty based on experience. R&D needs to connect with consumers' sensibility, the "word of mouth" has become crucial as the product needs to be endorsed by a community and a social network. Nestle is behind the Nespresso concept which has transformed the way consumers buy coffee. They are invited to buy the Nespresso experience, through the retailing experience or club membership.[59]

A sharp critic of contemporary society French theorist, Jean Baudrillard, has shown that technology no longer gives account of the value of an object. The non rational aspect of consumers' needs questions the technological rationality of the object.[60] As a result the object acquires another signification correlated to the cultural environment or social aspirations. The object becomes intrinsically linked to the subject and the world it attempts to create. Functionality becomes secondary in the act of purchase. According to Baudrillard, the consumption society is a consumption of signs, signs of happiness, wealth, meanings. He claims that the "sign-value" (as opposed to use-value or exchange value) which is the expression of style, prestige, power, luxury, becomes essential in consumption. The importance of "sign value" has given

[56] Dru JM, *Disruption*, *Overturning conventions and shaking up the marketplace*, John Wiley and Sons, New York ,1996, p.213.

[57] Lash, S. and Urry, J., *Economies of Signs and Space*, Sage publication, 1994, p.4.

[58] Pine, B.J and Gilmore, J., *The Experience Economy,* Harvard Business School Press, Boston, 1999.

[59] Extracts from an Interview with a Nestle executive, Brussels June 2008. It is worthy to note the use of vocabulary and terminology that is common in creative businesses like "word of mouth" in cinema.

[60] Baudrillard, J., *The conspiracy of Art*, Semiotexte, New York, 2005 and Leonelli, L., *La séduction Baudrillard*, Ecole Nationale des Beaux Arts, Paris, 2007.

tremendous importance to creative functions in the economy represented by artists, advertisers, designers, marketers, mass media and culture.[61]

Pine and Gilmore warn companies that "businesses that relegate themselves to the diminishing world of goods and services will be rendered irrelevant". To avoid this fate, businesses are obliged to stage a rich, compelling experience. Experience is part of the strategy to generate or better accommodate demand and to develop customer loyalty. It is also part of the search for differentiation from competing brands or products. The futurologist Alvin Toffler predicts that "eventually the experience-makers will form a basic, if not the basic, sector of the economy."[62] Artistic creativity will become a key driver of the experience industry – whether the sector concerned comes from tourism, entertainment or the arts. "The economy is being transformed from a giant factory to a grand theatre."[63]

Key offerings in the experience economy include:

- memories (the value of the experience lingers in the memory of the individual engaged in the event),
- personal (the individual can relate to the experience),
- reaching the senses (creating an individual emotion).

Culture-based creativity establishes such memorable events that touch individuals emotionally. It is an integral part of the experience economy.

As an example, when Virgin Atlantic entered the airline business, the differentiation came from entertainment services and the experience offered on transatlantic flights. Virgin was the first airline to offer massage on board or multiple choices of music and videos; a service that has now become a standard norm in air travel. It is no accident that Virgin founder, Sir Richard Branson, came from the music business and applied the "hip and cool values" associated with the Virgin record label to the airline industry.

Virgin Atlantic decided that it would do more than transport people from place to place. Its model was then copied by other airlines throughout the 1990s and beyond. Virgin has since extended the idea of a particular set of brand values into an extremely diverse range of sectors – ranging from mobile telephony to health clubs to trains.

Many companies in all sectors wrap experiences around their existing goods and services to differentiate their offerings. Doing so, they enhance the environment in which the client purchases services and goods.

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[61] Stanford Encyclopedia of Philosophy – http//: plato.stanford.edu/entries/baudrillard. His argument is that in a society where everything is a commodity that can be bought and sold, alienation is total.

[62] Rifkin, J, *The Age of Access,* Jeremy Tarcher/Putnam, 2000, p.144.

[63] Ibid p.163, footnote 22.

Another example is high street fashion retailer H&M which associates its name with creators in the fashion (Lagerfeld, Comme des Garçons), design or music world (Madonna). Nike - through Niketown - is providing consumers with "shopertainment" or "entertailing".[64]

Similarly it is the experience (through aesthetic and the user interface) provided by the iPod, the iMac or the iPhones that make these innovative technology products so popular, triggering mass interest at their launch. As a consequence, Steve Jobs, the CEO of Apple, developed an iconic status equivalent to an entertainment star.

Such goods and services need to provide a sensory and visual experience. The experience will very often involve artistic or visual impressions. The fashion industry, for example, likes to be associated with contemporary art.

The shift in consumer demand for experience reinforces the need for companies to structure an offering that addresses individuals' desire. Companies are calling upon the services of anthropologists and sociologists to understand human behaviour.

An economy of signs highlights the importance of creative functions in this pleasing and socialisation process. The creative functions within industry which are required to stage such experiences include design, marketing, advertising and communication. All these functions draw on culture-based creativity and the work of artists and crafts people.

2.1.2 When cultural value becomes as important as economic value – the sharing economy

Just as an increasing number of aspects of the economy are focused on experience, we are also seeing the parallel rise of what might be called "a sharing economy". The sharing economy differs from the "commercial economy" in so far as money or price is not the central aim of the exchange.[65]

What do we mean by sharing economy? Wikipedia is a good example of the sharing economy paradigm. A wiki is a platform that lets anyone write or edit in a common space. Wikipedia became a set of norms and software which were used to develop an encyclopaedia for everybody to access for free. Thousands of people throughout the world volunteer to write original articles. Contributors are motivated by fun in what they do and the sentiment of belonging to a community of volunteers.

The sharing economy postulates that:

- The production of wealth may no longer be the ultimate goal of society (but the creation of social links for instance);

[64] Nike has a policy of association with artists or art schools. It also launched artistic competitions such as "Art and Football" a competition launched in 2008 to inspire creative thoughts amongst Nike's shoppers.

[65] Lessig, Lawrence, *Remix,* The Penguin Press 2008. The book highlights the features of the emerging sharing economy.

- Money is no longer the main term of exchange in some relationships.

The economist and futurologist Jeremy Rifkin predicts the shift from a property-based regime (characterised by ownership) to an access regime.[66] Building on the idea that accumulation of goods in the new economy makes less sense (because of sustainability concerns), markets give way to networks structuring a new economic relationship where industrial production is replaced by cultural production based on the marketing of cultural experiences. The centre of hyper-capitalism would be "tourism, entertainment, theme parks, fashion, wellness, sports, cultural products, internet etc". The "age of access" would be the commoditisation of play, "namely the marketing of cultural resources". Rifkin predicts that in this new economy, where ownership is no longer central, local cultural resources become the new commodity (with the attached risk of depletion and over exploitation).

The Internet epitomises this new network economy with more than 1.5 billion people in the world connected online. It also illustrates the "sharing" and "access" economy in the way cultural products (whether music or audiovisual) or information goods are "consumed" online.

Culture plays a key role in the sharing economy as it is a key element in fostering social networking and sharing. It thus contributes to the establishment of communities of people sharing the same interests with values often expressed through music, literature, computer games or cinema/TV. The success of Facebook, YouTube or Twitter illustrates this quest for virtual socialisation as well as the sharing economy. Art and culture as a mean of expression play a key role in social life, notably music "which plays an essential role of group belonging amongst the youth"[67].

This sharing economy has important implications for businesses because when young people spend more time on social networks such as You Tube (than passively watching television) the industry needs to apprehend this social trend and find new ways to interact with its customers. Culture-based creativity is the heart of this new paradigm that requires ability to capture attention.

From car ownership to provision of mobility services – the car industry and the sharing economy

A very important trend today is the link between consumption and ethical behaviours. Consumption is becoming more relational than transactional. In developed countries, to take into account environmental concerns but also social developments, car companies are preparing to move into the business of offering a service of mobility rather than a car. People want to move from one point to another. They do not necessarily want to own a car. Therefore it is possible that car sharing will significantly develop in the future. Social networking will be important too (for instance the success of the "Mini" car club). This obliges car manufacturers to develop greater interactions with urbanists and architects in order to anticipate new trends

[66] Rifkin, J., *The Age of Access,* Jeremy Tarcher/Putnam 2000.

[67] Neurobiologist Changeux, J.P., Le Monde, 30 May 2009. On neuroscience to understand the process of artistic creativity and its social influence or function, see J.P Changeux, *Du vrai, du beau, du bien*, Odile Jacob, Paris, 2008.

and social behaviours. In this respect PSA Group finances the work of an Institute for the town in movement (IVM).[68]

The importance of community building in the new economy through the Internet is highlighted by Chris Anderson, Editor of the Wired Magazine. He anticipates a digital economy where prices fall towards "zero". As a consequence there would be a drive for companies to get to "zero first" with a view to obtain the first mover advantage and build reputation. Reputation would be measured against traffic which would become the main currency, replacing money.[69]

We would like to stress that with a view to establish "reputation" and the first-mover advantage, technology companies are relying on creative productions such as music, games and films. The latter are a key driver of technology innovation and acceptance. Culture-based creativity is often a determinant factor in the success of new technology applications and their market penetration. This is the case of MP3 technology, DVD and Blu-Ray equipment (computer and consumer electronics equipment in general) for instance whose market development is dependent on the availability of creative content.

The ability to entertain, to provide a compelling experience, to make new technology attractive or to trigger socialisation are features of culture-based creativity. If Rifkin's predictions that the "age of access" would be the commoditisation of play, "namely the marketing of cultural resources", then it is worth looking into the creative sector as a source of inspirations.

2.1.3 Towards a creative economy – lessons from creative industries

People working in cultural and creative industries tend to have a well-developed understanding of the importance of signs, symbols, emotions and aesthetic sensibilities. They are engaged in the experience and the sharing economy and can therefore be a source of inspiration, as engaging people in a personal way is key to the success of the creative and entertainment companies or artistic productions.

"Ordinary manufacturing industry is becoming more and more like the production of culture. It is not that commodity manufacture provides the template, and culture follows, but that the culture industries themselves have provided the template" claim Lash and Urry.[70]

The creative economy is interesting for the rest of the economy because of its emphasis on:

- The expressive (aesthetic, symbolic or social) component and emotions of the goods or performances produced;

[68] Example of PSA Group, interview Pascal Feillard, Head of strategic marketing, September 2008.

[69] Chris Anderson's presentation at the Antwerp World Creativity Forum in November 2008.

[70] Op.cit p 123

- Creating a lifestyle and building on cultural authenticity. The symbolic representations of the artist help to create and define a lifestyle. Lifestyle is created by music, video games, social networking, fashion or design. The cultural product or the artist's image contribute to the idea of a particular lifestyle (popular culture) enabling people to differentiate themselves and develop their own identities within a social group (thus establishing "brand loyalty");

- Making the manufacturing (production) secondary to the packaging (Hollywood sometimes spends almost as much money on marketing a film than on producing it). A record company is not involved in the production process of a record. The main function of the company is to package the artist and the recording; promoting the image rather than the product;

- Developing business services – focusing on servicing talents, advertising and promoting talents that creative companies have discovered and nurtured. They epitomize the post-industrial firm in which the manufacturing processes subordinate to marketing;

- Staging entertaining experiences that provide pleasure to the senses, and create enduring personal memories. Creative industries are at the heart of the experience economy.

Creative expressions enable the signs and symbolic to take shape for group identities to be revealed. Entertainment in general and music in particular shape identities as much as they reflect them.[71] The ability to build communities is an essential feature of the new economy. It therefore relies heavily on creativity and culture.

2.2 The requirements to succeed in the new economy

Clearly, creative people are central in order to succeed in the new economy as both manufacturing and service sectors must be able to:

- provide a distinctive experience,
- generate and/or better accommodate consumer demand through increased interaction and feedback,
- make use of "design thinking".

2.2.1 Experience staging

Creative functions such as architecture, design, advertising, marketing as well as artists are key assets for companies as they enable a business to deliver a distinctive experience. The ability of a company to engage consumers depends on its ability both to capture attention and to enthuse their senses. Creative people, including artists, can help to develop an experience which fits with the identity of the company and the

[71] Blake Andrew, *Living Through Pop,* Routledge 1999 – quoting Simon Frith p.38.

environment it wants to be associated with. The experience needs to engage customers' sensibilities with a view to creating a unique relationship.

The distinctiveness of the experience is even more relevant in the emerging digital economy where services are often available free at the point of use –e.g. search engines, messenger services, etc. The value of the service is derived from the ability to capture the time and attention of customers with regard to given brands or services; companies which thus engage the consumer can use this engagement as the basis for a financial relationship further down the road. In some cases, such as open-source software, financial benefit may be subordinate to the sharing of knowledge and expertise.

In the experience economy customisation is often crucial. The customers wish to be affected, to be changed, to be surprised in the same way as when they enter a museum or attend a film screening or an art performance. A hotel is then more than just a bed to sleep in. It becomes a place of adventure and discovery. The service or the object must provide emotions, pleasure, distraction, luxury, authenticity or entertainment. It must avoid the banal at all costs.

In the technology sector companies that integrate hardware and software in an intuitive way have gained an edge over competition. Apple has changed the paradigm of music consumption with the iTunes concept and has given an added value to its technological products: the iPod, the iTouch or iPhone. Telephone and telecom companies are attempting the same by bundling entertainment with their traditional voice services.

The Sims 2 H&M Fashion Stuff pack – Example of collaboration between virtual and real worlds to attract new customers

Since 2007 video games developer Electronic Arts and clothing designer and retailer H&M have teamed up to sell the Sims 2 H&M Fashion Stuff pack, one of the Sims' packs where people get a handful of extra outfits and objects. It is a creative way for the two companies to attract new customers. Sims 2 is a computer game that simulates aspects of life. It is a sequel to The Sims - the best-selling PC game series. Electronic Arts, developer of the game, has had a partnership with H&M since 2007. The partnership takes the form of the Sims 2 H&M Stuff Pack, which allows Sims players to design an H&M store and dress their avatars in H&M clothes. The stuff pack contains replicas of garments – all inspired by H&M's collection. The H&M fashions are featured in Sims software; H&M sent a group of stylists to work directly with the Sims team to help design virtual garments and accessories. In addition to this traditional route, the companies also held an online contest to allow a Sims 2 player to design clothes that will be produced and sold in the real world.

The contest - Sims 2 H&M Fashion Runway contest - ran for seven weeks during the summer of 2007. Players could submit an original outfit. The top outfits were showcased on a virtual fashion runway hosted by Yahoo!, where people could vote on the winner. More than 1,000 real-world aspiring designers crafted original outfits for their Sims 2 characters, and these were viewed by more than 500 million people. Fans

voted for their favourites, while the entries were also judged by several members of the H&M design team in Stockholm, Sweden.

The winning design was fabricated inside Sims 2 by a 21-year-old American interior design student. He brought his virtual outfit to life and sold it in 1,000 H&M bricks-and-mortar clothing stores. People are able to identify it by a special tag that mentions "The Sims 2". This is an effective way for EA to get publicity for the Sims 2 H&M Fashion Stuff pack.

The partnership between EA and H&M is positive for the two companies. In its first year, sales of the Sims 2 H&M Fashion Stuff pack reached 1 million. It is a way to capitalise on the two companies' similar target demographics, mainly young females (55 percent of Sims 2 gamers are female).

Steve Lubomski, U.S. advertising manager for H&M, emphasises that the idea of the partnership is to attract new customers and engage existing buyers in a fresh way. "We have, of course, been active in branding ourselves online for years, but this is the first time we have had the opportunity to showcase H&M properly in the gaming world", he wrote in Business Week.[72] EA also has a similar partnership with IKEA and Ford. As Nancy Smith, the EA global president for The Sims label, has said "We know not only players' passion for creating their own content but their desire to interact with brands. It's an environment in which players like to blur the line between the digital and real worlds."

2.2.2 Empower consumers and generate demand

In order to succeed in the new economy, strategies to generate or better accommodate the demand are important. Creativity contributes to such strategies. Culture-based creativity is one of the keys to attracting and holding consumers' attention and persuading them to purchase goods and services.

The U.S. economist John Kenneth Galbraith[73] "opposes the economics of organisation to the economics of the market". Galbraith contested the accepted belief that "consumer preferences come first" and described how corporations form and develop consumers' loyalty to manage the demand of the products they sell.

In wealthy societies goods related to the satisfaction of elementary physical needs represent a diminishing part of production (even if the on-going economic crisis makes this assertion today questionable). Many goods or services aim at giving consumers a sense of personal achievement, and enhancing their self-image. "The further a man is removed from physical needs the more open he is to persuasion – or management – as to what he buys. This is, perhaps, the most important consequences for the economics of

[72] Megerian, Christopher, *On the Digital Catwalk at H&M*, Business Week, 29 June 2007.

[73] Galbraith, John Kenneth, *The New Industrial State,* Princeton University Press, 1967/2007.

increasing affluence."[74] Despite the current economic crisis, capitalism is still in its third stage of development characterised as one of "hyper consumption."[75]

However Galbraith did not anticipate that the aesthetic experience would be within reach of the corporation's planning system.[76] Creative advertising is an expression of this change. Since 1980 global spending on advertising has increased three fold.[77] The repetitive advertising, whose aim is to hammer home a message, is more and more replaced by creative advertising, which takes into account the fragmentation of the market and the media. The aim of advertising is not so much about selling a product. It has become a means to sell an experience, a way of life, imagination and values.

At the same time consumers are more difficult to retain, as they are constantly transferring to products that are more capable of representing their values. Consumers do not switch allegiance to their values but to the brand if the latter no longer represents the former. For instance, they are now staging boycotts of products that they believe are unethical.[78] In the same way, young people today are switching more easily from one music band to another if they find a band closer to their social values and group's identity. Marketers in the music business have noted that the attachment to a band, a feature of music consumption until recently, is no longer the rule.

2.2.3 The importance of design

Design is one of the principal ways in which companies develop their values and respond to perceived consumers demand. Design is a key element of differentiation: it creates a distinct feel and look that enables products to stand out amongst competing products. Design is at the frontier of art and industry; it is the "point where art and technique meet to create another culture."[79] It brings together the complementary values of art, craft and industry. It helps to bring about harmonious balance of materials, forms and colours. Therefore its purpose is not simply utilitarian.

Designers transform consumer goods into magical and mysterious products and transform buildings into museums or art galleries. The trivial can become beautiful.

Designers not only transform objects; they help to formulate the DNA of a company. Design influences manufacturing, marketing, packaging, branding and communication campaign. Design impacts on brand identity and sales. It permits a consistent look which can lead to significant cost savings. It is also often an integral part of communication materials.

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[74] Ibid.

[75] Lipovetsky, Gilles, *Le Bonheur paradoxal: Essai sur la société d'hyperconsommation,* Gallimard, May 2007.

[76] Op.cit. Lessig Lawrence, 2008.

[77] Op.cit Gilles Lipovetsky, 2007.

[78] Ibid. p.122.

[79] Flusser, Vilem, *Petite Philosophie du Design*, Circé, 2002, p.9.

The function of design has evolved considerably since the formal influence of design on industrial production first began to be apparent in the USA in the late 1930s, when it was used to stimulate sales after the Great Crash of 1929. When Raymond Loewy (1893-1986) declared that "ugliness does not sell"[80] he managed to convince businessmen in the US that forms and aesthetics were crucial elements for sales: "*Success finally came when we were able to convince some creative men that good appearance was a saleable commodity, that it often cut costs, enhanced a product's prestige, raised corporate profits, benefited the customer and increased employment*."[81]

Jonathan Ive is senior VP for industrial design at Apple. He is a former student at the Royal Society of Art in England. He has developed a stream of iconic products including the coloured iMac, the iPod nano and the iPhone. Apple has put the design of great customers experience on the map by showing the entire ICT industry the importance of selling emotions. Apple's pioneering work in injection moulding is considered as part science, part art.[82]

Design is now everywhere: in public and private spaces, at work and at home. It touches toothbrushes, washing machines, business strategies, mobile phones, dustbins, public benches, online music stores. Design amplifies the perceived value of a good with a view to increasing its economic value.

Rémy Bourganel, designer at Nokia, describes his work as: « la recherche d'une certaine poésie du quotidien ». Supported by sociologists, the role of Remy is to decode cultural practices and evolution and to translate this information into ideas for brand innovation. His role is to help define metaphors which will guide the design teams. He contributes to formulating the Nokia DNA which will contribute to distinguish Nokia from its competitors in the mobile phone market (including Apple, Blackberry, Google, Samsung). It is human sciences and cultural knowledge which will enable the development of new applications.[83]

Design thinking

However design is no longer limited to being an add-on or an "expression in the cross field between the aesthetic and the functional."[84] It has become a management process, a method and tool for change and innovation. Design is now based on the observation of lifestyles, behaviours, individuals, on the consideration of collective needs and desires.[85] Design thinking is now a discipline that uses the designer's creativity and sensibility and methods to match people's needs with what is technologically possible and to enable a business strategy to capitalise upon market opportunities.[86]

[80] Raymond Loewy was one of the 15 founding members of the Industrial Designers Society of America in 1944. The Lucky Strike pack, the Shell and Exxon logos, the Greyhound bus or the 1935 Coldspot refrigerator are but a few of his contributions.

[81] Loewy, Raymond, *Industrial Design,* Overlook TP, New York, 2007.

[82] *Who is Jonathan Ive ? – the Man behind Apple's Magic*, Business Week, 25 September 2006.

[83] *"L'homme qui habille Nokia"* – article in Supplement Le Monde 2, 15 November 2008, 70.

[84] *Manifesto: The increasingly vital role of design,* Danish Designer, Copenhagen, 2007.

[85] APCI (Agence pour la Promotion de la Création Industrielle).

[86] *Design thinking, How to deliver on a great plan*, Harvard Business Review, June 2008.

Design is about identifying and creating meaning. Reporting on Philips Design Process, Stefano Marzano, CEO and Chief Creative Director, states: "This process aims to deliver solutions that are not only technologically possible but also preferable from a social, anthropological and personal perspective. To identify what it is that might be preferable, we conduct both short term and long term research, ranging from "culture scan" research into shorter-term societal, societal and cultural trends, to "strategic futures" research in which we explore large-scale social trends over the next 5 to 7 years. This helps us to refine our efforts to generate products and services that are culturally compatible – and therefore truly meaningful."[87]

The Philips slogan relays the significance of creativity: "Sense and Simplicity" having replaced "Let's make things better". The change of branding message characterises the changes of economic paradigm – the industry has moved "from making things" to pleasing the senses and appealing to values. The Philips branding reads like a Jane Austen novel.[88]

Philips: "A Design Strategy fully focusing on people"

Research

The company believes it is essential to have a detailed understanding of the world nowadays and the ability to foresee what it will be like in the future. In the sphere of design, Philips' Foresight, Trends & People Research Team looks into the needs of people in different regions and assesses what quality of life means to them - both now and in the future. This research gives strategic insights into global and regional socio-cultural changes which influence new values, lifestyles and needs. Research is used to deliver global and regional forecasts of emerging, significant cultural trends. The company tracks changes in artistic expression, fashion, media, architecture to identify trends.

High Design methodology

To complement Philips' research activities in design, the company has created a multi-disciplinary methodology, *High Design*. This approach draws upon the skills of designers, psychologists, sociologists and cultural anthropologists, and is an essential part of the business process.

[87] Philips *New Value by One Design* – April 2005 (corporate brochure).

[88] Jane Austen is the author of the literary work *"Sense and Sensibility".*

The importance of design in car manufacturing [89]

Patrick Le Quément, Chief designer at Renault, who studied at the Royal college of Art in London and the Art centre in California, and was strongly influenced by Bauhaus movement, revealed in an interview at the company's headquarters how the function of design has evolved in the car company. Design was initially linked to the unit responsible for engineering (called then "direction du style"). There were then 126 designers in the unit, whilst there are 430 designers at Renault now. Today the chief designer is part of the management board of the company and design is responsible for everything that can be perceived by the client. Design is an integral part of both the product unit and the marketing unit. Designers directly contribute to the manufacturing of innovative products such as the Scenic, the first mid-range space wagon. The diversity of the design workforce is an important feature in stimulating creativity. Design centres are located in Barcelona, Korea, Romania, India and Brazil.

Another interesting example is Decathlon, a retailer and manufacturer in sport goods. Its strategy illustrates the importance of design in a business strategy. In 2008, the sport retailer which has more than 400 outlets throughout Europe and more than 40 000 employees, came first amongst corporation with 6 IDEAs (the 2008 International Design Excellent Awards[90]) ahead of Apple.

Decathlon is the example of a distribution company that decided to move into the conception of its own products, as "selling for a low price" is no longer sufficient in the competitive retailing environment. Products must also look good. The aesthetic of the product also contributes to the image of a company; it conveys the value and message of the brand (conviviality): "the notion of experience goes beyond the mere product". It shows that retailing is moving from mass consumption to experience as a way to differentiate the product and the brand. The importance is put on the way of life conveyed by the brand. The artistic input is very important to discover the subjective. The design has become emotional, its process is complementary to marketing and helps to analyse market research.
Another function of design is to surprise consumers as the latter cannot know what the future application is going to be. Consumers also require the element of surprise.[91]

[89] Interview with Patrick Le Quément, 8 September 2008.

[90] The prize rewarding excellence in design saw the US take half of the awards while Europe took 23%, Asia 18% and South America 8%[90] (source: *Business Week)*.

[91] Interview with Simon Hadjidimoff, designer with a double academic cursus: art school (La Cambre) and business school (ICHEC) (September 2008).

Now that we have reviewed what is required to be successful in the new economy, we shall consider the role culture can play in the competitive strategies of different businesses.

2.3 The contribution of culture-based creativity to businesses' competitive strategies

> "*Companies have to do something else with their businesses beyond instituting just-in-time inventory control or SAP enterprise automation. They have to create an experience; they have to inform and amuse, they have to build a destination…. Only if a company's product stands out is someone going to pick it off the shelf or off a website. Entertainment has become a key part of the consumer value equation."*[92]

Companies that are successful in today's economy are keen to associate their products with culture. Here are two examples taken from the world of consumer electronics and car manufacturing:

- Each year Panasonic organises a competition on video called Panasonic'art. New Plasma TVs are described by the company as new works of art because of the aesthetic of the machines. "Our screens have become paintings that you hang on a wall" states head of Panasonic France, Laurent Abadie. "To watch images on such a screen …. is a new experience which carries the public at the heart of the work."[93]

- Louis Schweitzer, the former Chairman of Renault S.A., stated: "We are aware of the impacts of innovation on the firm and beyond, which is now conceptual rather than technological. In order to let such culture spread, we have to create areas of freedom where a creative disorder can express itself, but also to channel the latter. To be the best is not enough anymore, we have to be irreplaceable. Even if you are very good, you are not automatically irreplaceable, and one day someone will be as good as you. But if you are different, you become irreplaceable. We thus must have the capacity to do what nobody else does."

The former Renault executive invokes the "aesthetic", "artistic expression", "culture spread", and "creative disorder" with a view to being "irreplaceable" and "different". This is the reason "why inspiration, diversity and creativity are key values."

In the next section we will identify the elements of a competitive strategy, the integration of culture-based creativity in business strategies and more specifically its impact upon product innovation, branding, human resources and communication.

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[92] Wolf, Michael, *The Entertainment Economy*, Penguin Books, 1999.

[93] Technikart, August 2008, p.137.

2.3.1 Elements of a competitive strategy

Every firm develops a competitive strategy. This strategy consists essentially in setting goals and implementing policies to achieve such goals; a combination of ends and means. In his book on competitive strategy, Michael Porter[94] identifies three generic strategies which help a firm to outperform its competitors:

- achieve overall cost leadership through an emphasis on cost control and efficient manufacturing,
- focus on a particular buyers' group, a geographic market and
- product differentiation.

Creativity is an essential element of each of these generic strategies. There must be creative ways that enable more efficient manufacturing. Creativity, as a source of happiness in the workplace, helps to reduce absenteeism thus contributing to increasing levels of productivity. The development of marketing strategies requires creative thinking, understanding of local cultures and the ability to create a vision for the long-term.

The wheel of culture-based creativity strategy highlights the way creativity influences the competitive goals of a company.

The Wheel of Creative Strategy

[94] Porter, Michael E, *Competitive Strategy – Techniques for Analysing Industries and Competitors,* Free Press, 1980.

Key competitive elements for success obviously include financial resources (capital requirement), manufacturing efficiency, management and the ability to innovate but these do not suffice by themselves in the new economy to make a company competitive. A firm needs more than an efficient manufacturing process and a good technological base. It needs a strong brand, motivated staff and a management that respects creativity and understands its process. It also requires the development of products and services that meet consumers' expectations or that create these expectations.

Among the forces that drive corporate performance is the threat of new entrants or of substitute products or services. Culture-based creativity can assist a firm by making entry into the market by competitors more difficult or by making the product or service unique. It can help a firm to distinguish itself, thereby delivering a source of competitive advantage:

- Product differentiation enables brand identification and customer loyalty. It stems primarily from creative activities (advertising, design and communication strategy);
- Creative activities can generate intellectual property rights which provide exclusive monopoly rights for a time-limited period;
- Product differentiation enables the creation of new trends in consumption.

To illustrate this, the subsequent paragraphs provide concrete examples of the contribution of culture-based creativity to product differentiation and firms' competitiveness.

2.3.2 The integration of culture-based creativity in business strategies

> "*If you are not interested in culture by taste, at least you have to be interested in it by opportunism or by strategy*".
>
> Nicolas Bourriaud, former Director of the Palais de Tokyo,
> Museum of Contemporary Art in Paris.

To respond to the new market requirements industries have adopted several strategies which may draw on creativity. The interaction between business and creativity can be summarised as follows:[95]

1. At an operational level:

   a. The use of culture in the management of human resources:

      - for competence development – leadership,
      - to develop team spirit – bonding,

[95] Darso, Lotte, *Learning – Tales of Arts in-Business*, Frederiksberg, Sammfundlitteratur, April 2004 and interviews with Lene Bornemann (Arts in Business) in Copenhagen in June 2008.

- to stimulate creativity amongst the workforce.

b. The integration of creative functions at board/management level:

2. At a strategic level:

a. The use of culture in relation to:

- product development,
- communication,
- branding.

b. The development of programmes that associate the brand with culture.

In the course of this assignment we have interviewed several consulting companies specialising[96] in enabling companies and industries to develop the role of culture at both the operational level (the management of human resources) and the strategic level (in supporting R&D, branding, in improving communication).

Essentially culture-based creativity contributes to:

1. Product and Service Innovation
2. Branding
3. Human Resources
4. Communication

2.3.2.1 Product and service innovation

Innovation, according to Henry Chesbrough,[97] occurs when corporations open up to new influences and enter into a dialogue with diverse stakeholders in their surrounding environment – including competitors and consumers.

Such a notion of innovation is different from traditional explanations of how to create disruptive business solutions. It is much more in line with the understanding of creative professionals – and artists – who think

[96] The Agencies Mona Lisa and Trois Temps (Paris), Arts and Business (London), Arts in Business (Copenhagen), Tillt (Göteborg).

[97] Chesbrough, H. W.: *Open Innovation. The New Imperative for Creating and Profiting from Technology*, Boston, Harvard Business School Press, 2003.

about how to bring about "creative renewal" (as one of our interviewees called it). The almost playful treatment and development of new ideas and solutions, the development of prototypes and their continuous testing, are typical working patterns within the creative industries.[98]

Working practices in art (e.g. theatre rehearsal) also reflect such principles. Increasingly, these practices are becoming more important in a wide range of industrial domains. IBM, for example, frequently asks its customers to engage online in innovation "jams" to help develop new ideas and business ventures. It has been doing this since 2001. As a result, 10 new IBM businesses have been launched with seed investment totaling $100 million.[99]

Secondly, innovation is becoming more creative due to the increasing use of expressive (symbolic or aesthetic) components in today's products and services. As a result, creative skills are increasingly valued in corporate innovation and R&D departments. Our interviews with innovation experts in several European companies showed that these skills are often hired in from external providers.

Similarly to Chesbrough, Reichwald explains how contemporary innovations develop in "ecosystems" which depend on the interaction between multiple stakeholders, as well as on rules, values and communication processes.[100]

In the context of this new climate which draws heavily on creativity and innovation and which is at the heart of the new economy, companies from the cultural and creative industries can provide services which can help businesses from other sectors to overcome some obstacles to innovation such as risk aversion, status quo bias, myopia or the inability to imagine the future as potentially different from the present.

Obstacles to innovation in this environment are smaller than those in earlier industrial decades. Communication skills, cross-disciplinary management, aesthetic skills and an understanding of the social and cultural processes in an organisation are as important to stimulating innovation as technological breakthroughs or market power, argues Potts.[101]

In his book *Creativity in the Post Google Generation*[102], David Edwards shows how innovation is often catalysed by those who cross a conventional line drawn between art and science. He shows that developing ideas through the combination of art and science has a catalytic role for innovation. "Artscience both produces disruption and helps us creatively to respond to it". Examples cited by Edwards include Jan van Eyck, who invented oil painting, or the abstract painter and photographer Clifford Ross, who developed a camera capable of capturing 9 Gigabytes of data per minute. Technological innovation also produces

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[98] Paris, T., *Organisation, processus et structures de la création. Culture prospective,* 2007.

[99] See IBM Innovation Jam website: https://www.collaborationjam.com/ (accessed January 2009).

[100] Reichwald, R., Piller, F. T.: Interaktive Wertschöpfung. *Open Innovation, Individualisierung und neue Formen der Arbeitsteilung*. Gabler, Betriebswirt.-Vlg, 2006.

[101] Source: Pott, J. and Morrison, K., *Journal of Cultural Economy* as well as in *Nudging Innovation,* 2008, consideration of the NESTA Innovation Vouchers Pilot, October 2008.

[102] Edwards, D., *Creativity in the Post Google Generation,* Harvard University Press, 2008.

disruption in artistic form, with the invention of photography, cinematography, peer to peer file sharing and software. David Edwards also mentions Gustave Eiffel's engineering construction firm, which built the Eiffel Tower, a design that had no practical purpose at the time.

The integration of art and science is also illustrated by the integration of design in both engineering and manufacturing processes in the high-tech sectors. For instance, at Apple, designers work closely with engineers, marketers and manufacturers. They are not only stylists but also contribute to innovation in the use of new materials and production processes. It was the design group within Apple that was able to figure out how to put a layer of clear plastic over the white and black core of an iPod, giving depth to the structure. Whilst competitors have concentrated on squeezing manufacturing costs, Apple has perfected the differentiation of its product through design.

To illustrate the contribution of culture to product innovation, two examples are offered below. One features a collaboration between art and science (Le Laboratoire) and the other shows the importance of fashion design in the success of a clothing company (Marimekko).

When science meets the arts - Le Laboratoire

Le Laboratoire is a new space in Paris that aims to create a fusion between traditionally separated disciplines from science, industry, society and art, by fostering what its founder David Edwards calls "artscience" collaborations. It is a place to allow creativity to emerge and ideas to flow by enabling experience and discovery. Artists collaborate with scientists to conceive, translate, and realise original ideas. Collaboration has an industrial as well as a social or cultural objective. It is a good example of how arts influence product innovation.

A concrete example is the collaboration between Le Laboratoire and NASA. David Edwards, who is also a biomedical engineering professor at Harvard University, encouraged the French designer Mathieu LeHanneur (in one of the first collaborations supported by Le Laboratoire) to work closely with scientists from NASA. This artscience collaboration resulted in the invention and design of an ultra-efficient domestic filtration system that eliminates toxins in our breathing air using nature's own squad: plants. To increase filtering efficiency, fans in the so-called "Bel-Air" circulate air in complex patterns around the plant's leaves and force air through the roots and soil. The invention was exhibited in 2008 in Le Laboratoire and it has been on the market since May 2009. Bel-Air also won the prestigious 2008 award for best invention by Popular Science magazine. Importantly, the project illustrates how a design-led approach (the project focussed as much on the look and feel of the product as on scientific innovation) is increasingly important to innovating successfully.

Fashion design and competitive advantage: The case of Marimekko [103]

Marimekko is considered as a model for many design companies in terms of economic success and management. It started with Armi Ratia, a Finnish designer, and her wish to reform the world of design and go beyond traditional ways of thinking in Finland. When in 1951 Armi Ratia's husband, Viljo Ratia, owner of Printex, a company producing oilcloth and printed fabrics, asked her to find a solution to increase Printex's sales, Armi Ratia used this opportunity to commission artists to apply their graphic drawing to textiles and design fabric prints. The result was so radical that people did not understand how these coloured and patterned fabrics could be used. Armi Ratia decided to create a small collection of clothing to demonstrate the uses of these fabrics and established a separate company, Marimekko Oy, to produce the clothing. The company is now very successful. Marimekko designs, manufactures and markets clothing, interior decoration textiles, and accessories both in Finland and all around the world.

Innovation and creativity were at the heart of the Marimekko's original mission and remained an essential part of its bloodstream until its acquisition by Armer Group in 1986. During this first period, its designers constantly researched new ideas so as to continuously rejuvenate the firm, expand its knowledge and enhance the quality of its design. Marimekko introduced new concepts and products, first influenced by Finnish art and then by geometrical abstraction, architecture, "pop art", "opt art" or Japanese design.

Under the ownership of Amer Group in the late 1980s, the outlook of the firm was no longer focussed on creation. The emphasis was rather on financial control than on innovation. As a result, in the late 1980s, the company entered a period of decline. Not only did sales stagnate but the company became loss-making.

The situation changed both in terms of creativity and competitive advantage when Kirsti Paakkanen took over Marimekko in 1991. She promoted new design projects renewing the philosophy of its original owner and she finally managed to build up Marimekko's past performances. Between 1991 and 1994, its net sales soared from FIM 73.6 to 90.2 million. Since this period, Marimekko has kept modernising its production and has continued its steady growth. In 2007 the company's turnover was € 77 million (with operating profit of € 10.5 million) in constant increase since 2001 when it was at € 42 million (with operating profit of €4.7 million).[104]

[103] Ainamo A., *Design and competitive advantage: the case of Marimekko Oy, a Finnish fashion firm*. In Bruce M. and Jevnaker B. (eds.) Management of Design Alliances: Sustaining Design-Based Competitive Advantage, London, John Wiley Publishers, 1998.

[104] http://www.marimekko.fi/ENG/investors/financialinformation/

2.3.2.2 Branding

"*Au delà de la pure création de richesse, qui était jusque-là le seul objectif des entreprises, je suis convaincu que c'est dans les valeurs éthiques que se forment les singularités et la valeur ajoutée des entreprises*"

Patrick Thomas (Manager Group Hermès)

"*Brands are ideas that people store away in their heads and in their hearts*"

Ad Agency Young and Rubicam

Branding is another element of business strategies that can be influenced by culture-based creativity.

The brand determines to a large extent the value of the product and conditions the relationship with consumer and their willingness to buy. A brand is equivalent in many ways to the DNA of a company, and it determines the level of trust which a consumer puts into a product. The image of the product is as important as the product itself.

Therefore the brand is both identity (the values of the company) and image (perception by the consumer). Often customers relate to a brand on an emotional level. The way in which such emotional appeal is developed forms part of the overall marketing and branding strategy. Culture-based creativity is a powerful instrument to establish this emotional relationship.

Advertising, a creative trade, is - in part - about delivering messages such as "Just do it", "Be yourself," "Think different" with a view to creating emotional links. The consumer is solicited by advertisers to share certain values, to become part of the brand. In turn the brand espouses consumers' values and social sensibilities.

Advertisers often make reference to art as a source of discontinuity or disruption. "If there is one field in which discontinuity is a constant, it is contemporary art which broke with all aesthetic and representation convention."[105] Disruptive strategies in advertising overturn a convention in the marketplace and make it possible to develop a new vision and new perceptions of the brand.[106] As such, "advertising is no longer confined to price or services it is about signification."[107]

[105] Op.cit Dru J-M, 1996, p.37.

[106] Op.cit. Dru J-M, 1996, p.54.

Brands, whatever their industrial domains, attach great importance to being associated with art or creativity ("Go Create" from Sony, or the Creative campaign launched by DSM (www.dsm.com), the Dutch life science company for instance). Adding a cultural dimension to a brand contributes to the distinctive identity of that brand.

Some examples of association between culture, artists and brands:

- H& M and Madonna, Comme des Garçons or Karl Lagerfeld
- Louis Vuitton and Taksashi Murakami [108]
- Cartier and its foundation for contemporary art
- Telefonica and a painting of Eduardo Chillida
- BMW with Swetlana Hegger and Plamen Dejanov in 2000 (Project Quite Normal Luxury)
- Chanel with Nicole Kidman (N°5)
- BNP Paribas with characters from film company Europacorp ("Arthur et les Minimoys")
- Philippe Starck and numerous brands (Alessi, Philips etc)
- Swedish bed maker Hästens asked famous designers and artists Angela Missoni, Jaime Hayon, Satyendra Pakhalé and NEL Colectivo to make their bedroom fantasies come true[109]
- French retailer La Fnac and artist Fabrice Hyber (campaign with the square ball during the football world cup in France).

Bionade – The importance of branding

German soft drink Bionade illustrates how clever branding contributes to the success of a product.

The drink company Bionade was created in 1995 when Dieter Leipold, a German brewer, had the idea of making a drink for children that did not contain any artificial additives. He managed to create an alcohol-free fermented soft drink which eventually saved the small family brewery from bankruptcy.

Although early on the drink did not achieve strong sales, the turning point came in 1999 when marketing and design expert Wolfgang Blum joined the company. He quickly realised the need to change Bionade's image and proceeded to give the drink a radical makeover: a slick retro blue, white and red logo supported by a new strategy to brand Bionade as a healthy, hip, lifestyle drink.

Bionade increased its sales from one million bottles in 2000 to 200 million in 2007. This made the company the fastest growing beverage producer in Germany and it is now Germany's third largest soft drink brand. This success had also an impact at a local level on organic farmers in the region who are now collaborating with the company, providing it with locally grown organic raw materials.

[108] For branding in the luxury industries see Michel Chevalier and Gerald Mazzalvo, *Management et Marketing du Luxe*, Dunod, Paris, 2008.

[109] *Wallpaper*, December 2008.

Blum, who is now the company's marketing director, managed to create a brand with a character and a soul. This contributed to change the perception of the drink from a worthy organic brand into an organic lifestyle product. Sales quickly picked up thanks to word-of-mouth and news reports. In 2007, Bionade won a Design Management Europe Award, which is a European prize highlighting the value of design management. The company is now planning its international expansion with launches in the US and UK.

Steel and Art

ArcelorMittal, as the world biggest steel producer, is constantly looking for innovative ways to use steel.

The collaboration between ArcelorMittal and the American minimalist artist Richard Serra using mostly large steel plates in his work, started in 1991. Richard Serra worked first within the workshops of the Creusot-Loire Industrie which later became Industeel. In 2005 Serra used sheets of Corten steel made in Germany, to create the work "The Matter of Time", installed permanently at the Museum Guggenheim Bilbao, in Spain.

The third time Richard Serra worked with ArcelorMittal, he created the work "Promenade" which was exposed in the Monumenta in the Grand Palais in Paris in 2008. The artwork was again realised within the workshops of Industeel in France. Richard Serra's work represents an "innovative use of steel" and shows that the boundaries of innovation in steel production and use can always be pushed further. ArcelorMittal maintains contact with personalities outside its own sector like advertisers, architects or sportsmen, like for instance the ArcelorMittal "bold visionaries" Ed Viesturs, Sir Martin Sorrell and Paul Andreu.[110]

2.3.2.3 Human resources (HR) management – Triggering creativity

Businesses are more likely to succeed if they are creative. The role of management is to enable this creativity to flourish and to translate into better products or services. Business consultancies call on companies to set up processes that improve creative output. They propose methodologies to develop executives' creative skills and aim to stimulate creativity amongst firms' personnel.

Nestle is a company that nurtures creativity. Amongst food companies, it is recognised as one of the most creative. Its management insists on the need to support creativity. The company has set up an international training centre based in Switzerland whose aim is to show the role of innovation, teach creativity and "open the mind". The international training centre is designed to encourage managers to "think ahead" by challenging senses and perceptions.

[110] Sources: Website: ArcelorMittal *http://www.constructalia.com, http://www.arcelormittal.com*; ArcelorMittal WebTv Season 2 Episode 11: Steel in design; *http://www.monumenta.com/2008/content/view/26/lang,en/*.

In this context, creativity is defined "as a process by which ideas are generated, developed and transformed into value. It encompasses what people commonly mean by innovation and entrepreneurship."[111] In the business world, disciplines and rules are part of the means by which measurable outputs are efficiently produced. That is why businesses often feel uncomfortable with creative thinking, as it can mean an unsettling journey into the unknown.

Indeed managing creativity requires the ability to manage uncertainty. By valuing lateral thinking, encouraging collaboration across disciplines and rewarding expressions of creativity and imagination, companies can create an environment conducive to creativity.

For businesses which draw upon creative inputs, it is important to maintain the symbolic and improvisational aspects of creativity. The following section illustrates the role of creativity in human resource (HR) management and shows ways in which:

- creative functions are valued in companies, notably the function of design,
- creative individuals are integrated in the life of companies to stimulate creativity, to promote team spirit or help resolve conflicts,
- creative activities promote leadership.

1. Design management to stimulate creativity

Design management mainly relates to the management of the creative process inside an organisation. The term was invented by Michaël Farr who published the first book on *Design Management* in 1966.The idea was to manage and develop the existing interface between design businesses and client companies so as to optimise communication flows and control project development.

In most leading companies, successful design depends on the following: [112]

- Ensuring strong, visible leadership of the design function,
- Fostering a corporate culture that values design,
- Integrating design activities as tightly as possible with wider business processes (multi-disciplinary teams, cross functional development teams, etc.),
- Equipping designers with broad, business relevant skills beyond their core functional capabilities,
- Maximising senior management's support for design,
- Promoting formal but flexible control of the design process.

The role of design management to stimulate creativity is illustrated by Philips and Renault (both companies were interviewed in the course of this assignment).

[111] Kao, J., *Jamming,* Collins 1996, p. XVII.

[112] *A study of the design process*, Design Council, London, 2007.

Philips – Design in management

Designers have gradually become part of the management team whether in lifestyle, electronics, healthcare or lighting divisions. Designers now sit on all innovation boards and in each business unit.
Design is valued for its capacity to synergise knowledge, to synthesise and to provide systematic thinking. Design is integrated into the business processes from execution to upfront development of products. The ability of designers to think laterally is key to creativity. At an organisational level, the hierarchy is moving from the "pyramid" to the "pancake" model in a way “very much inspired by film companies”. Like entertainment companies, Philips partners with a multitude of creative businesses.

Renault – Stimulating creativity through design

Design is an essential element of Renault's competitive strategy. Designers are recruited on the basis of four qualities: passion for cars; artistic ability, team spirit and talent.
As part of its design strategy, the company pays particular attention to stimulating and nurturing employees’ creativity. To do so, the company relies upon two essential criteria: Maintaining a vision which motivates and inspires decision-making, and remaining active as a creative organisation with the following features:

- Close links between designers and high level executives;

- A rigorous, efficient and evolving organisation: the design team always strive to adapt to a constantly-changing environment;

- Ensuring artistic freedom amongst designers. Feeding designers’ creativity is a constant preoccupation for the company. Its strategy to stimulate creativity relies on tight and ongoing multidisciplinary teamwork;

- Satellite centres set up in diverse countries or culturally rich cities in France, Spain, Korea, Romania, India and Brazil: to ensure a diversification of cultural environment, to help facilitate the creative process, to explore new trends and automobile solutions and provide new sources of creativity. They also provide locations where creators can refresh their vision;

- Partnerships to explore and develop new sources of creativity. For instance, the company is conducting a research project with the *Universidad Pontificia Catholica* in Brazil to explore new fields of natural colour and materials;

- Observing global evolution: Renault encourages its designers to observe change across diverse cultures. The company also sends them to major art exhibitions to foster curiosity. The use of “concept cars” is used to help inspire the study of new base models by young designers. In 1991, the Vel Satis “concept cars” prototype helped design the Renault Mégane for instance. Concept cars are made to showcase a concept, new styling, technology and more. They help gauge customer reaction to new and radical designs and aesthetics which may or may not have a chance of being produced.

2. Artists' participation in stimulating creativity

Companies call on creative people to engage with employees and management for a variety of reasons. It may be with a view to promoting team spirit, to help resolve conflicts or simply to stimulate creativity amongst the workforce.

Engagement with art can stimulate individuals on emotional, physical and intellectual levels. Art helps to create opportunities for teams working in different parts of the same firm to appreciate and enjoy things together and this can translate into improved collaboration and team spirit. Participation in artistic performances helps staff to develop confidence at an individual level and cohesion at a collective level. Increasingly companies organise workshops involving actors or creators (directors, scriptwriters) to address body language, sense of time and space or to make participants aware of their surroundings in a different way.

A different form of interaction between art and business are "artist in residence" projects,[113] in which mutual exchange and dialogue are more intense. Companies invite artists to spend some time among their employees, usually several months, observing and producing works from their observations. The employees also observe the artist's process of creating an artistic work. These projects are designed to enable the discovery of different ways of thinking and producing on both sides, and to make employees think about their views on the company and their working environment.

To illustrate this aspect of culture in contributing to businesses' competitive strategy we will examine projects developed for Unilever, Astra Zeneca and ACE Europe.

Project "Catalyst" at Unilever UK ice cream and frozen food [114]

This project was triggered in 1999 by the need to facilitate organisational transformation in the company with a view to creating "an enterprise culture". Catalyst was managed by Alastair Creamer, musician and art manager, under the aegis of the HR department. Catalyst was designed to make the company less insular, to foster the confidence to develop creative ideas internally (and rely less on outside consultants), and to develop a programme leading to cultural changes in the company (following the merger of home care and personal care divisions). Over 4 years, the project resulted in around 300 activities giving employees access to visual arts, to the theatre or to poetry. Catalyst was about enabling individual expression (as individuals and not as employees) and emotions through the support of art and artistic experiments or workshops. Catalyst was a programme of individual development in creativity involving the collaboration with artists and

[113] See for instance report on a Swedish project named "Artist in Residence" (AIRIS), Alexander Styhre and Michael Eriksson, *Bring in the arts and get the creativity for free*: *a Study of the Artists in Residence Project,* Chalmers University of Technology Göteborg.

[114] Interview with Alastair Creamer (Architect of Catalyst) – London October 2008 and Lotte Darso *Learning Tales of Arts in Business,* 2004, p 110

arts organisation. Via the art, the aim was to show other ways of seeing, how to tell stories or to stage events (through live performances). Exposing people (at shop floor and management level) to the artistic process is a way to stimulate imagination, improvisation, or to show the value of new perceptions. Art is a stimulating way of training people.

"*… I want us to have the magic ingredient, which our competitors may not have and which allows us to do things in a more radical and creative way, a more joyful way, a more inspiring way. I want to have a greater sense of adventures in the business, in the way we serve our customers, a bit of surprise element, and I think that the Catalyst creative programme has helped to contribute towards that and I think it still does*."

James Hill, CEO of Unilever Ice Cream and Frozen Food [115]

AIRIS - Artist in residence by TILLT / Sweden

AIRIS is a Swedish project based upon a programme in which artists join a company for a period of 10 months to work together on a cultural project. It was initiated by TILLT, an organisation set up by the region of West Sweden since 1973 to promote and support collaboration between artists and working life. The AIRIS-project pursues three different goals: to create an interface for interaction between industry and the culture sector, to enhance the creative capabilities of industry with regard to a specific business development goal, and to create new employment opportunities for professional artists.[116]

AstraZeneca R&D and Anna Persson, Visual Artist

The AIRIS project at Astra Zeneca is particularly interesting as it was conceived on a long term basis, thus assuring an ongoing collaboration between the company and different artists. The visual artist Anna Persson, for instance, helped to facilitate processes of significant corporate change at the Department of Clinical Research at AstraZeneca (about 700 people), in 2003/2004. To help employees deal with new challenges, the artist arranged a series of workshops in which the staff were inspired to interpret and embody the core values of the company. This was done by creating silhouettes for each of these core values; where the staff posed in front of a bright light back-dropped onto a white screen, which was simultaneously photographed. These photographs, in turn, were placed onto large sheets of glass, which were suspended on strategic places throughout the newly constructed company building. The dancer and choreographer Maria Mebius Schröder collaborated with the department for safety surveillance at AstraZeneca (about 45 persons) in 2006 on a similar basis, in order to enhance creativity.

The evaluation of the AIRIS projects[117] demonstrates that such projects can boost creativity among employees, improve the working climate, assist team-working and provide workers with a different perspective on their occupation and life.

[115] Op.cit Lotte Darso, 2004, p 109.

[116] Styhre, A., Eriksson, M., *Bring the arts and get the creativity for free*, A study of the Artists in Residence project, p. 6.

[117] Done by IMIT**,** a group of interdisciplinary scientists monitoring all AIRIS projects since 2004.

However, there are a number of different ways of using creativity to foster team spirit.

ACE Europe

ACE Europe is an insurance company specialising in selling insurance contract for firms (with a turnover of € 383 million in France). Ninety eight percent of its brokers are women who work independently. ACE management wished to bring together brokers with a view to creating a team spirit and improving the links between the agents and the company. The art agency Trois Temps in Paris developed an artistic project involving fashion designer Sakina M'sa and the Petit Palais Museum. Over one year, 40 brokers were invited to attend fashion shows and a fashion exhibition as well as workshops with the fashion designer. The animation contributed to create a new dynamism in the firm, better identification of the value of the group (the project had also social objectives in the training of 12 persons who were out of job) and greater cohesion.

The organisation of informal meetings between the brokers facilitated commercial exchanges between them, improved the image of the company with the employees and contributed to better team spirit. A questionnaire was sent to the brokers to assess the impact of the initiative. Some 98 % of the brokers found the activity federative and 77% felt the need to know other colleagues better with 60% ready to organise social meetings out of work in the future to keep in touch with fellow brokers. Seventy percent of the female brokers expressed satisfaction in the meeting with the artist Sakina M'sa and a similar proportion wanted to know more about contemporary art. Finally 93% of the participants expressed the wish to see the operation renewed thus showing the powerful impact of the artistic experience on ACE Europe's image.

3. Creative activities and leadership

Creative activities can also be very helpful in identifying potential leaders in a company and in training management.

For example, staging a theatre play can help teams to understand the importance of pulling together in the service of a common cause.

A recent study shows how online games may contribute to train or identify future business leaders.

Online game to detect future leaders [118]

The research shows that "leadership in online games offers a preview of tomorrow's business world: a fluid workforce, self-organising and collaborative work activities with a decentralized and hierarchical leadership that typify games". The findings show that online games offer an opportunity to develop leadership skills. They help to prepare leaders by fostering a culture in which failure is tolerated, since trial and error play a big role in accomplishing game tasks. In online gaming leaders naturally switch roles, directing others and then taking orders. The idea of temporary leadership can empower employees to lead. The study highlights properties of games that enhance leadership: non-monetary incentives rooted in the virtual game economy and transparency in information which can enable leaders to be more efficient. The authors of the research suggest "gamifying" the work environment in order to improve quality of leadership. Skills in the game world include: making sense of ambiguous situations, transforming strategy into action and managing diverse teams collaboratively. Games can help develop leadership skills and as such the game generation may become a catalyst for change in business leadership. "Ultimately the entire workplace may begin to feel more game-like" which could enhance collaboration and creativity.

Disciplines from the performing arts are often used as a metaphor to teach business professionals the importance of talent development, creative management and teamwork. For example, the experience of conducting can shed very interesting light on the process of working in teams:

"The Art of Conducting" is a management programme developed by the Brussels Philharmonic's intendant Gunther Broucke in collaboration with an HR professional and an economist. At its core lies the idea of developing corporate leadership and team-working skills by experiencing and analysing the working dynamics of a symphony orchestra. Corporate participants sit in a rehearsal session to experience first hand how highly trained and talented artists – individualists at heart – collaborate under the "management" of a conductor to deliver a high-end product time and again. Broucke then uses the metaphor of the orchestra and its conductor as the basis of a training session, explaining work processes in the orchestra, analysing the different types and styles of conductors and highlighting the working conditions and mentalities of his "staff".

The basic idea behind this innovative programme is simple: Classical musicians are highly trained professionals able to combine individual creativity with the capacity to contribute to an overarching collective endeavour – a skill set needed in today's economy.

2.3.2.4 Communication

Communication is also a core part of a company's business strategy.

[118] Harvard Business School Review, *Leadership's online Labs,* May 2008, p.59.

Communication involving culture-based creativity can take different forms. For instance:

- Artistic creativity can help to communicate a company's financial results: slick annual reports are produced by professional photographers and shareholders' presentations are staged as a show;
- CEOs are treated like stars from a communication strategy point of view (Sir Richard Branson (Virgin) or Steve Jobs (Apple);
- Company magazines, distributed to clients in stores include interviews with famous designers or artists (for instance the H&M magazine is a fashion and style magazine which covers renowned fashion designers and artists[119]). The decoration of stores or offices may include a work of art which is designed to emphasise the affiliation of the company with creativity and art;
- Communication through culture can also make technology and science easier to understand for the general public.

To illustrate the importance of communication, several case studies are proposed below.

The first example relates to the collaboration of artists with research centres to communicate the outcomes of complex scientific investigations.

The collaboration between IMEC and Ad!dict Creative Lab

IMEC is a world-leading research centre in nanoelectronics and nanotechnology with operations on three continents and annual revenues of € 244 million. It conducts cutting-edge R&D years ahead of current business needs.

IMEC faces the challenge of illustrating the implications of its research (which are by definition relevant to multiple industrial and societal spheres) to a myriad of stakeholders, including scientifically adept experts as well as laymen. To achieve this, IMEC has for the last two years cooperated with Ad!dict Creative Lab, a creative think-tank that brings together artists and designers who wish to collaborate openly across disciplines. One of Ad!dict's aims is to fuse its creative energy with businesses and stakeholders operating outside the creative industries.

Ad!dict and IMEC collaboration has created a platform between artists and designers, on the one hand, and scientists and engineers, on the other hand, that aims to find more effective ways of communicating ideas about science in general and nanotechnologies in particular.

This collaboration has so far resulted in several tangible cross-over projects between artists and nano-technology, including visionary future concepts as well as real applications. These interactions were documented in two "inspiration books", which have been promoted together with some of the projects at a

[119] Reference to the H&M magazine available in H&M shops.

number of public events in 2008 and 2009, including the Creativity World Forum. This has helped IMEC in several ways. It has opened up communication channels to the general public and thereby helped to raise awareness and lower distrust. Additionally – and possibly as importantly – it has created bridges between IMEC's researchers and the world of art and design and stimulated creative collaborations between several leading designers and IMEC staff with a view to develop future joint projects.

Many companies are developing services which mediate between artists and enterprises to enable a fruitful collaboration in the sphere of communication. There are several of them throughout Europe andheir activities are typified by the work of the agency Trois Temps, a start-up company based in Paris.

Innovate in communication – Communicate through Art
The Trois Temps Agency – *www.troistemps.com*

Trois Temps is an agency advising firms on communication strategies through art. The firm was born in 2006 as part of an incubation process scheme called "Paris Innovation". The company employs 7 permanent staff. It holds a database of 200 artists and works extensively with 30 of them. Companies which used the services of Trois Temps include Pernod Ricard, La Poste, Hermès, ACE Europe but also public institutions.

Young entrepreneurs Armelle Weisman and Marie Georges analysed the needs of modern firms. They concluded that it would be interesting to introduce art in the workplace because of art's ability to provide a different vision of work practices and management.

The task of Trois Temps is to highlight how the contribution of artists to the corporate world makes a difference. According to associate director Armelle Weisman, "artists allow for a different perception of the present time (they see what we do not see), and have the capacity to figure out the future because of their innovative abilities (in particular the artists' ability to make use of new technology). Moreover, in the creative process, which brings together everybody, pleasure is a strong element. Art is no longer egoist consumption, as it can be associated to a collective effort within a corporation".

Trois Temps executives also stress the similarities between artists and entrepreneurs. As modern artists, entrepreneurs do not accept the status quo. They take risks and look for the assertion of their differences. Those similarities come with a range of qualities, assets and skills which are largely unexploited by modern managers, and which - when deployed - can help drive their business forward in new ways.[120]

[120] Extracts from an interview carried out in Paris in June 2008 with founder and associate director Armelle Weisman. *www.troistemps.com*. For other case studies see Mona Lisa, *www.monalisa-paris.com* or Arts & Business *www.AandB.org.uk* or Tillt at *www.tillt.com*.

2.4 Measuring creativity

The role of creativity remains difficult to quantify. Intangible inputs are difficult to measure and do not explicitly appear in companies' accounts or in terms of additional sales. The contribution of creative activities such as design to the revenues of a car manufacturer or to a consumer electronic company is extremely hard to measure.

Aiming at investigating and quantifying the impact of artistic and creative activities in stimulating innovation into the wider economy, NESTA's analysis of the Community Innovation Survey 2004 and the UK's input-output data[121] shows that firms who spend twice the average amount on creative inputs[122] are 25% more likely to introduce product innovations, while firms that have supply chain linkages with creative industries[123] typically offer more diverse and higher quality products.

The main findings are consistent with at least two observable effects of creative linkages:

- Creative products, like software or advertising, may be direct inputs into the innovation process of purchasing firms.
- Sales to creative industries by other industries' firms could facilitate ideas and knowledge transfers among the stakeholders involved (this can also lead to market failures and imply public policy intervention[124]).

To accurately measure the innovation process, the research focuses on some specific types of innovation within three key innovation measures: 'innovation activities' (in-house R&D, design activities and innovation-related marketing activities), 'innovation outputs' (product innovations, novel product innovations and process innovations) and 'innovation impacts' (improvements in product quality, increases in product range and expansion into new or increased market share in existing markets).The study shows some evidence that businesses that are more cooperative with suppliers and customers in the creative industries are likely to enjoy greater returns in terms of increased product range and improved quality. The importance of knowledge sharing between creative businesses and firms in 'non-creative' industries is highlighted. The argument here would be that creative businesses provide firms with "creative innovation services" that help them innovate more effectively, either directly via inputs into innovation processes (such as new ideas, etc) or indirectly by addressing behavioural failures, such as risk aversion, status quo bias and myopia or by shaping consumer adoption and retention of novelty in new market niches.

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[121] Bakhshi, H., McVittie, E. and Simmie, J., *Creating Innovation. Do the creative industries support innovation in the wider economy?*, March 2008, and Pott, J. and Morrison, K., *Nudging Innovation,* 2008, consideration of the NESTA Innovation Vouchers Pilot, October 2008.

[122] The expenditure on creative products is expressed as a percentage of total gross output for a given industry (forward creative linkages).

[123] The linkage between the creative industries and their suppliers is measured by the share of purchases by the creative sector in total sales by that industry (backward creative linkages).

[124] Knowledge spillovers imply that some firms start an innovation process thanks to a knowledge transfer and without bearing the costs of the innovation. This creates a market failure because the innovative firms who cannot protect their knowledge have no incentives to innovate.

In general business accounting emphasises fixed assets that are tangible (usually plants and machinery, land, building and investments). The valuation of intangible assets (which include trademark, copyright and goodwill) is subject to considerable controversy in particular regarding the treatment of brand names or the valuation of copyright catalogues. Goodwill is the term used in financial results of companies to assess some of the intangible assets of a company; in short it represents the value given by consumers to the product. It can be difficult to value but is very important in the creative industries as it is linked to the perceived value of a brand (in fashion or technology companies for instance) or the amount of intellectual property rights assigned to a company (in the copyright industries).

Interbrand (*www.interbrand.com*) is an international brand consultancy which undertakes each year to evaluate the intangible assets of a company. It has developed a complex methodology to rank brands with a turnover above $1 billion, which are international as well as publicly listed.[125]

The examination of PUMA 's financial reports provides revealing information on the impact of culture on the success of the company. In 1999 the company changed its business strategy to invest in culture-based creativity by focusing on marketing and design. From a sport brand relying on the popularity of football stars Johan Cruyff or Eusebio, the 1924 company turned to artists to become one of the "most desirable lifestyle brands". The turnover of the company went from € 302 million (1998) to 2.5 billion (2008) in the space of 10 years with profits being multiplied by 12 (from €108 million to 1.3 billion). These results are linked to a deliberate strategy of the company to team up with artists (Jill Sander, Marc Wanders, David LaChapelle or today Hussein Chalayan) and invest in arts project or education to provide new sources of ideas for new products.[126]

Another source of information to measure the impact of culture-based creativity would be to access market information collected by advertising agencies to provide evidence of the success of a creative campaign. However this information remains confidential to the client purchasing a campaign.

However there have recently been a number of attempts to develop a methodology to measure the economic impact of design on companies' performances.

Economic impact of design on businesses performances

Several national studies (in Belgium, Poland, Spain, Czech Republic, Sweden and the Netherlands for instance) have recently illustrated the direct economic impact of design applied in traditional businesses: the general outcome is better business performance in terms of turnover and profitability.

[125] Source *Les Echos*, 20 September 2008 p.5 and Les Echos p.12.

[126] PUMA Annual financial results – Reports of the Management Board, Wallpaper April 2009, p.91 and www.creative.puma.com.

Recent research carried out in the UK has shown that for every 125 Euros a design-related business spends on this field, turnover is increased by 285 Euros.[127] Shares in design-led British businesses out-performed the FTSE 100 Index[128] by 200% between 1993 and 2004, and 83% of companies in which design is integral have seen their market share increase, compared to the UK average of 46%.[129] Companies where design is seen as integral are twice as likely as businesses overall to develop new products and services, and to open new markets. Also, design is integral to 39% of rapidly growing businesses but only 7% of those which experience flat growth.[130]

The Design for Business Programme, developed by the British Design Council, has also shown impressive results. Mainly concentrating on SMEs, the Programme aims to demonstrate the practical benefits for businesses of taking greater advantage of design and creative skills. The Programme is concerned with "design" in its widest sense, from strategy to product design, packaging, production processes, market positioning and communications, among other things. Of the 118 companies that participated in the initial workshop stage, 97% rated the experience highly. The majority of the 61 companies that have so far gone through the full two-year programme have already reported improvements in performance. To name but a few examples: thanks to the Programme, Aga Rayburn a company specialised in kitchenware launched new products triggering an increase in sales of kitchen utensils from € 1.9 million to € 6.3 million per annum. At Minky, a British business specialising in household utilities such as ironing boards and clothes' dryers, the Design for Business Programme helped the firm increase its sales of cleaning products from € 637,000 to € 2.3 million over 12 months.

The Programme also produced interesting outcomes for technology companies: 80% of them changed strategic direction, accelerating their focus towards customers rather than technology; 80% reported a change in their vision and culture; 75% invested significantly in design and showed increased confidence that they would make a return on investment.

2.5 Implementing creativity

"*The key to creativity is to be prepared to accept the unexpected*"

Robert Austin (University Professor in Harvard Business School)

The management of creativity is the subject of a large body of academic work as management structures can influence the development of creativity through the establishment of a particular work environment, reward systems, or through the autonomy granted to employees. In this context, creativity is often

[127] *Design in Britain 2005-06*, Design Council, London, 2007.

[128] The FTSE 100 Index is a share index of the 100 most highly capitalised companies listed on the London Stock Exchange.

[129] Op.cit Design Council, 2007.

[130] Op.cit, Design Council, 2007.

associated with increased productivity and efficiency. Therefore the term creativity is indiscriminately applied to all types of works (not necessarily culture-based) and creativity is emphasised as an organisational resource. The risk is that processes inhibit the spontaneity which often leads to creative insights. Processes require linearity which make the emergence of creative thoughts more difficult. Systems rewarding creativity might be more effective than processes[131].

> "*Creativity is a process based on intrinsic value and motivation, is often spontaneous, rebellious and chaotic, generally individualised, beyond rationality and can tolerate loss and failure in a way inimical to business organisation.*" [132]

Implementing creativity is about challenging conventions and is therefore a way of managing changes. The value of art and culture is the enhanced ability it brings to challenge existing business and management practices. However as culture-based creativity is difficult to measure, managers can be reluctant to try and deploy it. In a world that demands accountability, results and progress, supporting creative changes requires a certain amount of faith and trust. Creativity also requires the acceptance of failure and change which often unsettle work organisations.

The organisation of creative industries deserves to be examined as we can learn from creative industries about ways of organising and managing creativity.[133] Because of their reliance on creativity, the creative industries as a whole provide lessons for managing creativity in businesses and administrations.

2.5.1 The experience of cultural and creative industries

> "*If show business was not a business it would be called show show*"
>
> Woody Allen

Operating at the frontline of the experience and networked economy, many businesses from the cultural and creative industries can be considered as role models when it comes to understanding how to run a creative organisation. However, creative professionals such as film makers, designers, advertising executives or games producers also often provide creative and innovative services to companies operating outside the cultural and creative industries and are increasingly considered as playing an important role in stimulating change in the general economy.

Such a notion is derived from two distinct characteristics of businesses which operate in the creative sector: Firstly, it relates to the common practice of cultural and creative enterprises of operating in highly collaborative, networked and people-centred environments in which improvisation and risk are key. These

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[131] Richard Seymour at a talk in Brussels for *Untitled – Sans Titre* – 13 May 2009 (*www.untitled-sanstitre.eu).*

[132] *Definition in Dying in the Arts: Creativity as Metaphor* from Glow H., Minahan S., Gahan P. – Bowater School of Management, Deakin University, Australia, 2005.

[133] Bilton, C., *Management and Creativity*, Blackwell Publishing, 2007.

factors are characteristic of the cultural and creative sectors and are increasingly characteristic of businesses operating in the wider economic landscape. Secondly, it relates to the idea that progressive companies and public institutions make increasing use of cultural and creative services across the value chain, in areas such as R&D, marketing, communication and human resources.

French sociologist Pierre Bourdieu has argued that the charismatic individual creator is only one element in the field of cultural production.[134] Successful cultural production requires investment, organisation and marketing. Creativity requires a business environment that supports such creation and its expression.
Whilst creative industries rely on creators and creative output for their survival, they are also organised to enable such creative output and to encourage the expression of talent and individuality.

The ways in which creative industries further creation varies according to the sector but they have the following characteristics:

1. The capacity to generate new ideas:

   - on the basis of a brief and or through technical or marketing requirements which are prescriptive (design, advertising, TV production, computer animation),

   - through individual creation (literary or music authors, visual artists, songwriters, film directors, screenwriters, games developers, fashion designers etc).

   New ideas can be generated "in-house" (design in car manufacturing, fashion design, a play in a theatre company) or outsourced (in which case, creative are not employees, but can be exclusively contracted with a company (artists in music, independent designers, visual artists).

2. Identifying and managing talent. This is the ability to retain talents and to network with the talent community whether creators, independent producers or managers ("schmoozing"). The creative industries are people-based businesses.[135] Creation is not "managed", creation is rather supported, encouraged and promoted.

3. Financial expertise in understanding the investment value of creative ideas. The ability to provide budgeting and forecasting that relates the amount invested in creative projects to its market potential (both for production and distribution). This involves the willingness to take and accept risks as creative ideas can never guarantee success. The ratio between success and failure is

[134] Bourdieu, P., *les Règles de l'Art,* Le Seuil, Paris, 1998.

[135] The story of creativity is a story of relationship and human bonds: Yves Saint Laurent/Pierre Bergé – Chanel/Lagerfeld – Coen Brothers/ Working Title (Tim Bevan-Eric Fellner) - U2/ Mc Guinness / Island Records/Interscope, Nobel Prize writer Le Clezio and publisher Claude Gallimard, etc.

rather high in the creative sector which implies the need for a long term vision and the tolerance of failure in creative output.[136]

4. Decentralised production coexisting with centralised administrative and often distribution functions (the Hollywood model).

In his book *Jamming,* [137] John Kao, Professor at the Harvard Business School, urges companies to look to the Hollywood network model. The network system of production is prevalent in the music, film and TV businesses – it is a way of bringing together different talents and limiting risks in case a project is not successful. Content is mainly developed by independent producers who are attached to larger companies for distribution purposes. The "major" finances the production, takes the risk on the project, and then assumes the marketing and distribution risk of the production generated. Companies do not need to own plants or physical infrastructure anymore ("Studios" or DVD, CD Plants). There is reliance on small structures for creativity to emerge. Independent record labels in music and small film production units provide an informal artist development service for larger companies. They are usually more innovative and less risk-averse than larger conglomerates which are subject to shareholding scrutiny and short term stock exchange imperatives.

The importance of geography in creative industries should also be highlighted. As Richard Florida has argued[138], creative industries are often clustered in a particular location; either in large cities with an excellent cultural offer (New York, London, Paris, Berlin, Barcelona) or in areas devoted to creation (Hollywood, Montreal, Silicon Valley).

Managing creativity therefore means reconciling the creative processes with the demands and constraints of a business organisation[139]. The way creative industries manage creativity and creative people, on which they depend entirely for survival, is worth considering.

2.5.2 Managing creative people

"Creative people are different from other people – special for better or worse, in a way that we are only beginning to understand" states Gordon Torr, author of a book *Managing Creative People.* [140]

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[136] Galenson, D., *Old Masters and Young Geniuses – The Two Life Cycles of Artistic Creativity,* Princeton University Press, 2006. This research on artistic creativity and life cycle of creativity makes an interesting distinction between conceptual artists (Picasso, Godard, Welles) and experimental innovators (Cézanne, Hitchcock and Gehry), whose master works came at a later age. "Experimental innovators seek and conceptual innovators find".

[137] Kao,J., *Jamming The Art and Discipline of Business Creativity,* Collins, 1997.

[138] Florida, R.. *The Rise of the Creative Class:* And How It's Transforming Work, Leisure, Community and Everyday Life. Basic Books Inc., U.S., 2003.

[139] Paris, T., *The Organisation, Processes and Structures of Creation,* Culture Strategic Foresight, French Ministry of Culture, November 2007.

[140] Financial Times, 10 April 2008 *Recruitment: Calling all creative types: hide in the garage*.
On Gordon Torr, *Managing Creative Peop*le, Lessons in leadership for the Ideas Economy, Wiley 2008.

Creativity is based on the expression of often rebellious and somehow chaotic people whose behaviour and ego make them somewhat inimical to business organisations. Creative people can be difficult to manage. On the other hand creators are often the inspiration for the overall strategic direction of a company – at least when their vision is shared by management.

Organisational creativity is often key to making connections between individuals and managing the complexity of this relationship. Creative industries are specialists in managing creative individuals and teams. Mutual trust and respect is a key ingredient to build upon the specialisation that is often a feature of creators. Creative industries' managers are accustomed to coping with emotional stress and disagreements that exist between creative minds.

Business managers have to act as brokers of creativity by connecting disparate talents, by being able to inject diversity or play with creative tensions. The management of creativity also requires finding the right balance between freedom on one hand and operational efficiency on the other.

Several examples illustrate the above:

"One of hallmarks of the team I think is this sense of looking to be wrong. It is the inquisitiveness, the sense of exploration. It is about being excited to be wrong because then you have discovered something new".

Jonathan Ive, Chief Designer at Apple[141]

Pixar [142]- Extracts of an interview with CEO Ed Catmull

A pioneer in computer animation, the company has a unique track record in achieving technological and artistic breakthroughs. *Toy Story*, produced in 1995, was the first computer animated feature film. Since then the company has produced 8 other films, including *Bugs Life*, *Monsters Inc*, *Ratatouille* and *Wall E*. All achieved significant box-office success. All the stories have been created internally by the Pixar community of artists. Pixar believes its success is based on its ability to manage creative talent and risk. In animation, creativity involves a large number of people from different disciplines working effectively together. The process takes four to five years for each project. It takes trust and respect to get talented people to work effectively with one another. Creativity is unleashed if the company is able to build an environment that nurtures trust and respect.

[141] *Business Week,* 25 September 2008.

[142] Harvard Business Review, *How Pixar foster collective creativity?* September 2008. Pixar was purchased by Disney in 2006 for USD 7.4 bn.

If you want to be original you have to accept uncertainty and have the capabilities to recover when your organisation takes risks and fails. The most difficult is to find the talented people. Creativity must be present at every level of the organisation. Pixar is an example where the marriage of technology and art brings extraordinary results. It shows the value of tearing down barriers between the different disciplines – the common language resting in creativity. "Technology inspires Art and Art challenges the technology".

The guiding principles of creativity management for the CEO of Pixar Ed Catmull are the following:

- Everyone must have the freedom to communicate with everyone else (e.g. the structure of the Pixar building is designed to maximise inadvertent encounters),
- It must be safe for everyone to offer ideas,
- Stay close to innovation in the academic community,
- Try to break down barriers between disciplines.

2.6 Conclusion

This chapter sets out to demonstrate the potential of culture-based creativity to make industry and the economy more innovative and, as a result, more competitive. The economy requires specific creative skills which are available in art and creative sectors.

At the level of the firm, culture-based creativity is essential for product innovation, branding, communication (in particular, communication of values) and management of human resources. It is a requirement to succeed in an economy that:

- Gives more and more importance to signs, symbols, values, emotions, experiences and aesthetics;
- Increasingly values access and sharing as much as ownership and monetary exchanges and in which creating relationships (social networking) is becoming as important as financial transactions.

The numerous paradoxes of the economy are that:

1. Economic statistics pay lip service to the importance of the intangible and it remains difficult to measure culture- based creativity. However, an increasing number of studies are showing the value of brands and the importance of design in transforming product development, services and processes as well as

strategy.[143] In the non for profit sector, regions[144] and cities know the value of culture investment to create economic prosperity, social cohesion and to attract the"Creative Class".

2. Culture-based creativity still has negative connotations for some businesses or investors. Research published by the National Endowment for Science, Technology and Art (NESTA) in the UK shows that while venture capitalists believe creative industries have a high growth potential, few are willing to invest in those industries. Only one in five VCs said they were likely to invest in the sector. Those who develop creative ideas often find it hard to gain financial backing. The divide between art and science is clear in the eyes of investors. This divide needs to be bridged if creative entrepreneurship is to be stimulated.[145]

3. Culture-based creativity is important in the search for differentiation, as a tool to innovate and is increasingly being used for this purpose.

4. Creative people are still reluctant to apply their imagination, non-linear thinking abilities, experiences and intuition to the benefit of enterprises. The latter remains attached in general to routine thinking and traditional as well as secure processes. Creative people will be increasingly called upon to mingle with people working in other disciplines in science and technology notably to stimulate innovative thinking.

5. "Managing" creativity is about adopting an attitude which enables exchange across disciplines (art and science for instance). It is about valuing risk taking and failure. Creativity management is about nurturing freedom and trust. It is very often a long term investment as creativity requires maturing through experience and social recognition (or acceptance).

6. The demand for culture-based creativity requires the development of creative skills and experimentation in society. This will be examined in Chapter 4.

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[143] Brown, Tim, *Design Thinking,* Harvard Business Review, June 2008. Tim Brown is CEO of IDEO, a design firm based in California.

[144] See notably the considerable economic success of regional film funds such as Wallimage (Wallonia in Belgium) and Film Y Väst (West Sweden) in establishing a creative economy and attracting investment in regions suffering from industrial decline.

KEA Study for Cineregio, www.cineregio.org.

[145] FT.Com *Show us the Money* by Fiona Harvey, 10 February 2004.

CHAPTER 3
CULTURE-BASED CREATIVITY IN ITS SOCIAL DIMENSION

> *"… the arts regenerate the rundown and rehabilitate the neglected. Art buildings lift the spirit, create symbols that people identify with, and give identity to places that may not have one. The arts teach the young how to create, inspire the imagination and believe in their own potential. Where the art starts, jobs follow, jobs which are independent and forward looking…."*
>
> John Tusa[146]

The notion that art and culture can have a transformative effect on both individuals and society has a long intellectual history, dating back to classical times.[147] But in recent years, the literature in this area has expanded dramatically and policymakers have become increasingly aware of the possibilities for culture as a contribution to a variety of social and economic policy areas.

In this section we examine how art and culture can have a creative effect in a diverse range of social areas, while bearing in mind that economic and social policy objectives in Europe are inextricably linked and shaped by many of the same forces, including technological change, globalisation and an ageing population.[148] There is a need to further understand how Europe's social agenda is connected to the Lisbon goals of innovation and competitiveness, as recalled by the Presidency Conclusions of the European Spring Council in March 2007, which highlighted the reciprocity of Europe's social and economic objectives.[149] But there is also a great need in Europe to consider the potential of culture in view of achieving such objectives.

This chapter shows how culture can promote social cohesion and how it contributes to crime prevention, criminal justice and regional and local regeneration in new ways. It then looks at the effects of culture on social processes, and especially focuses on how social capital is formed through cultural participation. Finally, it addresses the role of cultural activities in public services innovation and their contribution to changing institutional settings. Before doing so, we introduce the key role that creativity plays in cultural activities aimed at social transformation.

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[146] Tusa, J., *Engaged with the Arts*, I.B Tauris, London 2007.

[147] Belfiore, E. & Bennett, O., *Rethinking the Social Impact of the Arts: a critical-historical review*, in Bennett, O & Ahearne, J (Eds.) *Research Papers*, Centre for Cultural Policy Studies, University of Warwick.

[148] Commission of the European Communities, *Renewed social agenda: Opportunities, access and solidarity in 21st century Europe*, CEC, Brussels, 2008.

[149] Presidency Conclusions of the European Council (2007). Council of the European Union. http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/93135.pdf (accessed 10.01.2008)

3.1 Culture-based creativity leads to social innovation

Social innovation, defined as innovation in the ways social outcomes are being achieved, has become a conscious concern in policy discussions. Indeed, Murray et al. argue that social innovation can radically re-shape critical areas of social production and distribution[150] , including:

- systems of prevention (e.g. re-inventing criminal justice, early year programmes for children to reduce risk factors, healthy living and positive health);
- support economy (e.g. re-shaping the care of elderly, new models of learning);
- complexity and flow in the social economy (e.g. transformation of hospital care, redesigning urban mobility); and
- markets for the marginalised (e.g. micro finance, fair trade, sustaining local economies through collaborative networks).

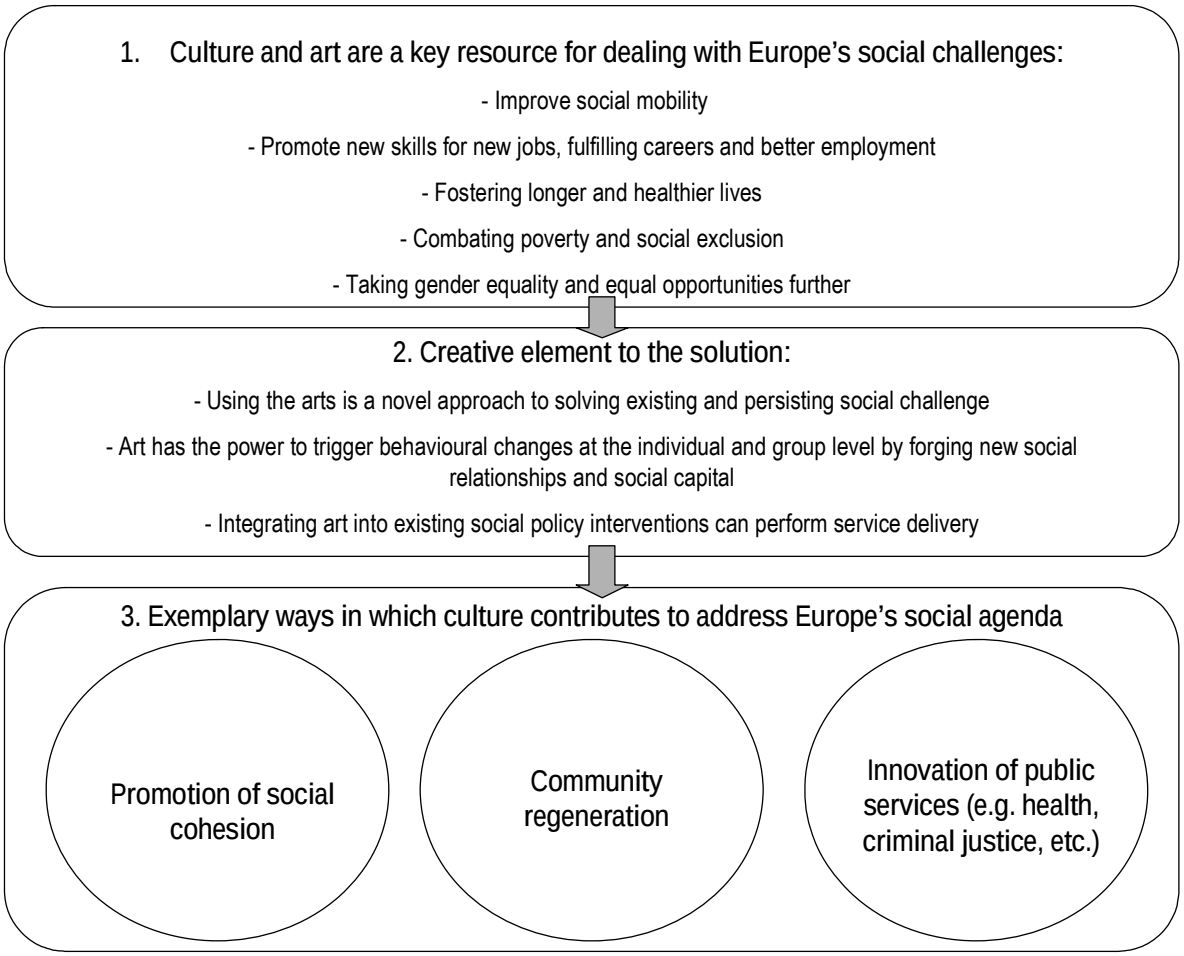
Culture-based creativity plays a key role in the generation of social innovation. At the most basic level, a creative solution in this context may simply involve a novel approach taken by linking a culture-based intervention with a social policy objective, as is the case with public art in urban regeneration. Secondly, incorporating cultural or artistic elements in existing social interventions can help develop completely new approaches – as is the case with the health care case study below. Where individual behaviour is the target, cultural activities can lead to a change in self-perception and to the development of new skills which can both help people to break with former ways of thinking or perceiving the world.

The view that culture has a role to play in delivering social objectives is not an uncontentious one, with critics often decrying such instrumentalist rationales, not only as inadequate social policy but also as 'bad for the arts'.[151] On the other hand, some argue that culture can offer new approaches both in terms of tackling what are sometimes referred to as 'wicked social problems,' for which current approaches are deemed inadequate. They argue that there are transformational possibilities arising from engagement with creativity which move beyond the instrumental, by allowing creative activity to help determine new policies by developing and negotiating shared understandings of policy challenges and mapping out solutions.

[150] Murray, R., Mulgan, G. & Caulier-Grice, J. Generating Social Innovation: setting an agenda, shaping methods and growing the field, *Social Innovation Exchange*, 2008.
http://www.socialinnovationexchange.org/files/event/attachments/Copy%20of%20Generating_Social_Innovation%20v4.pdf [accessed February 2009]

[151] Mirza, *Culture Vultures: Is UK arts policy damaging the arts?,* Policy Exchange, London, 2006.

The following illustration highlights the role of culture in stimulating creativity that generates social outcomes:



It is of course difficult to differentiate clearly between types of social impacts and many of the case studies below will have worked on several different levels: promoting cohesion via social capital formation for example; or using new approaches to public services in view of crime prevention. The headings below therefore are not meant to suggest that cultural projects only have single types of impacts, but merely serve to illustrate the kind of social impacts that cultural activities can have.

3.2 Culture and social capital formation - strengthening social processes

Contemporary interests in social capital formation[152] and in the potential of cultural activities to develop such capital have led researchers towards an 'ecological' view of the role of cultural activities within communities – taking into account a variety of agents, including organisations, and their links with one

[152] Putnam, R. *Bowling Alone: The Collapse and Revival of American Community*, Simon and Schuster, New York, 2000.

another – rather than simply focussing on individual cases and outcomes. From such perspective, culture contributes to strengthening the social ties among multiple communities and actors and thereby nurtures individual as well as organisational well-being.

Notions of social capital seek to build upon the insights of human capital theory[153] and site the asset value within social relationships, not individuals. One role for cultural activities is thus to develop these relationships. More recent work[154] has sought to distinguish between:

- 'bonding' social capital, which cements groups of like-minded individuals (and can often be destructive, as in criminal gangs);
- 'bridging' social capital (weaker links across more diverse groups);
- 'linking' social capital (links between groups with different levels of power or social status).

Those who argue that cultural participation is beneficial to social capital formation usually have bridging or linking social capital in mind, particularly that which promotes links across generations, social classes, ethnic or religious groups. The assumption here is that artists as well as artistic projects strengthen the social fabric of a community. They thereby make it more resilient and provide the ground for people to develop imaginative and creative solutions – in business as well as in social domains.

Jeanotte[155] argues that those who participate in cultural activities are more likely to volunteer in other capacities, and volunteering is often used as a measure of social capital. Other researchers suggest that participation in cultural events has more influence than other kinds of events when it comes to developing other elements of social capital such as trust and tolerance.[156]

In many cases, cultural institutions themselves function as 'third spaces,' allowing the mixing and blending of different groups. In the case study below, this is an express intent of the project; in other cases, it is more of a beneficial side-effect. A recent study[157] of mixed-media venues in the UK (for example FACT in Liverpool, the Cornerhouse in Manchester or Watershed in Bristol) argues that such cultural centres act as 'hubs for inter-disciplinary relationships.' Many of these mixed media venues began as art house cinemas and have since developed a variety of digital media offerings combined with social, educational and business development roles. Beneath the informal structures of such organisations lies a network of often long-term personal relationships which are the real mechanism by which collaboration is effected. However, their

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[153] Becker, G., *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. Chicago*, University of Chicago Press, 1964.

[154] Aldridge, S.. and Halpern, D., *Social Capital: A Discussion Paper*, Performance and Innovation Unit, UK Cabinet Office, London, 2002.

[155] Jeanotte, M. S., *Just Showing Up: Social and Cultural Capital in Everyday Life*, SRA, Department of Canadian Heritage, 2003.

[156] Stole, D. & Rochon T., Are All Associations Alike? Member Diversity, Associational Type and the Creation of Social Capital, *American Behavioural Scientist*, Vol 42, 1998, No 1.

[157] Fleming, T., *Crossing Boundaries: Cross art-form and media venues in the age of 'clicks' not 'bricks'*, Arts Council England, London, 2008.

success also depends on remaining 'porous' and consistently open to collaborations. The multi-purpose character of the institutions enables them to maintain such openness. Although these establishments often receive cultural funding for their core programmes, that is showing films, they also frequently bid for other public resources for educational and other activities, which forces them to develop a wider range of networks and collaborations.

Case study: Heritage, Memory and Local Population (Poland)

The programme Heritage, Memory and Local Population was a project funded by the European Union Culture 2000 programme, which sought to strengthen local communities in four Member States through innovative arts projects surrounding multiple heritage sites. The programme sought to raise awareness among local communities concerning their historic and social links with heritage monuments and of the various possibilities these monuments offer for an active participation, especially for young and socially deprived people. By specifically focussing on strengthening the social ties and relations between individuals, groups and institutions – both private and public, it can be regarded as a flagship project in the context of arts-supported social capital formation.

The biggest project of the programme, 'Nova_Huta.rtf', took place under the lead of the Malopolska Cultural Institute in Nova Huta, a quarter of Krakov (Poland) which was built around steelworks as a 'socialist' model area in the 1950s. The abbreviation 'rtf' in the project name stands for 'relations, text, form', which summarises the main objectives: to build relations between people, whilst exploring personal stories and cultural texts using a number of artistic forms. In particular, the project aimed to develop sustainable links between two communities – the often unemployed steelworkers residing in Nova Huta and other residents of Krakow – but it also aimed to build intergenerational networks.

There were several activity strands: Firstly, weekly debates were held with local inhabitants to discuss a concept for the future (artistic) use of the Nova Huta market square which was then submitted to the local authority. Such a participatory element linked to a cultural initiative is typical of arts-based interventions that have a social objective and tends to be a powerful means to create local community buy-in by people that may perceive art as out of touch or elitist. Secondly, artists created 'business cards' of the city (including posters, role playing games and arts installations in public spaces), helping the community of Nova Huta to experience and reclaim their surroundings anew. Moreover, nine volunteers collected stories and experiences of Nova Huta's residents, having received journalistic and interview training. Finally, an exhibition of objects belonging to the first inhabitants along with young people's commentaries and reflections on these objects and the subject of emigration was organised in the market square, and thereby establishing a link between the areas younger generations and its rich past.

As a result of the Nova_Huta.rtf project many local residents have extended and strengthened their social networks and links. For example, during the preparation phase of the exhibition, older people shared their experiences with young residents, and these stories not only constitute an insightful resource for the present day generation, but through them both groups could explore their relationships with each other in a new,

collaborative context. Also, the project led people to stronger engage with their neighbourhood, in particular by getting involved in the conceptualisation and planning of local spaces. Thus people had the opportunity to establish links with the local authority and to influence local decision-making. Apart from that, local residents also engaged with Nova Huta based institutions such as the local Museum and the CK Norwid Cultural Centre, some of them for the first time.

3.3 How culture can help achieve social policy objectives in new ways

In recent years, policy makers have increasingly started to think about how culture can be used to creatively meet a range of social policy objectives.[158] Policy areas in which culture has successfully helped in this respect include social cohesion, urban regeneration, physical and mental health and crime prevention. In the sections below we introduce ways in which cultural interventions can contribute to social transformations in some of these areas and present a selection of case studies.

3.3.1 Promoting social cohesion

Policymakers' interested in cultural impacts on social policy at the group level tends to focus either on specific marginalised groups – such as offenders, the homeless or refugees - or on 'community issues' such as social inclusion, neighbourhood regeneration or community and civic cohesion. In some cases, the split between these approaches is not as clear as it appears; although the language in the latter case is more inclusive, the communities targeted for 'renewal' tend indeed to be those that have high numbers of relatively marginalised citizens.

Social cohesion can be defined as a set of shared norms and values for society which also encompasses the diversity of people's different backgrounds and helps to ensure that those from different backgrounds have similar life opportunities. It is the ability of cultural activities to help us express specific cultures, while also developing strong and positive relationships between people from different backgrounds in the workplace, in schools, and within neighbourhoods.

The notion of intercultural understanding is key to what we mean by social cohesion – and this is where most commentators[159] see cultural activities as having an impact. Carole Scott's work,[160] for example, suggests that both professionals and the public agree that museums contribute to social cohesion, both by making 'people feel they belong to a common heritage' and making them aware of other heritages.

[158] Reeves, M, *Measuring the economic and social impact of the arts: A Review*, Arts Council, London, 2002.

[159] Linley, R. and Usherwood, B, *New Measures for the New Library. A Social Audit of Public Libraries*. Centre for the Public Library in the Information Society, The University of Sheffield, 1998 *and* Harris, K, *Open to Interpretation: Community perceptions of the social benefits of public libraries*. BLRIC (Report 88). CDF, 1998.

[160] Scott, C, 'Museums and impact; curator'. *The Museum Journal*. (Vol. 46, No 3, pp 293-310) 2003.

Case study: Abolition '07 (UK)

Abolition '07 was a project developed and delivered by the Hackney Museum in London, marking the bicentenary of the abolition of the transatlantic slave trade. The project worked with local groups from a variety of ethnic origins including African/Caribbean, Hungarian, Malaysian, etc. The aim was to explore the issue of enslavement, its abolition and the legacy of enslavement on the communities living in Hackney (a North-London borough) through a variety of community consultation events, drama workshops and an exhibition.

The project has successfully attracted underrepresented and socially excluded groups including ethnic minority communities, young people and older people. The theme of Abolition '07 has enabled a wide audience to increase their understanding of cultural heritage and the impact of enslavement on the communities of Hackney. Some of the younger participants have related to their ancestors and learnt about their own heritage, as one teacher explained: *"The Caribbean and African heritage – children could make connection with their history"*.

Moreover, the pupils had a real opportunity to explore their identity, pride and cultural heritage: *"Children today really really need to have this experience, especially children of African and Caribbean backgrounds. They are so lost, not knowing themselves. I work in a pupil's exclusion educational programme with many children from an African background who frown on the fact that they are African [whereas in this project] the whole experience was extremely powerful and enlightening."*

Although this was not a specific aim of the project, it brought together participants from a wide range of age groups and there have been examples of intergenerational links; for example through the young people working with writers and performance poets and students working with practising visual artists.

3.3.2 Regional and local regeneration

Regeneration is a broad term, one that, according to Evans and Shaw, is place-based (concerned with a specific geographic area, neighbourhood or town) and encompasses environmental, social and economic aspects. Territorial communities have their own culture and history which adds to the quality of people's life. They also share their own development issues which may include below the average gross national product contribution, skills shortages, demographic trends, unemployment, high levels of disadvantaged minorities, and other issues. In such challenged areas, community workers look at a range of policy interventions to help people to engage, to develop social and economic skills and to master their own future. There is increasing evidence that art as well as cultural interventions can act as a lever in this respect.[161] Thus culturally-led regeneration is far more than a mere improvement in the local environment, but it should also

[161] Popple, K; Scott, S. Arts in Our Community: *Interim report of the Research Evaluation of Plymouth's Water Front Project.* Development of Social Policy and Social Work. University of Plymouth, Plymouth, UK., 1999.

ensure improved employment opportunities, increased health and well-being and enhanced quality of life.[162]

Culturally-led regeneration is often linked with the idea of iconic or destination buildings, many of them being art (particularly modern art) galleries and museums.[163] The Guggenheim museum in Bilbao is perhaps the best example of this in Europe, and it is one that many other cities have tried to emulate in the past decade. A cultural icon in a depressed, post-industrial city, the high profile capital project was joined by other major infrastructure projects, notably a high quality underground rail system, designed by Norman Foster. The short-term benefits were impressive; a worldwide transformation of the city's image, indicated by a large rise in tourism. Overseas tourism increased by 43% between 1994 and 2000, while domestic tourism rose by even more (58%) over the period.[164] Large-scale festivals, such as the European Capital of Culture (ECoC) scheme, may have similar effects. Research on the ECoC Liverpool 2008 indicates that direct impacts of the ECoC on visitor figures are positive: at the start of 2008, there was a high proportion of first time visitors to the city (24% of all visitors from outside Merseyside in Jan-Apr 2008) and 77% were influenced to some extent by Liverpool ECoC when deciding to visit.[165]

However, the sustainability of such large-scale events has been questioned. Gentrification as a result of such large-scale and high-profile initiatives is another issue often raised.[166] Nevertheless, several authors including Gertler[167], Bradford[168] and Bottomley[169] et al argue that cultural investments can have a specific role in making city-regions both competitive and more socially sustainable, in particular when finer-grained, more local initiatives are concerned.[170] Mark Stern argues that smaller, community-based arts groups can have just a dramatic effect on a neighbourhood as major arts institutions, without the harmful effect of gentrification, as it stimulates renewal "not through direct economic impact, but by building the social connections between people".[171]

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[162] Evans, G. and Shaw, P., *The Contribution of Culture to Regeneration in the UK: A Review of the Evidence*, DCMS, 2004.

[163] Baniotopoulou, E., 'Art for whose sake? Modern art museums and their role in transforming societies: the case of the Guggenheim Bilbao', *Journal of Conservation and Museum Studies*, 7, 2000.

[164] Garcia, B., 'Cultural policy and urban regeneration in Western European Cities: lessons from experience, prospects for the future', *Local Economy*, Special Issue: Cultural Policy and Urban Regeneration, 19(4), 2004.

[165] Impacts 08, *Benchmark Indicators Update*, December 2008.

[166] Op. cit. Evans, G. and Shaw, P., 2004.

[167] Gertler, M. *Creative Cities: What are they for, How do they Work and How do we Build them?* Background Paper F/48. Canadian Policy Research Networks [Online],.2004.

[168] Bradford, N. *Creative Cities*. Background Paper F/46. Canadian Policy Research Networks, 2004.

[169] Bottomley, MacDonald, Poetker and Stewart, *401 Richmond,* [Online],.2003.

[170] BOP Consulting, *New Directions in Social Policy: Developing the Evidence Base*, London: Museums, Libraries and Archives Council, 2005.

[171] Stern, M. and Siefert, S., *Culture Builds Community: Evaluation Summary Report*, SIAP, University of Philadelphia, 2002.

Such local regeneration is also being supported by the European Regional Development Fund, one of the key means to achieve the EU regional policy objectives which include convergence (stimulating growth and employment in the least developed regions), regional competitiveness and employment, as well as European territorial cooperation.[172] The fund aims to strengthen economic and social cohesion by redressing regional imbalances across Europe. The European regional policy does recognise a potential role for culture 'in support of socio-economic development, sustainable tourism and improved regional attractiveness.'[173]

Culturally-led local development in disadvantaged regions

The town of Medzilaborce[174] and its surrounding region is one of the most peripheral Slovak regions and suffers from very high unemployment rates (13.5% in March 2007). The overall objective of a project in the region was to accelerate local development of tourism and thereby to contribute to local job creation and regional development. In doing so, the local stakeholders recognised the need to be unique and innovative in comparison to other cities. The key innovative element of this plan was developing a new local development tool based on art as a driving element.

The central idea was to market the city internationally using the link to Warhol. The project's activities focused on three key tourist locations in Medzilaborce: the town centre, the town's leisure and sports park (with amphitheatre) and the Andy Warhol Museum of Modern Art (AWMMA). The renovation and new elements of infrastructure were designed following Andy Warhol's Pop Art style. The works, co-financed by the European Regional Development Fund, included renovation and new construction of pavements, parking sites, public lighting, facades of selected buildings as well as the introduction of a new town information and street information system. Another part of the plan was the partial reconstruction of the town amphitheatre. The endeavour also included the creation of a replica of Andy Warhol's parents' village.

The initiative was welcomed by the local citizens as it drew attention to their role in local life as well as the local private sector. The image of the town has significantly changed and with an improved local environment, tourism figures have risen and new private activities in tourism services (e.g. restaurants, guesthouses) have been initiated.

An increasing number of academic studies seek to capture the social and economic regenerating effects of arts-based interventions on community development.

[172] L 210/1, Regulation (EC) No. 1080/2006 of the European Parliament and of the Council of 5 July 2006 on the European Regional Development Fund, *Official Journal of the European Union*, 2006.

[173] L 210/1, Regulation (EC) No. 1080/2006 of the European Parliament and of the Council of 5 July 2006 on the European Regional Development Fund, *Official Journal of the European Union*, 2006.

[174] http://ec.europa.eu/regional_policy/projects/practices/details.cfm?pay=SK&the=93&sto=1449&region=ALL&lan=7&obj=ALL&per=ALL&defL=EN.

Stern & Seifert analysed data maintained by the City of Philadelphia and found that cultural presence is associated with broader neighbourhood improvement. Among Philadelphia neighbourhoods that were low-income in 1990, roughly 15 percent underwent economic revitalization— defined by above average poverty decline and population gain—over the next decade. Yet, if the block group had a high regional cultural participation rate, the chances that it would revitalize were twice as high.[175] Moreover, their collaboration with The Reinvestment Fund demonstrated that within Philadelphia block groups with the most serious housing market problems, areas with high levels of cultural engagement were roughly three times more likely to have had decreasing poverty and increasing population during the 1990s. [176]

While there remains a need to collect accurate statistical data concerning these impacts qualitative findings suggest that such interventions can lead to a greater understanding of different cultures, more skills in community leadership and management; and a stronger sense of local identity as well as a feeling of "ownership" and responsibility.[177] Effects at the individual level included improved levels of self-expression, communication, feeling good, working hard, pride in the making, having fun and feeling as part of a team.[178] Of course, culture and art cannot independently achieve the regeneration of a community in decline. But they can act as complementary forces that go hand in hand with a variety of structural and capacity-directed interventions (e.g. better facilities and infrastructure, education, social services, etc.).

The following case study specifically examines the ability of community media initiatives to stimulate local regeneration. Community media are a specific form of "third-tier" media (next to commercial media and public service broadcasting) which encourage the volunteering by members of local communities.
It involves participatory creative media production and has lately received priority attention by the European Parliament – also because of the social and cultural effects it has.[179]

Case study: Community Media practice, skills development and local community renewal (UK)

Community Media initiatives exist across the European Union and take shape in a number of different ways. The social and cultural aims of the different initiatives are usually what sets them apart. For example, a Community Media programme in Hungary may have a stronger focus on integrating marginalised ethnic minorities (such as the Roma) into the public sphere while an initiative in the UK will most likely be focussed on local regeneration efforts and skills development.

Radio Regen is a Manchester based Community Media station with the goal to foster media and communication skills as a way to promote social inclusion and regional regeneration. In essence, the

[175] Stern, M. & Seifert, S., Culture and Urban Revitalization: A Harvest Document, University of Pennsylvania, 2007, p. 48

[176] Stern, M. & Seifert S., Culture and Urban Revitalization: A Harvest Document, University of Pennsylvania, 2007, p. 49

[177] Kay, A., Art and community development: the role the arts have in regenerating communities. Community Development Journal. OUP. Oxford, 2000.

[178] CAFÉ ,Arts Awareness Intervention. Dublin, 1996.

[179] KEA Study on *Community Media in the European Union,* European Parliament, Brussels, 2006.

initiative does so by enabling individuals from the Greater Manchester area which have no professional background in media production to create radio and television programmes that are then broadcast on local channels.
Since 1998 Radion Regen has enabled more than 5,000 residents of disadvantaged areas of Manchester, Salford and the North West to get on air and thereby achieved many of the above benefits. Radio Regen has been an influential advocate for the establishment of strong links between Community Media and other social policy objectives. With regards to learning and skills development it has achieved the teaching of media literacy skills as part of the English National Curriculum. It has also implemented 6 partnerships with local schools to promote communication and IT skills through radio production and broadcasting sessions. Finally, Radio Regen has created the Community Radio Toolkit that provides advice on how to start, run and finance a CM initiative. This toolkit is available online and provides valuable advice to CM volunteers and activists.

3.4 Innovating public services

Improving the delivery of public services – services provided through or financed by governments for their citizens – is an important objective of Member States and the European Union. Increasingly policy makers turn their attention to public sector innovation, as well as improved delivery of such services.[180] Such focus can include new methods of funding (such as public-private partnerships), new ways of communicating with the public (political blogs) or innovation in wider areas such as democracy (e-voting or citizens' juries) to international affairs (the International Criminal Court).

The role of design in public services

The most common form of public sector innovation is the reform of public service delivery. Design, if understood as a structured creative process, can play a key role in finding innovative and practical solutions for complex problems.[181] In particular, design-led thinking can improve service delivery by developing more personalised services, managing risk by prototyping new ideas on a small scale first, identifying inefficiency thus improving value for money and by giving users more control.[182]

The UK Design Council piloted a range of live public sector projects to test this approach. One of the projects was the 'Move Me' project centre on a small school in Northumberland. The project looked at the school community's mobility needs and explored how they could be better served by combining existing services in smarter ways – for example, the planning of integrated journeys, vehicle sharing, or better use of community vehicles such as minibuses. Also, a toolkit was developed for transport providers who wish to improve access to their services. Ultimately, the project team designed a reliable and ecologically

[180] Mulgan, G., *Ready or Not? Taking innovation in the public sector seriously*. NESTA, London, 2007.

[181] DTI, *Economics Paper No. 15 – Creativity, Design and Business Performance*, HMSO, London, 2005.

[182] Design Council, *The role of design in public services*, 2008.

sustainable transport service that helped this particular rural community and also provides a model that would work elsewhere.

The role of culture in innovating public service delivery has not received much attention in public innovation literature,[183] but cultural advocates have stressed the importance of culture in creating trusted institutions.[184] Indeed, art and culture can benefit public service delivery and innovation in a variety of ways:

- Firstly, many cultural services are also public services – funded out of taxation and responsible to their public – public service broadcasters are an example of this and many make much of their reputation as 'trusted media providers;'[185]
- Secondly, participation in cultural activities can emphasise a feeling of belonging in society, as in the social cohesion case study above, which also increases trust in the public realm and public services. Culture can therefore help to bring certain public services closer to their constituents;
- Thirdly, some public services have pioneered new methods of collaborative feedback and decision making by means of integrating creative media innovations – online discussion fora, social networking sites, online petitions allow the public to interact more easily with public services;
- Finally, some public services promote participation and involvement, often of marginalised groups – the development of community media and community arts more generally are good examples of this.

Another kind of public sector innovation is the attempt to change institutional forms through cultural intervention. This can be well exemplified by looking at the case of healthcare delivery below.

Improving healthcare delivery

Europe's ageing society is forcing policymakers to confront a range of issues from well-being in later life, to ensuring that pensions and healthcare systems are sufficiently well-funded to deal with changing demography. In addition, many now accept the links between poor health and other social issues such as poverty, unemployment and low levels of education, while an increasingly holistic' view of health – encompassing physical and mental well-being – is becoming better-understood.[186]

It is this background, particularly the more holistic view of health, which provides the rationale for many cultural organisations to work in the health/mental health sphere. There are essentially two types of activity that cultural organisations pursue in this field:

- Arts-based activities that aim to improve individual/community health by addressing the social determinants of health – including issues of poverty, unemployment and social isolation;

[183] Mulgan, G, *Ready or Not? Taking innovation in the public sector seriously*. NESTA, London, 2007.

[184] Holden, J, *Cultural value and the Crisis of Legitimacy*, Demos, London, 2006.

[185] Davies, Gavyn, *The BBC and Public Value*, London, Social Market Foundation, 2004.

[186] WHO, *Holistic Health*. World, Health Organisation, 2004.

- Healthcare delivery that uses arts-based approaches to enhance the healthcare environment.

Whereas the first type of activity can be seen as seeking to address social policy objectives (as the interventions mentioned in paragraph 3.2), in this section, we will focus on the second type of activity which has innovation of the healthcare service and environment as its primary objective. This includes the use of the arts in operative and post-operative recovery. A review of the medical literature on healthcare delivery using cultural approaches shows that there are a number of medical areas in which there is evidence that clinical outcomes have been achieved through the intervention of art.[187] For example, research has shown that visual art and live music greatly diminished the levels of anxiety and depression in cancer patients having chemotherapy treatment.[188] Patients exposed to music during or after an operation reported significantly lower pain intensity and required fewer analgesics in the immediate post-operative period than those patients not exposed to music.[189] With regards to mental health, an evaluation of the role of therapeutic theatre as a method of therapy for people with deficits in communication, cognition and social skills showed a positive effect in alleviating these disabilities.[190]

Other work has focussed on the impact of art on hospitals themselves. Leather et al[191] has looked at the impacts from new environmental designs in both in-patient and out-patient areas. Results included the self-reported, such as reduced levels of stress and increased levels of positive environmental stimulation; together with measurable outcomes such as shorter post-operative stay and reduced post-operative drug consumption.

As such, the outcomes of arts interventions tend to be oriented towards clinical outcomes and/or improving the standard of care provided by practitioners, but they could also include the education and training of practitioners, and the introduction of works of art into the design of healthcare environments. Some projects, such as the example below, feature elements of all these approaches.

Case study: Culture à l'hôpital en Rhône-Alpes (France)

The project 'Culture à l'hôpital en Rhône-Alpes' is embedded into the national programme 'Culture et l'hôpital', a programme supported by the French Ministry of Culture and Communication, the French Ministry of Health and Solidarity, private companies and foundations in France that seek to encourage collaborations between cultural organisations and health institutions, and the development of cultural strategies for

[187] Lelchuk-Staricoff, R., *Arts in Health: a Review of the Medical Literature*. Arts Council England, 2004, a Research report 36.

[188] Staricoff, R., Loppert, S., 'Integrating the arts into healthcare: can we affect clinical outcomes?', in Kirklin, D., Richardson, R. (eds). *The Healing Environment: Without and Within*. Royal College of Physicians. Chapter 5, 2003.

[189] Nilsson, U., Rawal, N., Unosson, M., 'A comparison of intra-operative or post-operative exposure to music – a controlled trial of the effects on postoperative pain', *Anaesthesia*, 58, 684-711, 2003.

[190] Snow, S., Damico, M., Tanguay, D., 'Therapeutic theatre and wellbeing', *Arts in Psychotherapy*, 30, 2, 73-82, 2003

[191] Leather, P. et al., *A comparative study of the impact of environmental design upon hospital patients and staff*, Institute of Work, Health & Organisations, University of Nottingham, 2000.

hospitals.[192] Extended by a number of objectives, the first regional convention in Rhône-Alpes (2001-2005) aimed at reinforcing the human dimension of the hospital and at rethinking the global approach to the patient, as well as at improving the quality of life of patients and caretakers in health establishments. It also sought to encourage exchanges between different workforces within the hospital. The second phase of the programme (2006-2008) widened its objectives by also aiming to open up the health establishments to the community and to encourage exchanges with the city in which it is located. The overall goal was thus to transform a public service through cultural activities, as well as increasing social cohesion.[193]

The first phase of the project was funded with 380,000 € by the Regional Agency of Hospitalisation (Agence régionale de l'hospitalisation Rhône-Alpes – ARHRA) and 50,000 € by the Regional Cultural Directorate (Direction régionale des affaires culturelles en Rhône-Alpes – DRAC). A total of 43 health care establishments participated in the programme. The second phase is being funded by ARHRA (380,000 €), DRAC (100,000 €) and the Rhône-Alpes Region (100,000 €). The funding is normally granted for one year, although in the current phase, a three-year grant can be made to those projects which have been running for at least three years during the first phase of the programme. The individual budgets for each project range from small-scale grants of 800 € to large three-year funds of up to 35,000 €. The programme is now coordinated by Hôpital Innovation Culture (HI-Culture), an organisation comprising representatives of public and private health care establishments, and national health care federations.

The projects implemented as part of this programme include a wide range of activities and cultural domains, such as dance, theatre, circus, music, writing, plastic arts, photography, film and heritage. Most of the activities are being carried out in the form of ateliers which are then opened up to a larger audience by means of a theatre performance, an exhibition, or the production of a DVD or a publication. The projects involve the participation of patients, caretakers and/or administrative staff. The number of participants varies according to the scale of the projects, ranging from as little as 6 people in one atelier up to approximately 25 persons. Similarly, each of the presentations or exhibitions involves smaller or greater numbers of community members; from around 200 up to 3,000 people for an exhibition project in the Lyon based psychiatric hospital, 'La Ferme du Vinatier'. Most projects last for one year (or one cultural season) but some projects have continued over several years.
At the end of each year, all projects submit an evaluation report to HI-Culture, which summarises the project activities, number of participants and describes the performance against the set objectives. Moreover, in 2004, ARHRA and DRAC (Rhône-Alpes) commissioned an external evaluation of the programme that was carried out by the University Lyon 2. This evaluation focussed on the impacts of the programme on participating health care establishments, as well as looking at the management structure of the programme. An evaluation of the second phase of the project is currently being produced.

The 2004 evaluation demonstrated that the programme had led to a process of rethinking and questioning existing professional practices, conceptions and hierarchies. The cultural activities happening in the health

[192] Direction Régionale des Affaires Culturelles Rhône-Alpes et Agence Régionale de l'Hospitalisation Rhône-Alpes "Il suffit de passer le pont: Restitution du groupe de réflexion régional 'Culture et Hôpital', 2001.

[193] Direction Régionale des Affaires Culturelles Rhône-Alpes et Agence Régionale de l'Hospitalisation Rhône-Alpes Convention Culture-Hôpital, 2006-2008.

care institutions interrupted certain routines, such as the timing of meals or the use of wards for particular activities. To a certain extent, the patients thus re-captured control over their own time and space, whilst the medical staff had to adapt to the new situation when e.g. the physiotherapy ward was being transformed into a dance atelier for a few hours each week.[194]

It also established new terms in the relationships between caretakers and patients. This meant that a new approach to health care services was developed, focussing more on its human than on its technical dimension. One paralysed patient explains this change as a result of his participation in a theatre performance: *'What I want is that people look at me when I'm on the stage. To be able to look at yourself, to listen to yourself, to applaud yourself, means that you are not only a mere resident, but you are becoming a human being*.'

Finally, the programme allowed the health care institutions to reconceptualise their role in society and there are indications that it changed the way the establishments are being perceived by the community, e.g. due to them offering a new dimension as a location for arts exhibitions and cultural performances.[195] These relationships between the health care institutions and communities are further interrogated in the current evaluation.
Since this is a national programme, similar projects are being carried out across other regions in France.

Culture's contribution to crime prevention and criminal justice

Another example of the attempt to change institutional forms in view of social objectives is the criminal justice system. Criminal justice policy differs widely across the EU but administrations are concerned to reduce re-offending rates and this – together with basic skills acquisition - is often the aim of cultural projects in prisons. Artists commonly work in prisons and with young people at risk of committing crime.

Research undertaken in California compared two samples of people leaving secure establishments.[196] The first sample focussed on people who had participated in an arts programme at least once a week for a minimum of six months. The second sample contained all people leaving secure establishments in California over a period of five years. The comparison found that those people who had participated in art programme were less likely to re-offend than those who had not. Two years after release 69 per cent of those who had taken part in the arts programme had not returned to custody, compared with 42 per cent of all those released.

Drama-based approaches have been used to improve the literacy skills of prisoners. In one UK example 15 prison establishments took part in a drama programme over three years, with 77 per cent of participants successfully completing the projects. For example, a 90-hour drama-based project at Send prison was

[194] Herreros, Gilles, Les petites liaisons Culture-Hôpital: Variations sur le vital, Evaluation of the convention ARHRA-DRAC/Irco, 2004.

[195] Ibid

[196] Arts Council England, *The arts and social inclusion: evidence on impact,* 2003.

highly effective in helping inmates to improve articulacy and communication skills, as measured by City & Guilds examinations, 81 per cent of the women inmates gained these qualifications at the highest level.[197]

Case study: Archeological and conservation training for prison detainees (Italy)

Between 2001 and 2003 the Italian penitentiary of the area of Rebibbia, together with the city of Rome, initiated a project that took a completely new approach to future crime prevention. The idea was to provide archaeological training to criminal offenders based in the Rebibbia prison.

The course was aimed at providing training that could be used by offenders to get a job in the archaeological field and thereby to achieve their rehabilitation, whilst at the same time providing them with a learning experience that could enhance their personal knowledge and comprehension of society. The exhibition project aimed at teaching the offenders skills and abilities related to museological work, as well as offering them a way of sharing their learning experiences. At the same time, the exhibition's goal was to make accessible never-exhibited archaeological objects to visitors, and to promote a new image of Rebibbia as a historical heritage site rather than as a slum hosting the city's biggest prison.

The first training course started in September 2004. Lasting for 11 months, it provided 10 offenders with 500 hours of training in three modules: History of the Ancient world, Methodologies and techniques of archaeological excavations, and Care of the green areas within archaeological sites. The course also included practical activities such as the cleaning and marking of archaeological artefacts that had been discovered during an excavation in the area of the prison. The second training course started in January 2006, lasting until April 2007.[198]

The ultimate goal of the project was to help the offenders find a job. Indeed, two offenders who were released in 2007 have been offered a job in archaeological excavation but for personal reasons had to deny the offer. Another participant chose to take up university studies in cultural heritage management. In terms of wider social impacts, it can be noted that all participants are now free and none of them is re-offending. Furthermore, the project generated great attention for the prison in newspapers and TV. The exhibition has become the first stop of any high-profile visitor to the prison.

[197] Unit for Arts and Offenders, *Getting our act together: literacy through drama in prisons*. http://www.a4offenders.org.uk, 2002.

[198] Da Milano, Cristina, 'Thanks to what I am learning I am a better person', *Adults Learning*, February, vol. 17, 2006, n. 6, pp. 14-16.

3.5 Conclusions

Europe's renewed social agenda *Opportunities, access and solidarity in 21st century Europe*[199] recognises the need for social policy to be crosscutting and multidimensional in areas from labour market policy to health, education, environment or immigration. However, there is hardly any reference to culture. While the EU European Agenda for Culture[200] seeks to integrate culture into wider policy frameworks that include lifelong learning, citizenship and intercultural dialogue, most social policies forget about the potential of cultural activities as creative and innovative instruments for achieving social objectives.

European social policy has to cut across diverse policy realms, including health, immigration, labour market, education and multiple other domains. It needs to be transversal and should help to establish a social fabric that supports the vulnerable and poor while enabling all others to realise their own potentials. Culture is uniquely positioned to help produce this creative and resilient social fabric that is required to bring European social policy into the 21st century. It is a social resource that is equally available throughout the European Union. Moreover, culture-based interventions epitomise Europe's social policy principles: culture and art, in a unique way, combine the capacity to stimulate individual creativity and to motivate people with their ability to establishing a sense of connectedness and community spirit.

Artists are among the most sensitive observers of social conditions and those who express the wish to should be encouraged to help fight social exclusion, skills shortages, urban or rural decline and other ills with their creativity. At a time when the principle policy focus rests upon the potential of culture to transform our post-industrial economy an equal share of attention should be paid to the social benefits of culture.

[199] European Commission, *Renewed social agenda: Opportunities, access and solidarity in 21st century Europe*, CEC, Brussels, 2008.

[200] European Commission, *European agenda for Culture in a globalizing world*, CEC, Brussels, 2007.

CHAPTER 4
CREATIVITY AND LEARNING

Society in general and education in particular play a crucial role in developing and advancing creativity. Amongst the different factors that influence creativity the learning environment is important: it may comfort, stimulate or "kill" personal ability. The learning system is itself dependant on a social context which gives more or less value to creativity features in assessing abilities: intuition, emotional intelligence, craftsmanship, imagination. Given that, as Czikszentmihalyi argues, "it is easier to enhance creativity by changing conditions in the environment than by trying to make people think more creatively"[201], policy makers need to pay specific attention to how to shape favourable learning conditions.

"Creativity in learning is about fostering "flexibility, openness for the new, the ability to adapt or to see new ways of doings things and the courage to face the unexpected."[202]

Because art requires a divergent cognitive process and the ability to think in analogies or in a non linear way, it is able to help us break down artificial boundaries between different disciplines.[203] This ability to work and collaborate across different disciplines is also important in future project-based work. Art's other main benefit, when being mainstreamed throughout the whole curriculum, is that it creates eager learners and helps to prevent them from being early school-leavers. Because art is an enjoyable discipline, it generally induces motivation and commitment. According to Gardner[204], younger people learn better when they are actively involved. Amabile described 'intrinsic motivation' as the main factor for creativity to be aroused.[205] Art, because it engages pupils' activity under "critical thinking" and encourages them to produce independent judgements, is a way to avoid the passivity that characterises students in many classrooms. It can thereby trigger their interests in other disciplines.

Education is often seen as simply developing academic abilities and rewarding achievement through formative assessment. However, less academically able children may have other powerful abilities that lie dormant. Such children are usually resentful of their 'failure' and don't feel as bright as children with stronger academic results. Equally important is the fact that an undue emphasis on product rather than process is likely to frighten children away from originality. Taking risks without fearing failure is the cornerstone of creative endeavour.

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[201] Csikszentmihalyi, *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Collins, 1996.

[202] Cropley, *Creativity in education and learning, a guide for teacher and educators,* Routledge, 2001.

[203] Hilpert, *Changing emphasis in school art programs,* in Fortieth Yearbook of the National Society for the Study of Education: Art in American Life and Education, Bloominton, IL: Public School Publishing Company, 1941.

[204] Gardner, *Art, Mind and Brain: a cognitive approach to creativity*, Basic Books, 1982.

[205] Amabile, *Creativity in Context: Update to The Social Psychology of Creativity*, Perseus Publishing, 1996.

This section makes the strong case that arts schools and arts-related disciplines should play a larger role in this learning transformation in the entire education process, including higher education as they can help students to develop the creative skill sets needed to be real innovators and entrepreneurs.

Such emphasis on the role of creativity in learning and skills development is in line with current trends in policy making at EU level. Education has been given a new impetus with the implementation of the Lisbon strategy.[206] Moreover, the European institutions have highlighted important links between creative learning, entrepreneurship and culture by including a strong learning theme in the European Year for Creativity and Innovation.[207] Governments increasingly emphasise the importance of developing citizens' "creative capital" and thereby lead schools and other learning institutions to a curriculum reform, which includes introducing arts education and culture-based activities at an early stage in the learner's development.[208]

Yet, the relationship between arts education and the creativeness of Europeans is not as obvious as it might appear. Increasing the level of arts education in school, higher education or lifelong learning does not inevitably result in generating more creative people. This chapter examines how arts-education and culture-based activities in learning can make learners more creative. This is done in several steps:

- First, expert views concerning the link between culture and creativity in learning are examined.
- Subsequently, an overview of how the link between culture and creativity is addressed in selected learning policies is provided.
- Thirdly we review selected strategies and cases of best practice concerning the integration of culture and creativity in learning in school, higher education and lifelong learning.
- Finally, some preliminary conclusions concerning the role of culture in fostering creative learners are drawn.

Issues of learning and education are, of course, closely linked to most of the economic and social challenges shaped by constant technological innovation, migration, demographic transformations, as well as climate change. The boundaries between policy realms that address these issues are very porous and related policies cannot be considered in isolation. Yet, by examining the role of learning and education in a special chapter, this study emphasises the important role that Europe's institutions, as well as its teachers, trainers, and professors have to play in ensuring that the future of Europe is a creative one.

Despite an extensive literature review, many consultations with learning experts across the EU and the stakeholder workshop that was held in Brussels in February 2009, it is necessary to mention the methodological constraints that this exercise entails. The role of art in education varies greatly across Member States and regions. In fact, it differs from institution to institution. Moreover, best practices very

[206] Report from the Education Council to the European Council *The concrete future objectives of education and training systems* (5980/01).

[207] Op. cit. Cropley, 2001, p.136.

[208] Sharp, Le Métais, *The Arts, Creativity and Cultural Education : an International Perspective*, QCA and NFER, London,. 2000.

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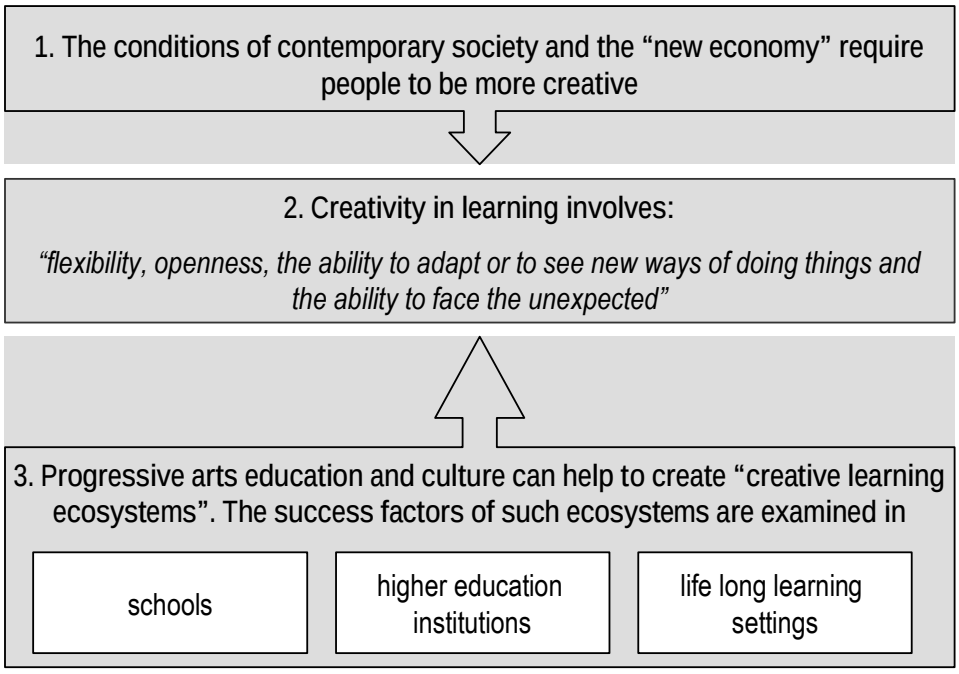
often develop from the bottom up. Consequently, it is difficult to paint a complete picture of the role of art and culture in fostering creativity in learning. This chapter should therefore be considered as an overview of current trends and developments, indicating what works and what seems to be out of date in relation to the challenge of putting creativity at the heart of Europe's learning strategies.

Based on the theory and research findings we propose a simple model to conceptualise how culture contributes to creativity in learning.



4.1 How culture stimulates creativity in learning

Despite a general consensus concerning the importance of creativity little attention has been paid to the way in which art and culture can enhance the creativity of learners. Yet, most psychologists agree that learning and educational environments are among the most important factors that shape creative capacities (next to the family and the work environment).[209] [210] [211] In this context, two somewhat contradictory assumptions often surface. As mentioned earlier, Sir Ken Robinson (like Guildford and Gardner) states that everyone maintains creative capacities and that it is the "school that kills them."[212] On the other hand, there is a widespread assumption that art and culture in education generally foster the creativity of learners. The following section examines this relationship.

[209] Amabile, *Creativity in Context: Update to The Social Psychology of Creativity,* Perseus Publishing, 1996.

[210] As referred in Davies *Creative teachers for creative learners* – a literature review TTA Research and Development Award, 2004.

[211] Csikszentmihalyi, *Society: Flow and Psychology of discovery and invention*, Harper Collins, New York, 1999.

[212] Robinson, K., *Out of our minds, Learning to be creative*, Capstone Publishing Limited, 2001.

4.1.1 The relationship between culture and creativity in learning and education

A consistent theme is inherent to most models concerning the process of creative thinking, namely that creative thinking involves purposeful analysis, imaginative idea generation and critical evaluation and is a balance between imagination and analysis.[213] Munro established in 1941 that artistic skills were about "perceiving, imagining, desiring, reasoning and experiencing emotions."[214]

On a different level, Koestler defines creativity as 'the ability to make connections between previously unconnected ideas.'[215] With this definition the contribution of art and culture-based learning to creativity becomes more apparent. In contrast to every other discipline, there is no right or wrong answer in art. As there is an inherent ambiguity in artistic expression, arts education requires learners to apply abstract reasoning and very active thinking.[216] By placing the learner in the situation of uncertainty, arts education forces him/her to take risks and to make choices in the face of a multiplicity of possible answers. Furthermore, Fowler explains that arts-based learning gives learners a feeling of satisfaction by realising their own personal potential.

The assumption that art helps to stimulate creativity obviously strongly depends on the way art is taught. Indeed, students that receive arts education are not necessarily more creative. Artistic disciplines are often taught in a traditional 'left-brained' way and put emphasis on repetition and imitation.[217] For example, visual arts in primary school are often limited to colour preprint outlines or to copying what is seen according to a set of rules. Students learning music are taught techniques and how to read musical symbols. Yet, even in higher education institutions the composition of music is generally absent from teaching curricula. But, students should learn how to express their own musical thoughts and then learn to encode them. For Fowler, the aural process comes before the musical symbols, just as we speak before we learn how to write.

Critics of current arts teaching practices claim that contemporary arts teachers hide behind the idea that the interpretative act is a creative one. Yet, when students are asked to imitate and when the answers are handed to them, they do not exercise their minds in a creative way. They do art but they do not experiment, evaluate and translate intuitions into artistic constructs. Munro observed that 'too often we teach art without asking how we can best develop the power to think and imagine artistically.'[218]

4.1.2 How can we put art and creativity back into learning?

What becomes clear is that the key question is not how much art and culture are integrated into the curriculum but rather how they are integrated. Imagination, divergent thinking and intuition need to be considered as important characteristics of progressive arts education – by schools, universities and further

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[213] Plsek Working paper: models for the creative process, Paul Plsek and associates, Inc.

[214] Munro, *The Psychological approach to art and art education* in Fortieth Yearbook of the National Society for the Study of Education: Art in American Life and Education, Bloominton, IL: Public School Publishing Company, 1941.

[215] Koestler, *The Act of Creation,* London: Arkana,1964.

[216] Fowler, *Strong Art, strong schools,* Oxford University Press, 1996.

[217] Ibid.

[218] Op. cit. Munro, 1941.

education providers. The frequency with which learners are exposed to art and cultural education needs to be combined with sustainability and quality.[219] Bamford's theory of quality underlines this. She claims that if the quality of arts education is poor or intermittent, it tends to inhibit rather than expand creativity.[220]

The following provides a rare example of evidence concerning the impacts that art- and culture-based learning can have on learners' creativity:

BIP – creativity schools (Germany)

The BIP creativity schools (BIP stands for *Begabung, Intelligenz und Persönlichkeit* – "talent, intelligence, personality") were created in the late 1980s in Leipzig, Germany. The schools were born initially in the context of an experimental project to study the development of children's intelligence and creativity through special art classes embedded in the general curriculum. Eight classes in different areas of the city were chosen, (four experimental and four control groups). Each experimental group had an additional four hours of special classes dedicated to artistic expression, computer use and chess, musical education, dance, creative use of language etc.

In 2007 an independent study of the creativity of elementary school children was conducted by PERLE[221] on a sample of 17 classes in "BIP-creativity schools" and 21 state school classes. The results show that the children participating generally had better results in school, were proficient at reading much earlier than others, their musical and artistic skills were much more advanced, and that they were better at understanding literature, writing, and speaking. In "creative" subjects these children showed above-average abilities. Several of them became professionals in dance, music and computer science. Children were more active, less bored, knew what they wanted and asked for diverse activities on weekends.

Transferability of creative skills

If art and culture contribute to making learners more creative and if creativity is a skill requirement that increasingly cuts across different disciplines, there is a need to examine whether art - or culture-based creativity can be transferred to other learning domains. Psychologists have done so.

Craft showed that "conjuncture thinking"– an open-minded, generative style of thought characterised by the question "what if…?" – can benefit the investigative process in science or mathematics. It enables children to perceive new relationships between number and shape.[222] Craft continues to extend this theory of

[219] Bamford, *A,. Wow Factor*, *The: Global Research Compendium on the Impact of the Arts in Education.* Waxmann Verlag GmbH, 2006.

[220] Ibid.

[221] Greb, K., Faust, G. & Lipowsky, F., Projekt PERLE: Persönlichkeits- und Lernentwicklung von Grundschulkindern. Diskurs Kindheits- und Jugendforschung, 2 (1), 100-104, 2007.. http://www.springerlink.com/content/t6128074123h0l6n/

[222] Craft, *Creativity across the Primary Curriculum: Framing and developing practice* London: Routledge, 2000.

creative overspill to areas such as ICT and web-design and thus provides arguments to proponents of an interdisciplinary approach to arts education, who – among other things – advocate the mainstreaming of art in non-artistic disciplines in schools, universities and in lifelong learning.

Other research confirms that art, if taught appropriately, fosters a set of transferable academic skills – creativity, intellectual risk-taking and the ability to see multiple solutions to a problem – and that it also enhances students' self-identity.[223] The advantage of arts is that by its own nature, it is more prone to the application of creative teaching which can then be transferred to other disciplines.

Interestingly, research (e.g. Levi Strauss, Piaget, Bruner and Gardner) on contemporary cognitive theories shows that learning involves developing webs of concepts and categories that we need to interpret. "Experiential learning", in this context, is learning through reflection on doing. Like the previously outlined theories on design thinking and the experience economy, this notion proposes an experience-centered approach to solution formation. Cultural expression puts experience at the heart of any process of thinking, feeling and doing. Art and culture can thus help learners to transfer their conceptual artistic skills (both analytical and synthetic) to other learning domains.[224]

The benefits of an interdisciplinary approach

Finland has long been widely recognised for the quality and progressiveness of its education system. The Finnish education system is remarkably built around art and cultural expression and participation. Hargreaves[225] claims that the system is a successful example of integrating art into the entire school curriculum. Yet, his description of how science and technology are also increasingly the focus of Finnish education policy shows how different policy goals can be brought together in an integrated education strategy which fosters links between previously separated realms of activities.

The Finnish example indicates that exposure to art in different disciplines enhances a student's prospects of learning and achieving in general, by virtue of the creative process it entails. As Cropley underlines, creativity is a capacity to be applied in all contexts in all subjects to all children. It should not be reduced to a collection of set exercises carried out at fixed times as part of a "creativity programme". [226]

The potential of art and culture in learning

Art is commonly segregated from other disciplines in curricula. All schools have art in their curricula, but it is usually considered less important than other disciplines, especially numeracy and literacy, and its contribution to preparing pupils for the practical challenges of the world is understated. The older pupils are, the less arts education they get, unless they choose it as an option.

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[223] Burton, Horowitz and Abeles, *Learning in and through the arts: curriculum implications*. In Fiske (Ed), Champion of change: The Impact of Arts on Learning.

[224] Grumet, *No one learns alone in Putting the Arts in the picture: reframing education in the 21st century*, Columbia College Chicago, 2004.

[225] Hargreaves, *The long and short educational change* in Education Canada, Canada Education, 2006.

[226] Op. cit. Cropley, 2001.

This image, creating two impermeable realms, is reflected in school curricula in both the number of hours and the budget assigned to arts education. As Arnstine puts it, "arts are traditionally justified on the grounds that they provide wholesome recreation, salutary therapy, cultivation of taste or vocational preparation – these are not bad reasons for teaching art but they are not compelling enough to keep them from being among the first school studies to suffer when budgets are cut."[227] Consequently, art seems thus far to reside outside the mission of schools as an outlier of the overarching process of learning.

Steiner-Waldorf education

The Steiner-Waldorf education is a pedagogical method based on Rudolf Steiner's educational philosophy. The first Waldorf School opened in 1919. It is nowadays one of the largest independent educational systems in the world with about 1000 schools and 1400 kindergartens. A main characteristic of Waldorf schools is the interdisciplinary nature of the learning process which integrates practical, conceptual and artistic elements in each lesson. Imagination plays a central role. Waldorf education systems aim at developing thinking that is both creative and analytical. One of Waldorf education's central principles is that schools should be self-governing and that a high degree of creative autonomy should be left to teachers.

The UK Department for Education and Skills, which conducted a report[228] on the differences in curriculum and pedagogical approach between Steiner-Waldorf and mainstream schools, recommended that schools in the state sector would benefit from some Waldorf strategies, especially with regard to the Waldorf approach to art and creativity. A 2008 report by the Cambridge-based Primary Review found that Steiner-Waldorf schools achieved superior academic results to English state schools. An international study was conducted to determine if there was a significant difference between the creative thinking ability of Waldorf students and state school students in England, Scotland, and Germany. The sample consisted of 1,165 third through sixth grade children.[229] The findings obtained from administration of the Torrance Test of Creative Thinking Ability, suggested that Waldorf students were more creative than their state school peers.[230]

Two additional surveys complete the picture of the impact of creative learning. In the US, a survey shows that Waldorf alumni are three times as likely as the general U.S. college population to have studied arts and humanities. Also, up to twice as many go on to study science in college, including both life sciences and physical sciences[231]. Their primary characteristics are the integrative quality of their thinking and their creative and imaginative capacities. Another survey was conducted amongst former Waldorf students (in the

[227] Arnstine, *Democracy and the arts of schooling*, State University of New York. Press, 1995.

[228] 2005 report *Steiner Schools in England* by Philip Woods, Martin Ashley and Glenys Woods of the University of the West of England, *Steiner Schools in England*, University of West of England, Bristol: Research Report RR645.

[229] 479 English, 193 Scottish, and 493 German students.

[230] Ogletree, The Comparative Status of the Creative Thinking Ability of Waldorf Education Students: A Survey, 1996.

[231] Mitchell D. and Gerwin D., *Standing Out without Standing Alone: Profile of Waldorf Graduates*, Profile of Waldorf School Graduates. Research Bulletin · Spring 2007 · Volume 12 · #2.

age brackets 30-66 years old in Germany and Switzerland[232]). It shows that there is a significantly higher number of teachers, engineers, medical doctors/pharmacists, and artists among the former Waldorf students (in comparison with the general population statistics). Sophistication of culture and creative aspects of life play a more significant role for Waldorf alumni than for the general population. The Waldorf school is seen to exert a favorable influence on the development of the personality (e.g. personal sense of worth, self-assurance, creativity, flexibility) and of social competency (e.g. empathic faculties, consideration, ability to cooperate) as well as the development of the ability to form one's own opinion and become self reliant.

4.2 The role of culture and creativity in learning policies

A study on international perspectives concerning 'The Arts, Creativity and Cultural Education'[233] shows that most countries' policy strategies acknowledge that there is a link between culture and creativity in learning. However, only a minority of them articulates the nature of this relationship and explains how it could be strengthened. According to the researchers, most countries simply recognise "that creativity is important, and that its development should be encouraged in schools, and acknowledge the key role of art in the curriculum in developing creativity."[234] The following section examines more closely how the links between culture and creativity are treated in Member States' learning strategies. For reasons of data availability it focuses primarily on education policy. Subsequently, we briefly review how this relationship is treated in EU policies. Given that the European Commission has recently commissioned the Information Network on Education in Europe (Eurydice) with a separate comparative study on arts and cultural education in Europe, the section focuses on providing an overview of key issues and best practices rather than an in-depth country-by-country analysis, thereby avoiding any overlap.

4.2.1 Policies in EU Member States

Most EU Member States included the value of arts education and culture-based initiatives in their learning strategies for multiple reasons.[235] Art and culture are considered important in order to raise cultural awareness and understanding among learners. As such, they convey a sense of national cultural heritage and at the same time create a climate of openness and tolerance. Moreover, several Member States integrate art and culture in their learning strategies due to the assumption that this will increase the creative capacities of learners.

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[232] Mitchell D. and Gerwin D., Alumni of German and Swiss Waldorf Schools , *An Empirical Study on Education and Creative Living* VS-Verlag Wiesbaden,. 2000.

[233] Sharp, Le Métais, *The Arts, Creativity and Cultural Education : an International Perspective*, QCA and NFER, London,. 2000.

[234] Ibid.

[235] Responses to a KEA questionnaire sent to the Ministry of Education and/or Culture of the 27 Member State in order to get a better overview of the objectives of Member State for having arts education in primary and secondary school and its relation with creativity.

An interesting example in this respect is the UK. Following Ken Robinson's Report *All Our Future*[236], the UK granted creativity official recognition as one of the overarching aims of the curriculum in British schools. According to UK education policy, school curricula should enable pupils to think creatively and to solve problems through critical thinking and therefore eventually make a difference to society. In the UK, being creative and innovative is believed to equip learners for their future lives, for employment and for their civil duties.[237]

"Find your Talent" (UK)

The "Find your Talent" programme was put in place in 2008 to allow young people to be given a chance to engage with cultural and creative forms on a sustained basis. It gives an arts entitlement to every child of 5 hours per week both in and out of school. It is the first time that such a fixed entitlement for every single child has been adopted in Europe.

'Find your Talent' aims at giving young people the widest possible exposure to art and the broadest possible cultural experiences so they can decide what they enjoy. The central concept is to ensure that every child and young person experiences high-quality cultural work in order to encourage lifelong engagement with art. The government justifies this initiative by stating that participation in cultural activities gives young people the chance to develop important life skills such as creativity, confidence, self-discipline, effective communication and the ability to work in teams.

The government has set aside £25 million over the next three years to establish Find Your Talent in 10 local areas where a full range of partners will trial different ways of delivering a comprehensive offer.

Other examples include Ireland which recognises that "a purposeful arts education (…) is life enhancing and invaluable in stimulating creative thinking and in promoting capability and adaptability". Quality arts education should enable all individuals to reach their full potential and to contribute to Ireland's future economic success.[238] Interestingly, Polish learning strategies go a step further to embrace the societal and intercultural dimensions of integrating art and culture in learning. Poland's strategy for a national school curriculum stresses the role that arts education can play in nurturing students' creative attitudes – towards themselves and in relation to the world.

It is important to stress the pertinence of developing partnership with cultural institutions or artists in residence at schools to reinforce and complement artistic activities developed at school.

[236] Robinson Report, Great Britain, Department for Education and Employment, Department for Culture, Media and Sport. National Advisory Committee on Creative and Cultural Education *All our futures: Creativity, Culture and Education.* London: DFEE (1999)

[237] Qualifications and curriculum authority, *The National Curriculum: Handbook for Primary Teachers in England* Key Stage 1 and 2. London: QCA

[238] Irish Department of Education and Science, Statement of Strategy 2005-2007.

4.2.2 Policies at European Union level

At EU level, education and training have gained an important place in the revisited Lisbon strategy for jobs and growth. As part of this overall strategy, the Council has set Europe five learning benchmarks for 2010 (these include literacy, reduction of early school-leaving, upper secondary attainment, maths, science and technology graduates and participation in adult learning).[239] Creativity unfortunately does not feature in this list. However, the EC's Education and Training 2010 work programme includes "cultural expression" as one of its eight key competences.[240] While it does not link creativity to the competence of cultural expression it recognises that creativity and entrepreneurship – another key competence – are closely related.

The EC's 2005 proposal for a recommendation on key competences for lifelong learning[241] is the first policy document that recognises the cross-cutting value of creativity and recommends that it be streamlined across the whole learning framework (alongside critical thinking, initiative taking, problem solving, risk assessment, decision taking, and managing feelings). What this indicates is that there is a growing awareness among EU policy makers concerning the potential importance of creativity in learning, but that the links between culture and creativity in this domain still have to be further investigated and fully acknowledged. The arts do play a role in supporting creativity; therefore it is clear that it should be taken into account when advocating the mainstreaming of creativity in the whole learning framework. Using an interdisciplinary approach through the arts in other learning key competences can be therefore an excellent way to develop creativity in all areas.

The European Commission has set up a working group on Education and Culture in the framework of the Open Method of Coordination (OMC) for Culture. This new mode of governance has become increasingly important in the EU and enables coordinated action in a sector in which the EU has limited competence. The OMC was recently introduced in the cultural field by the European Agenda for Culture. The working group gathers experts at Member States level to debate and secure action to form closer synergy between education and culture.

4.3 Culture and creativity in schools

If society at large as well as the more intimate social environment in which a person develops are important drivers of individual creativity, schools are among the most important institutions to nurture Europe's creative potential. The following section examines how this can be achieved through arts education and culture. It identifies several cases of good practice across the EU in this respect.

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[239] Commission Staff Working Document, *Progress towards the Lisbon objectives in education and training* – indicators and benchmarks, 2008.

[240] The *Key Competences for Lifelong Learning – A European Framework* is an annex of a Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning that was published in the *Official Journal of the European Union* on 30 December 2006/L394. (http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_394/l39420061230en00100018.pdf)

[241] Proposal for a recommendation of the European Parliament and of the council on key competences for lifelong learning **(**2005/0221(COD)).

4.3.1 The creative learning ecosystem

According to contemporary thinking, creativity in learning is triggered by the interplay of various environmental factors. Harrington, for example, links creative learning to the concept of a "creative ecosystem". A creative atmosphere, opportunities for playful experimentation, easy access to resources and information, mentoring and role model schemes, motivational strategies and open-ended assignments are all elements that contribute to developing a creative learning ecosystem.[242] Arts education and cultural participation can help schools to develop such a learning environment when mainstreamed in the whole curricula. Cooperation between schools and cultural institutions might prove useful in this context.

As such, creative learning and arts education have evolved from the "laissez faire" approach proposed by earlier teaching generations, as explained by Florence Beetlestone.[243] What makes for successful creative learning is the right balance between free and intuitive experimentation and a certain level of guidance and mentoring. Beetlestone considers that creativity arises from holistic teaching practices that value all aspects of children's experience and personality. Equally important is the fact that an undue emphasis on product rather than process is likely to frighten children away from originality. Taking risks without fearing to fail is the cornerstone of creative endeavour.

The "testing-culture" that takes place in certain countries in the EU goes against this idea of experimenting and taking risk without fears of failure. Sir Ken Robinson has identified the high-stakes assessment culture – i.e. the growing emphasis on grades, numerical testing and on sacrificing everything in the interest of improving university entrance rates - as stifling innovation and creativity.[244] Instead of considering arts as a less important subject because of its lack of economic utility, the mainstreaming of the arts is a way to achieve high-academic results in other disciplines.

Reggio Emilia (Italy)

Reggio Emilia, a community in Northern Italy, developed a system of early childhood education that became world-renowned for its progressive pedagogical approach, emphasising creative learning. The system, created by parents after the Second World War, is a network of pre-schools and infant-toddler centres for children from 3 months to six years. The central concept of the Reggio Emilia approach is that of the 'rich' child that is "rich in potential and competence and closely connected to adults and children around. The Child is seen as being autonomously capable of making meaning from experience and it is adults' role to motivate the child."[245] Practical activities are built around individual children's interests and focus on creative expression. Children are encouraged to use words, movement, art, building, sculpture, drama and

[242] As referred in Davies, *Creative teachers for creative learners* – a literature review TTA Research and Development Award, Bath Spa University College, 2004.

[243] Beetestone *Creative Children, Imaginative teaching,* Buckingham: Open University Press, 1998.

[244] Op. cit. Robinson, 2000.

[245] Mortimer, *Special Needs and Early Years Provision,* London: Continuum, 2001.

music to express themselves. To stimulate children's creativity, all Reggio Emilia schools have their 'atelier', their art studios, which is an integral part of the learning experience and where 'atelieristas', professional artists, work with pupils.

The key to this approach is that the creative activities of the children, usually seen as mere playing, are taken seriously and reflected upon by teachers who are seen as 'partners, nurturers, and guides' rather than figures of authority. Teachers are rigorously trained to improvise and to respond to children's predisposition to enjoy the unexpected. Focus is rather on the cognitive process of children than on the achievements.

Moreover, the Reggio Approach characterises itself through the close tie-in of its community, thereby ensuring that educational philosophy is actually realised in the day-to-day practices of the Reggio institutions. The particularity of Reggio Emilia is that the entire citizen community supports the educational project. This, according to several experts, is a major achievement as far too many progressive learning theories do not master the challenge of actually succeeding in practice.

The Reggio Emilia schools have been active for the last 50 years. They are subject to constant advice and guidance from pedagogues and educators. The learning approach has impressed and inspired school experts from all over the world. Howard Gardner heralded the system highlighting the quality of creative 'products' generated by young children which has gained worldwide recognition in stimulating infants' creativity[246].

4.3.2 Four basics of developing a creative learning environment with the help of culture

Building on the foregoing outline of what makes contemporary learning creative we propose four areas that policy makers and practitioners should focus on in order to develop a learning environment that is favourable to creativity.

Task one: Create a stimulating physical environment

School can be a creative place as long as a few parameters are present – such as a physical environment, both inside and outside, that is conducive to creativity.[247] Barnes suggests that the 'physical environment of the school is a primary source of inspiration for creative teachers and the learner.'[248] Children especially need to be given a sense of ownership and permission to exercise their imagination. This requires a bright stimulating environment which prompts activity and enquiry, offering the learner different ways to interact and develop ideas. In the project 'Manifesto for a Creative Britain'[249], carried out by Tate Modern and

[246] Gardner, H, *The Disciplined Mind. What All Students Should Understand*, Simon & Schuster, New York, 1999.

[247] Willings, *The creatively gifted – recognising and developing the creative personality*, Cambridge: Woodhead Faulkner, 1980.

[248] Barnes, *Replacing creativity* Keynote lecture at the annual conference of the UK reading association, 27th March 2003, Writing in Education 13-17.

[249] http://creativemanifesto.tate.org.uk/

Creative Partnerships, more than 3,000 young people across the UK were consulted to gather their ideas on what kind of school environment they need to be creative. Recommendations included less formality in school and more arts and culture in the classroom, as well as creating spaces where they can vent their individual creativity through cultural expression. Interestingly, many answers indicated that children do not necessarily link their understanding of a creative environment to state of the art buildings, but rather to space and a certain level of independence as well as to access to cultural resources (instruments, paint, etc.). Progressive arts education and culture-based interventions can help schools to create such a physical environment, which animates learners to be more inquisitive and experimental.

Task two: Creative methods for creative learners

In order to generate creative students "education needs to be creative in itself", argues Roberto Travaglini.[250] Creative learners require creative teachers and it helps if the latter have a good understanding of how art and culture can be used as tools in learning. Teaching creativity implies a broader conception of the role of the teacher than traditional transmission pedagogy. Creativity needs to be taught in an *open* and *exploratory way* which enables taking risks, failing and allowing experimentation. This is especially the case for teaching art and culture (but applicable to other areas of the curriculum). However, teaching is often reduced to imitation and children are still too often considered as passive recipients of knowledge. There is a need for a blend between tradition and experimentation in teaching both non-artistic and artistic disciplines. Of course, knowledge is important to the development of creativity. Csikszentmihalyi argued that to be creative implies first understanding the domain.[251] As Ken Robinson puts it, "individual creativity is stimulated by the work, ideas and achievements of other people."[252] Most successful creative people therefore have all looked at traditions, at history and culture and then built on them or moved away from them in their own creative work.

Some of the strategies involved in creative teaching methods have already been mentioned. Creating an atmosphere of playful enquiry, mentoring models, self-directed learning, etc. are all part of the equation. In many countries, learning strategies also see a role for information and communication technology (ICT) in making learners more creative. For example, France, Scandinavia, the Netherlands and Belgium make special reference to ICT in their arts education policies.

Some new Member States have implemented the development of ICT content in their curricula. For example, Slovenia requires teachers to encourage creativity through the use of ICT. In doing so, such countries meet two separate objectives, namely stimulating individual creativity and increasing students' ICT and media literacy levels, thereby teaching them critical thinking skills and allowing them to acquire the capacity to analyse the digital world.[253]

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[250] Travaligni, R., *Concise notion of creativity*, 2008 (not published).

[251] Csikszentmihalyi, *Creativity: flow and the psychology of discovery and invention*, Harper Collins, New York 1996.

[252] Op. cit. Robinson, 2001.

[253] Burnet, *Learning, Education, and the Arts in a Digital world,* in Educating Artists for the future: learning at the intersection of Art, *Science, Technology and Culture,* ed. Mel Alexenberg, Intellect Bristol, UK. 2008.

Task three: Training teachers to be creative

As mentioned before to ensure that learners benefit from integrating art and culture in creative learning processes we need to ensure that teaching and training professionals understand art and learn how to work with it as an important teaching tool. This is the outcome of the review 'Creative teachers for creative learners',[254] which was commissioned after another study showed that the education system was one of the main barriers to releasing creative potential in the UK economy and that the training of teachers featured as an important bottleneck in that respect.[255]

There is a need for progressive continuing education programmes that enable teachers and trainers to learn how art and culture can be used in creative teaching and learning.[256]

Task four: Establishing partnerships between schools and external cultural institutions and artists

As previous examples show, developing sustainable partnerships with artists and cultural institutions is an excellent way for schools and other training institutions to stimulate learners' creativity. It confronts them with a different environment, more concretely related to art and creative professionals. Artists and cultural institutions have a professional approach to creativity which enables the learner to experience the actual creative process in an authentic way.

Most of the time, such initiatives are the result of bottom-up incentives initiated by the schools themselves or by local cultural institutions. In Poland, the Ministry of Culture and National Heritage cooperates within EU operational programmes to support such partnerships. In Slovakia, the Ministry of Culture set up a project of "cultural vouchers" to encourage children to go to theatres, galleries, libraries and cinemas. In Paris, the local gouvernement finances the organisation *La maison du geste et de l'image.*[257] It offers programmes at school and outside schools managed by artists directly in the fields of theatre, video, sound, photography and creative writing.

Creative Partnerships (UK)

Creative Partnerships in the UK is a governmental initiative first introduced as a two-year pilot scheme in 2002 in 16 local areas. It now operates in 36 areas in England and is working intensively with around 1,100 schools. It is now the Government's flagship creativity programme for schools and young people.

The scheme funds creative professionals to go into schools in the most deprived communities in England and work in partnership with teachers and students, offers continuing professional development to school staff, and also provides guidance on creativity in relation to wider school improvement. The approach of

[254] Op. Cit. Davies, 2004.

[255] Ibid.

[256] Op. cit. Bamford, 2006.

[257] http://www.mgi-paris.org/.

Creative Partnership to developing creativity focuses on that triangular partnership between the child, the teacher and the creative practitioner in a collaboration based on constructing learning together. Accordingly, the four main aims are to develop: (1) the creativity of young people, raising their aspirations and achievements; (2) the skills of teachers and their ability to work with creative practitioners; (3) schools' approaches to culture, creativity and partnership; and (4) the skills, capacity and sustainability of the creative industries.

In 2004/05 the programme received £25 million in funding and in 2005/06 it increased to £45 million. Creative Partnerships has worked with 575,000 young people and 70,000 teachers, provided training to over 36,500 teachers and creative practitioners, and has employed over 4,800 creative practitioners and cultural organisations.

In April 2006, the British Market Research Bureau (BMRB) completed a survey of 510 head teachers that revealed an improvement in pupils' confidence, communication skills, motivation, enjoyment of school, ability to learn independently and behaviour. As a consequence, schools are seeing improvements in young people's achievement and educational standards in the school, as well as improvements in teaching skills and teachers' willingness to take a creative approach. Ofsted who undertook an inspection during the summer term of 2006, visiting a sample of 36 schools in six areas, reported that they had seen evidence of significant improvements in basic learning skills.

4.4 Culture and creativity in higher education

Society requires students to develop interdisciplinary, creative and sometimes artistic skill sets. Companies increasingly rely on artists and creative professionals to trigger business innovation in diverse areas such as product development, human resources, marketing and communications. The social sector is in need of entrepreneurial innovators that can help reform Europe's social systems by applying visionary and creative ideas.

This section therefore explores whether and how higher education (HE) institutions meet the creativity challenges that contemporary society presents. Particular attention is given to the role of culture and arts schools and the trends towards providing interdisciplinary study programmes that link art disciplines with disciplines in the social sciences, business management, technology and the natural sciences.

4.4.1 Arts schools in the European Union: a new learning paradigm

There appears to be a growing interest in the transferability of arts graduates' creative skill sets to other sectors. Recent research commissioned by NESTA in the UK shows that fine arts graduates are well adapted to the needs of the knowledge economy. However, it also identifies barriers to success, including long-standing attitudes and biases regarding the contribution that arts graduates make to the wider

economy. Creative graduates also need to gain awareness of the transferability of their skills and to be able to set up their own enterprises[258] if they have an interest in business entrepreneurship.

Transferability of arts graduates' skills to other sectors

Arts schools exist in all EU Member States and provide programmes including music, dance, fine arts, design, theatre, film, crafts, new media, fashion and architecture. The key common point of all those disciplines is that they enable students to develop their creative potential by teaching them a wide range of artistic, technical, professional and personal skills. According to the *Inter}artes tuning document*[259] creativity is a skill that features in all learning of arts disciplines provided by arts schools.[260]

The reason why arts schools particularly nurture creativity lies in the way art is learned and taught. The modes of teaching consist of promoting critical reflection, innovation, and the ability to question orthodoxies. An important characteristic of arts education is that students are best able to connect with their education through practice-based learning and experimentation.[261] Divergent thinking, improvisation and experiential learning are mainstays of all education that takes place in arts schools.[262]

NESTA's report *The Art of Innovation* shows that fine arts graduates' work processes are akin to the notion of interpretive innovation, involving collaborators across sectors, industries and disciplines.[263] Dance and theatre, for example, are usually taught as part of a multi-disciplinary environment (such as the ability to perform in public and present and control the body) that can become transferable skills (e.g. communication, the ability to work effectively as a member of a team, risk-taking). The study shows that such skill sets are valued in other working contexts such as the creative, managerial and entrepreneurial ones.

Examples of initiatives enabling this transfer of skills exist across the European Union but remain primarily bottom-up. Since 1998, for example, arts schools in Belgrade have developed interactive learning and training sessions in collaboration with a number of science departments.[264] Another example is the National College of Art and Design in Ireland which researched how creative skills nurtured through arts education can have a positive impact in various areas such as health, medicine or local development.

[258] Oakley, Sperry and Pratt, *The Art of Innovation, how fine arts graduates contribute to innovation.* NESTA, London, 2008.

[259] Inter}artes, *Tapping into the potential of Higher Arts Education in Europe*, ELIA – European League of Institutes of the Arts. Amsterdam, 2008.

[260] Ibid.

[261] Ibid.

[262] Ibid.

[263] Op. cit. Oakley, Sperry and Pratt, 2008.

[264] Op. cit. Inter}artes, 2008.

Arts education, culture and entrepreneurship

In a recent report[265] the European Commission identifies the need for the Lisbon strategy to ensure that all graduates in the European Union are to some extent entrepreneurial. Arts graduates are no exception to this prescription.

Entrepreneurship is foremost about doing things. It is often about taking risks, ability to work on new projects and anticipating future trends. Arts education can teach students to be problem-solving, team-oriented, visionary and daring.[266] Arts students have to develop unique perspectives and often learn that it is this uniqueness that sets them apart from the crowd. Such strong character traits are especially important for entrepreneurs. With the emergence of the creative economy it seems important to help would-be artists to develop their entrepreneurial skills and help them make a living out of their artistic abilities.

Tailor-made entrepreneurship education – such as that provided at the *Swansea Institute* in the UK[267] – seems to better prepare arts students for establishing themselves as creative entrepreneurs.[268] In Sweden, universities and private initiatives understood that the key to promoting creative entrepreneurship was professionalising creativity by creating new tailor-made entrepreneurial courses, as outlined by a recent report of the Nordic Innovation Centres.[269]

Arts graduates are often unaware of the value of the wider skills – risk-taking, self-confidence, lateral or non-linear thinking – often encouraged by art education.[270]

Creative business incubators – low-cost shared facilities for creative businesses, which are linked to arts schools and HE arts departments – offer opportunities for students to take their first steps in business in a supportive environment. The University of Arts and Design Helsinki introduced the idea of "incubator units" by setting up a Design, Media and Art Business Centre in 1996. The *IADE* (Institute for Art Development and Education in Finland), which offers consulting services to SMEs and entrepreneurs in the creative sector, created a business incubator unit, *Arabus*, to enable start-up entrepreneurs to acquire the knowledge and skills needed for business management and developing operations. Some of the tools used include consulting, precision training and a network of mentors.[271]

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[265] According to European Commission communication paper on 'Fostering entrepreneurial mindsets through education and learning (COM (2006) 33 final), 'entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives.

[266] Op. cit. Oakley, Sperry and Pratt, 2008.

[267] Penaluna, *Drawing parallels: Design pedagogies and entrepreneurship* in Teacher's Academy Paper, 2007.

[268] Raffo, O'Connor, Lovatt and Banks, *Attitudes to Formal business training and learning amongst entrepreneurs in the cultural industries: situated business learning through 'Doing with Others,*, Journal of Education and Work, Vol 13 (2), pp. 215-230, 2000.

[269] Nordic Innovation Centre, *Portrait: Creative industries in the Nordic Countries*, Norden, 2007.

[270] Op. cit. Oakley, Sperry and Pratt, 2008.

[271] http://www.iade.fi/en/yrittajyysjaarabus

Kunstenaars (Netherlands)

In the Netherlands, 67% of arts graduates feel that their education did not prepare them adequately for their professional life[272]. Creative Co-makership is a joint initiative of Kunstenaars&CO and Kunst& Zaken commissioned by the Dutch ministry of Education, Culture and Science and the Ministry of Economic affairs to support schools in their efforts to innovate. This programme is meant to help to find ways to integrate entrepreneurship in arts curricula and to involve potential clients (business community and social organisations mainly) in this endeavour. The idea is to show broader professional prospects to students beyond art galleries and the jobs classically associated with arts education.

4.4.2 Examining the creative contributions of culture to other sectors and disciplines

Based on the above considerations, policy makers and education specialists increasingly seek to combine arts education and culture-related training with other academic disciplines. A report by the European University Association on *Creativity in higher education* examines how a combination of disciplines is favourable to creativity and how art can play a vital role in such combinations.[273] The report highlights the benefits of a mix of individual talents and experiences among students and staff, and examines how structured exchanges between art and other disciplines are particularly fruitful ways of promoting creativity. This trend is also supported by several influential researchers that examined how arts education and culture could benefit different areas in economics[274], science[275] or technology.[276]

In the following section we review how arts education and culture can bring creative renewal to other disciplines including business education and scientific as well as technology-oriented disciplines.

Creative contributions of culture to business education

It has long been an endeavour of progressive HE institutions to blend certain features of arts and design schools with those of business schools. The reason is that arts courses and design thinking help to foster students' creativity, which is essential in the experience economy, in which product differentiation, experience staging and entrepreneurship are central.

[272] Huiskens, Lucie, "*Closing the Gap: between education and practice*" in Hello creative world: Entrepreneurship in Arts Education, ECCE, Utrecht 2008.

[273] EUA Creativity in Higher Education: report on the EUA creativity project 2006-2007 European University Association, Publications, 2007.

[274] Florida, R., *The Rise of the Creative Class*, Basic Books, New York. 2002.

[275] Bohm and Peat, *Science, Order and Creativity*, Routledge, London, 2000.

[276] Pink, *A whole new mind*, Penguin, New York, 2005.

In addition to the above-mentioned focus on "experiential learning" that enables students to challenge ideas and concepts[277], arts and design programmes teach visioning and scenario-planning skills which are essential in problem-solving situations and therefore relevant for business managers.

A report commissioned by *Arts & Business* in the UK shows that business schools and management faculties increasingly use art in MBA, postgraduate and executive development programmes. It shows that art helps to shape creative, flexible and visionary leaders and managers, and complements their expertise and know-how.[278] The report explains that art offers a mirror for management thinking and thus increases reflexivity skills which are needed in today's complex and fast changing business environment.

For example, some management schools use improvisation in music and drama as it places future managers in the position of having to answer creatively to a new and unpredictable situation.[279] According to Simon Majero, visiting professor of marketing strategy and co-director of *the Centre of Creativity at Cranfield School of Management*, the neglect of "the software of the brain" in primary and secondary education means that many managers are not encouraged to develop creative skills. Majero has pioneered a resident ensemble in the business school, the *Wihan Quartet,* in order to develop teamwork, a skill that is crucial for playing in ensembles.

In Denmark, the 180° Academy was created as an initiative of seven top companies (Lego, Danfos, Gumlink, Nokia, Bang & Olufsen, Middelfart Sparekasse and Novo Nordisk) to offer interdisciplinary education in "Concept making and radical innovation" to practitioners and executives. The 180° Academy believes in people-driven innovation, rather than traditional technology-based innovation. It wants to change traditional education by merging together students with different skills and thinking styles in a praxis-oriented learning environment. The 180° academy aims to teach professionals to develop, design and execute new and innovative business concepts.

The learning methods are based on the aspirations and motivations of students. They make them progress from ideation and creative concept development to business applications and commercialisation. By choosing non-linear learning methods, the 180° Academy acknowledges the fact that linear thinking does not solve the dilemmas of a rapidly changing world. This is why one of the core modules addressing the different phases of the innovation process is "design methodologies" taught by designers who bring their design tools to the creative phase of the course. The 180° Academy is an example of the application of new learning methods achieved through interdisciplinary learning that brings together people with different skills. Designers and design thinking is more and more involved at the decision-making level. It is important for future business managers to understand designers' visions and for designers to understand the business implications.[280]

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[277] Op. Cit. Penaluna, 2007.

[278] Hadfield, *A creative education: how creativity and the arts enhance MBA and executive development programmes*, Arts & Business publication. 2000.

[279] Op. cit. EUA Creativity in Higher Education, 2007.

[280] www.180academy.com.

Creative contribution of culture to scientific education

A similar synergy has been acknowledged in relation to scientific education. Technological innovation and industrial creation require a dialogue-based approach that stands at the crossroads of different disciplines (science, technology, law, health, management, etc).[281] A creative skill set will enable people responsible for innovation management to orchestrate these inputs. The *Dual design* master's degree programmes with St Etienne Engineering School and a professional master's programme on Landscape and Urban Space run jointly with the Jean Monnet University and the School of Architecture illustrate this wish to foster interdisciplinarity. In fact, all arts disciplines have a role to play in science and technology learning, because arts education nurtures innovative thinking and contributes to personal development.[282]

Towards more interdisciplinarity

Innovative and paradigm-shifting ideas (whether business-related or social) are often the result of being at the intersection of different "disciplines". According to a study from the European Commission[283], the way forward is "to make entrepreneurship accessible to all students, creating teams for the development and exploitation of business ideas; mixing students from economic and business studies with students from other faculties and with different backgrounds".

The most progressive examples of this transformation exist primarily in Northern Europe and Anglo-Saxon countries and illustrate why successful education experiments are inter-sectoral and inter-disciplinary learning partnerships.[284]

It is important to stress that such focus on merging arts education with other disciplines for economic and social reasons should be complementary to much of the current provision. Art as well as arts education have intrinsic value in society. There may be a danger of limiting the inquisitive and imaginative nature of artists and arts students if arts education is confined to pursuing economic ends. The idea is rather to make traditional business education pervasive to artistic point of views with a view to challenge traditional perceptions and "realities".

Faculty of Art and Economics of Utrecht (The Netherlands)

At the Faculty of Art and Economics at the Utrecht School of the Arts, in their first year of management studies, students work with music bands, for which they develop and present business plans within two

[281] Christofol and Mathieu, *Creative contributions to scientific education' in Hello Creative world: entrepreneurship in arts education*, ECCE, Utrecht. 2008.

[282] Ibid.

[283] European Commission, DG Enterprise and Industry, *Entrepreneurship in higher education, especially within non-business studies,* 2008.

[284] Inter}artes Socrates Thematic Network, ELIA (European League of Institutes of the Arts) and the European Culture Foundation, Innovation Arts and Culture 07, European League of Institutes of the Arts, 2007.

months. In their second year, they learn how to run the entire process of starting up a business based on internally developed products and services in the creative industries. These business plans are assessed by a panel of experts from banks, the Chamber of Commerce and the Entrepreneurship Academy. The most feasible and innovative idea is eligible for a Cultural SME award. In the third year, students are engaged by companies to work independently on a product or a service. Finally, in their fourth year, students are offered the opportunity to open their own businesses as part of their final project. This innovative education programme has been developed by the Utrecht School of the Arts in order to create a unique learning environment where management and creative professionals learn to work together in a vocational situation. This reflects the facilitator role managers play more and more in collaboration with creative professionals. The University of the Arts acknowledged that the focus should be put on professional entrepreneurship education which is an important skills requirement in creative industries.[285]

Some higher education institutions even go so far as to blend their faculties into one. Scandinavian countries have been pioneers in bringing together higher education institutions from different fields. For example, in Sweden the Karolinska Instituttet (medical), the Kungliga Teksniske Högskolan (technology), Handelshögskolan (economics) and Konstfack (arts) have joined forces in the *Stockholm School of Entrepreneurship*, to offer a multidisciplinary creative education focussing on innovation and entrepreneurship.[286] Finland recently initiated a paradigm shift away from technology-driven innovation towards more human-centred innovation, as the following case study of Aalto University illustrates.

Aalto University (Finland)

The Ministry of Education, supported by the Ministry of Culture and the Finnish business sector, launched a very innovative initiative, while restructuring its higher education system, to create a new research-orientated university from three existing academically autonomous institutes of higher education: the Helsinki University of Technology, the Helsinki School of Economics and the University of Art and Design. The future institution, that will start operating at the beginning of 2010, was created with a view to becoming one of the world's leading universities for research and education by 2020. Scientific and artistic student communities from the three universities will be merged to provide possibilities for multidisciplinary education and research.

The philosophy behind the Aalto University is to break down disciplinary segregation in order to enable students to understand the skills and methods used in other areas and what people from other disciplines might expect from them, and to learn how to communicate with people from other backgrounds. This philosophy grew from the experience of already offering successful interdisciplinary programmes. Students of the University of Technology have seen their learning outcomes and the standard of their results

[285] Blijleven, *A centre for Creative entrepreneurship,*,in Hello creative world: entrepreneurship in arts education, ECCE. 2008.

[286] www.sses.se.

improving when working together with design students. The Aalto University wants to change the learning culture by aiming at a student-centred culture encouraging people to bring passion to learning new things where research and artistic works that are of high quality coexist.

The main difficulties encountered relate to the challenge of merging universities of different size (the technology university has 15.000 students whilst, the business and arts and design substantively less). The success of this initiative depends on carrying out two tasks which strongly differ by nature: matching the administrative aspects (application and selection of students, credits, etc) with the creation of a completely new innovative structure. Motivation to accept the changes in the structure and aims of the three universities is the most important challenge. Some students, professors and members of staff are very suspicious or negative about the merger, but the majority are positive, especially the teaching staff of the technology and business universities. About 400 members of staff and students are actively involved in building the new Aalto University. The industry on the other hand showed unanimous enthusiasm and support.

A foundation will oversee the new institution with a start-up capital of 200 million euros. Businesses have welcomed this initiative and are backing the University's foundation with 40 millions euros as they call for better quality higher education. The prospect foundation capital is 700 million euros (including 500 million euros from the government and 200 million from industry) in 3 years' time.

4.5 Culture and creativity in life long learning

Lifelong learning is the cornerstone of the EU's learning strategy and strongly linked to the Lisbon goals of job creation, growth and social cohesion. Over the past decades it has emerged as a major issue in our contemporary knowledge society. The EU officially dedicated 1996 as the year of lifelong learning, UNESCO included 'lifetime education' as a key issue on its agenda and the G7/G8 countries believe in lifelong learning as an essential strategy to fight unemployment.

In this study, the term is understood to embrace the idea that learning takes place throughout life and in a range of situations, and that this understanding of continuity in learning and skills development is essential if Europe wants to remain innovative. This section examines the role of the creative process in lifelong learning and illustrates how art and culture-based activities can help learners to develop essential creative capacities such as self-confidence, imagination, communication skills, team-spirit and entrepreneurship. Art and culture thereby contribute to learners' employability, to social inclusion and personal fulfillment.

Research shows that lifelong learning can influence the creative and innovative potential of individuals, groups, organisations and countries.[287] According to management scholar Peter Drucker, creativity should especially be fostered in lifelong learning in order to make people "work smarter rather than work harder in the information age".[288] Many EU Member States have traditionally made strong links between culture and lifelong learning. Some, such as Sweden, also have a political tradition of integrating cultural participation in

[287] Dohmen, *The future of continuing education in Europe*, German Federal Ministry of Education and Research, Bonn, Germany, 1999.

[288] Drucker *The Age of Societal Transformation* in The Atlantic Monthly, November,1994.

continuing education initiatives.[289] This section shows that this can be a future strength. However, it also illustrates a potential which lifelong learning specialists and policy makers at European, national and regional level have yet to fully embrace.[290]

The following pages specifically focus on those creative areas of lifelong learning that occur outside the realm of formal education (schools and HE). We examine the role of culture in non-formal learning initiatives aimed, first, at children and young people outside school and, secondly, at employees in the workplace. Finally, several lifelong learning initiatives that are aimed at various socially excluded groups are assessed.

4.5.1 Creativity in after-school arts education

After-school arts education plays an essential role across EU countries in providing creative activities in a non-formal learning context.[291] Many of these kinds of provision are additional to mainstream education and support either explicitly or implicitly the development of creative capabilities. As research shows, it is mostly children of affluent parents with a high educational level who attend after-school arts classes.[292]

Non-formal learning settings seem to be particularly apt to offer cultural and artistic activities, since they are not compulsory and often not assessed and thus associated with playful entertaining activities. Children therefore experiment and develop their imagination with more freedom than in formal settings. In the context of enhancing children's creative skill sets, non-formal learning appears to be a good alternative to traditional school provision as it is likely to feature important characteristics of the creative environment (e.g. as identified in Harrington's theory of the creative ecosystem).

The study *Arts, creativity and cultural education* shows how to create ideal conditions for increasing children's creative development: There needs to be enough time to experience art and the experience needs to be made relevant to children. This can be achieved by reducing barriers to the introduction of culture- and arts-based initiatives and by establishing high-quality partnerships with artists and cultural organisations.[293]

4.5.2 Development of creative skills through culture in the workplace

Creativity at work and – to a somewhat lesser extend – the question of whether culture can lead to such creativity have played an important role in recent management literature. This issue has been considered in chapter 2 on human resource management triggering creativity (section 2.3.2.3).

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[289] Conclusions, A European and International research Symposium: Evaluating the impact of Arts and Cultural Education in *La Documentation Francaise*, Centre Pompidou, Paris, 2008.

[290] Commission Staff Working Document Progress towards the Lisbon objectives in education and training – indicators and benchmarks, 2008.

[291] Op. cit. Bamford, 2006.

[292] Bamford, *Arts and Cultural Education in Flanders*, Canon Cultural Unit, Ministry for Education Flanders, 2007.

[293] Op. cit. Sharp, Le Métais, 2000.

4.5.3 Supporting disadvantaged individuals

This section highlights the patchwork of innovative projects that exists across the EU, many of which are developed by bottom-up initiatives. However, many policy makers have yet to embrace the idea that culture is a means to stimulate creativity in a lifelong learning context in a systematic and strategic way. We illustrate this potential by looking at three specific areas.

Alienated/At-risk Youth

A key problematic feature of many European economies is the structural presence of unqualified and unemployed young people.[294] A major phenomenon is the presence in many cities of large immigrant and second generation ethnic minority communities - who are frequently discriminated against and who feel culturally marginalised. These social groups are often economically and socially disempowered. A common feature across all the sub-groups who might fall under this description is that they have low qualifications and have failed in or been failed by the education system. The Europe-wide belief in the value of learning as the key process to take people out of poverty and to create growth is clearly far from the aspirations of many young people experiencing social exclusion.

Independent projects directed at these sections of society thus tend to mix ambitions for civic renewal[295] (that is, to inspire forms of pro-social and community-oriented actions) with economic aims (that is, to make people more employable). In many cases, the programmes are culturally situated as a means to engage and inspire youth, to attract interest and to motivate participation in learning.

From activating workshops to vocational workshops, Grodzki Theatre, Poland

The project "From activating workshops to vocational workshops", co-ordinated by Grodzki Theatre in Poland, is based on the conviction that young people first need to be "activated" to make vocational training effective. Thus the workshops first had to focus on their self-development, to improve their self-belief and to develop skills on which to base vocational training. The project aimed to support the social integration of young people from families at risk, young offenders, teenagers from an orphanage, and young people with drug and alcohol addictions, through artistic activities. The two-year project started in September 2005 and the project costs of approximately 115,000 € (386,991 Zł) were funded by the European Social Fund (Grodzki Theatre, 2007).

The project included educational and artistic workshops to work on their own performances or works of art which were presented to a wider public at a series of events in the Bielsko-Biała area. During the course of theatre workshops young people developed and rehearsed plays, whilst also receiving training specifically focused on employment (e.g. how to behave in a job interview). During the course of computer workshops

[294] See for example, Jobs for Youth: United Kingdom OECD 2008

[295] Lauglo, Tormod, Oslahia, *Education and Civic Engagement: Review of Research and a study of Norwegian Youths*, OECD, Directorate for Education in its series *OECD Education Working paper* number 12, 2007.

they were asked to reflect upon their dreams in order to develop goals for their life in general and their work life in particular. In the course of this visioning process, they learned to use animation programmes to produce collages and films, e.g. featuring themselves in their future life. A publication of a document entitled "The Ordinary Extraordinary" was published as a guide book both for professionals and disadvantaged young people, encouraging them to take part in creative activities. The book consisted of interviews with the workshop participants about the effects of art on their lives.

A number of evaluation reports were produced over the course of the two years. Six months after the end of the project, out of the total 277 participants, 15 had found a new job, 20 undertook volunteer work, 12 people continued employment and 195 continued education or training.

Refugees and Migrant Communities

The presence in many EU countries of recently arrived migrants, many of whom are refugees, has led to a particular set of challenges. Often concentrated in large cites, refugee communities have a special relationship with culture, art and expression. Many refugee communities have an explicit interest in forms of cultural maintenance, often wanting education to support the usage of home language, and drawing on forms of artistic expression as ways to sustain cultural roots. For example, the project of *The Return of the Swallows* led by artist Els Dietvorst focussed on the Anneessens district, a "transit" neighbourhood close to the south train station in the city of Brussels. Fascinated by this area and the local population, the artist started researching the roots of the neighbourhood, its inhabitants, its migration flows and its historical background. She found 33 so-called "swallows" from different cultures and social backgrounds to collaborate with her on a six-year project. The project resulted in a series of short films, a feature film, publications, photographs and a multi-media exhibition produced by the swallows.[296] The participants were directly involved in the creative process through writing, photography or film. Their "artwork" reflecting their life and their culture triggered a positive critical reception. This contributed to a more positive cultural integration into the host country.

People with Physical Disabilities and Learning Difficulties

Given that around 15.7% of the European adult workforce is made up of people who are physically disabled or learning impaired[297] and that these terms describe very large numbers of people who are able to live productive and independent lives, it is not surprising that finding ways to harness these latent talents is a key objective across many countries. The creative processes associated with arts and culturally based interventions are highly valued as offering successful and proven methods in supporting integration. The *Awangarda Foundation* in Poland aims to promote arts and handicraft among disabled persons. It

[296] For example, *Rachid Ajerrar* started writing himself as a result of this project. In the last few years he wrote about a hundred poems, a selection of which got published in a book of poetry allowing a step into his world.
Ajerrar, *Ombre de nuit sur une journée ensoleillée*, Firefly, 2005.

[297] European Foundation for the Improvement of Living and Working Conditions. *Employment guidance services for people with disabilities.* 2006.

cooperates closely with occupational therapy workshops, where disabled persons produce unique handicraft products.

Evaluations focus on how participation in projects supports independence and individual capacity building. Arts and cultural interventions are often valued for the ways in which they appear to build self-esteem, motivate alienated or disengaged people and support pro-social integration.

Divadlo z Pasaze ("Theatre from the Passage"), Slovakia

To counter a situation in Slovakia where mentally disabled people are still often excluded from social life and treated like children, the Divadlo z Pasaze (Theatre from the Passage) was first created to produce performances with mentally disabled actors. The aim was to help these individuals to live an independent life by improving their creative skills, developing their personal interests and abilities, and by making them realise their individual virtues and capabilities.

In the course of the theatre's development, a day-care centre was established as a place where the actors could develop their artistic skills (drama, dance, music) and also take part in more general activities (computer skills, communication, citizenship), thus working on their career development. The project organisers have seen remarkable changes in the actors' lives. They are far more independent than when the project started. The actors have developed a number of practical and social skills.

After years during which the theatre struggled to raise private funds for its activities, a three-year funding agreement with the Ministry of Culture started in November 2005, providing a grant of 4,000,000 SKK (approx. 130,000 €) for operational costs. At the same time, the theatre was integrated into the Slovak Theatre Institute in 2005, which is now administrating the budget. However, most of the theatre's activities continue to be funded by private sponsorship and donations.

4.6 Conclusion

Both theory and practices outlined in this chapter show that art and culture can play an important role in stimulating creativity in learning settings at all levels – in schools, higher education and in lifelong learning. In a world where people's skill sets increasingly need to include creative capacities policy makers should therefore consider making art and culture-based activities an integral element of their educational and learning strategies.

Putting culture and art nearer to the centre of learning policies requires openness and boldness. It asks policy makers, practitioners and learners to break with traditional segregations between disciplines and brings a sometimes isolated focus on numeracy, literacy and the natural sciences into question.

Another important element to creativity in education is apprenticeship and knowledge acquisition through contacts and training with creative professionals and craftsmen. Some creative industries are at risk today due to lack of interest in traditional craftsmanship, pillars of the fashion and luxury brand industry, for instance. Apprenticeship is an important tool to transmit creative heritage as well as creative experiences.[298] This aspect of creative training and education should not be overlooked in life-long learning policies.

However, developments in learning and education have always been a reflection of greater societal and economic trends. In the business world companies have already realised that the boundaries between research, technology, art and design are gradually becoming porous. And, particularly in higher education, some progressive institutions have reflected on this trend and developed more integrated programmes where art and culture play an important role. Our task for the future is thus to make such practice more common across the EU. For only such a holistic approach will eventually help to shape a generation of creative polymaths.

An important step that needs to be taken in this regard is to make further enquiries into the relationship between culture and creativity in learning in order to be able to measure the success of art in education beyond relying on anecdotal evidence and case studies.

It is important that any emerging strategy at EU and Member State level explicitly recognises the role of art and cultural expression as catalysts for creativity. For example, EU lifelong learning policies include artistic and culture-based policies without clearly establishing the links between art, culture and creativity. As Cropley argues, there is a danger "that the call for creativity has become simply a catch-cry that is not really regarded as having any serious implications for actual practice.'[299]

[298] Richard Seymour – Untitled – event in Brussels on 12 May 2009 – www.untitled-sanstitre.eu and interview with the Secretary General of the Comité Colbert (French luxury brand organization).

[299] Op. cit. Cropley, 2001.

CHAPTER 5
A REVIEW OF POLICIES ON CREATIVITY

Over the past decade EU policy has made a remarkable shift towards focussing on supporting economic and social innovation across the European Union. The belief that Europe has to become more innovative - if it is to retain its global competitiveness - underlines the majority of decisions in most policy domains. In its most recent strategies related to innovation, the EU increasingly acknowledges that innovation is a multi-facetted phenomenon that depends on a variety of factors, including scientific and technological progress, an innovation-friendly environment as well as several softer parameters, such as entrepreneurship or education. However, upon closer examination EU policy makers have so far not succeeded in implementing visions of more progressive, let alone culture-based creative innovation through tangible support programmes or regulations. They thereby run the risk of missing the opportunity to position Europe at the top of the currently emerging new economy that is significantly shaped by experience, non technology innovation and a user-centred approach.

European innovation policy – and indeed most EU policy – is deeply interwoven with the Lisbon strategy. In March 2000, the EU Heads of State and Government meeting at the European Council in Lisbon agreed on an ambitious goal: making the EU by 2010 "*the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*".

The Lisbon Agenda essentially focussed on boosting R&D spending by governments, universities and corporations to a total of 3% of GDP within this decade. The belief was that growth and employment will be achieved notably by investing in ICT industries, the flagship industries of the information society. As such, Lisbon – as well as the follow up renewed Lisbon Agenda from 2005 – has had a significant impact on subsequent strategic guidelines concerning innovation, such as the EC Communication "More research and Innovation", the Aho Report on "Creating an Innovative Europe"[300], or in the EC Communication "Putting knowledge into practice: A broad-based innovation strategy for the EU." [301] While these strategies tend to describe innovation in relatively open and comprehensive ways, EU regulatory and funding actions indicate that the underlying thinking continues to essentially associate innovation with research and technological progress.

Previous chapters have shown the contribution of culture to economic and social innovation. National public policies are increasingly geared towards recognising that the process of nurturing creative talents and

[300] "Creating an Innovative Europe": report of the independent expert group on R&D and innovation appointed following the Hampton Court Summit and chaired by Mr Esko Aho.

[301] Adopted by the European Commission on 13.09.2006.
http://cordis.europa.eu/innovation/en/policy/communications/innov_comm.html.

cultural capital is essential in helping to create and sustain flourishing societies. In this chapter we review EU policies and programmes to assess their relevance in establishing a context and social environment generating culture-based creativity.

5.1 EU cultural and educational policy

Whilst the EU has powers over the economic environment of cultural activities and creative industries (copyright, trade in cultural goods, competition law, state aid), culture remains at the level of subsidiary competence.[302]

Culture became an explicit but limited EC competence when the Maastricht Treaty came into force in 1993. Culture is and will[303] therefore primarily remain a responsibility of Member States. The role of the EU is to support and complement the actions of Member States, by stimulating exchanges, dialogue and mutual understanding. The EU's role in education, as in culture, is limited to supporting national governments. Member States remain fully competent to organise and direct policy formation for education.

We distinguish between the place of culture and education in the EU's internal policies and the role played by culture in external policies of the Union.

5.1.1 Culture and education in internal policies and programmes

EU cultural policy: from cultural exchanges to a creativity policy?

The EU aims to promote cultural activities in Europe by supporting artistic networking and exchanges across territories.[304]

- For instance the Community's Culture programme (2007-2013)[305] aims to support cultural organisations in creating and implementing cultural and artistic cooperation projects improving the

[302] The basis for the action of the EU in the field of culture lies in the Treaty. Article 151 states that: "The Community shall contribute to the flowering of the cultures of the Member States, while respecting their national and regional diversity and at the same time bringing the common heritage to the fore."
"Action by the Community shall be aimed at encouraging cooperation between Member States and, if necessary, supporting and supplementing their action …."
"The Community and the Member States shall foster cooperation with third countries and the competent international organisations in the sphere of culture, in particular the Council of Europe."
"The Community shall take cultural aspects into account in its action under other provisions of this Treaty, in particular in order to respect and to promote the diversity of its cultures."

[303] The Treaty of Lisbon of 13 December 2007 - still subject to ratification by some Member States - confirms this subsidiary competence.

[304] Source: Commission staff working document - *Inventory of Community actions in the field of culture* SEC(2007) 570

[305] Decision No 1855/2006/EC of the European Parliament and of the Council of 12 December 2006 (OJ L372, 27.12.2006).

knowledge and dissemination of European cultural heritage, promoting cultural exchanges, mobility of artists, intercultural dialogue, artistic and literary creation, and literary translation;

- Other programmes are interesting from a cultural point of view ("Europe for Citizens" (2007-2013)[306], "Lifelong Learning" (2007-2013)[307], including Erasmus and Erasmus Mundus, and "Youth in Action" (2007-2013)[308]), as they promote active European citizenship, stimulate the use of foreign languages, and support multilingualism and exchanges of young people and others;
- In the cinema and audiovisual sector, the MEDIA programme, in place since 1991, essentially supports training, development and the distribution of European films outside their country of origin. It has enabled non-national European films to reach an 8% market share on average in local cinema markets. Media International and Media Mundus will give the Media programme a larger international scope to foster partnerships in training and co-productions;
- A range of other Community funding programmes make an important contribution to culture. Support offered by the cohesion policy or rural development policy is instrumental in promoting, for example, the restoration of cultural heritage and the promotion of creative industries;
- In May 2007, the European Commission proposed a European Agenda for Culture[309] addressing, among others, culture as catalyst for creativity (more details under 5.2.2).

The initiative Europeana, the European digital library portal, museum and archive, was launched on 20 November 2008. The overall aim of this initiative is to make the European cultural heritage directly accessible to Europe's citizens and preserve it for future generations. The library is initially making available online 2 million digital treasures (currently half from France), including film material, photos, paintings, recordings, maps, books, manuscripts, newspapers and archival papers in French, German and English.

The European Digital Library is part of the i2010 initiative, a "European Information Society for growth and jobs", presented by the European Commission on 1 June 2005. The European Commission estimates that "Europe's libraries alone contain more than 2.5 billion books, but only 1% of archived material is available in digital form."[310]

[306] Decision No 1904/2006/EC of the European Parliament and of the Council of 12 December 2006 (OJ L 378, 27.12.2006).

[307] Decision No 1720/2006/EC of the European Parliament and of the Council of 15 November 2006 (OJ L 327, 234.11.2006).

[308] Decision No 1719/2006/EC of the European Parliament and of the Council of 15 November 2006 (OJ L 327, 234.11.2006).

[309] COM(2007) 242 final.

[310] The Commission announced on 11 August 2008 that it will allocate in 2009-2010 € 69 million from the EU's research programme for the digitalization and the establishment of digital libraries. The Competitiveness and Innovation Programme allocates € 50 million in the same period to enhance access to Europe's cultural content.

Creativity in education policy

In the context of the Lisbon strategy for growth and employment, the Heads of State or Government asked, at the Lisbon Council, in 2000 for 'a challenging programme for the modernisation of social welfare and education systems'.

Subsequently, the Ministers of Education adopted in 2001 a report on the 'future objectives of education and training systems.'[311] The Council and the Commission then endorsed a 10 year work programme[312], the Education and Training 2010 initiative. Using the open methods of co-ordination between Member States, the Education & Training 2010 work programme has led to a number of initiatives supporting lifelong learning which include setting up a framework of key competences[313] that each citizen should gain to succeed in today's knowledge society.

Creativity is not one of the key competences listed as such, but is explicitly quoted as a key-issue in relation to the promotion of entrepreneurship (objective 3.2) and there is a key competence on "cultural awareness and expression."[314] In the 2005 Commission's proposal for a recommendation on key competences for life long learning[315], creativity is quoted as a theme to be applied through the whole framework as it plays a constructive role in all key competencies – alongside critical thinking, initiative taking, problem solving, risk assessment, decision taking, and managing feelings.

More recently a particular emphasis has been put on creativity. In its 2007 Communication on "Delivering lifelong learning for knowledge, creativity and innovation",[316] the European Commission underlines the importance of creativity in the integration of the knowledge triangle: education, research and innovation. The

[311] Report from the Education Council to the European Council "*The concrete future objectives of education and training systems*" (5680/01 EDUC 18)

[312] Council's and Commission's Detailed work programme on the follow-up of the objectives of Education and training systems in Europe (2002/C 142/01)

[313] Recommendation No 962/2006/EC of the European Parliament and of the Council of 18 December 2006 (OJ L 394, 30.12.2006, p. 10).

[314] The eight key competences are: Communication in the mother tongue; Communication in the foreign languages; Mathematical competence and basic competences in science and technology; Digital competence; Learning to learn; Interpersonal, intercultural and social competences and civic competence; Entrepreneurship; and Cultural awareness and expression.

[315] Proposal for a recommendation of the European Parliament and of the council on key competences for lifelong learning **(**2005/0221(COD)).

[316] Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on "*Delivering lifelong learning for knowledge, creativity and innovation*" **-** Draft 2008 joint progress report of the Council and the Commission on the implementation of the "Education & Training 2010 work programme" (COM(2007) 703).

Communication highlights the need to "ensure that all sectors of education and training play their full role in promoting creativity and innovation."[317]

This is justified by the fact that "in this increasingly complex world, creativity and the ability to continue to learn and to innovate will count as much as, if not more than, specific areas of knowledge liable to become obsolete.[318] In February 2008, the Council and the Commission released a joint report on the implementation of the Education & Training 2010 work programme.[319]

Following this report, the Council[320] stressed that education and training must both provide a broad knowledge and skills base in the population but must also contribute to 'develop learners' creativity and capacity for innovation. To this end, curricula on all levels should be developed to enhance the creative and innovative skills of learners, and policy cooperation between the areas of culture and education should be developed. For the first time, culture is mentioned in relation to this objective. The Council conclusions in preparation for an 'agenda for European cooperation on schools'[321], whilst failing to explicitly linking creativity to culture, emphasise the need for schools to foster creativity.

Creativity and culture in regulatory and enforcement policies

The EU also stimulates creativity through the implementation of community policies. The EC competition authorities' intervention in the Lagardère/ Editis merger is an example of public intervention in the field.[322] Lagardère was authorised by the European Commission in 2004 to acquire part of the publishing business of Editis. The competition authorities forced the sale of some assets (representing 40% of the total turnover of the acquired companies).[323]

[317] Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on "*Delivering lifelong learning for knowledge, creativity and innovation*" **-** Draft 2008 joint progress report of the Council and the Commission on the implementation of the "Education & Training 2010 work programme" (COM(2007) 703).

[318] *Improving Competences for the 21st Century: An Agenda for European Cooperation on Schools Communication* from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (July 2008).

[327]Joint progress report of the Council and the Commission on the implementation of the 'Education & Training 2010' work programme "*Delivering lifelong learning for knowledge, creativity and innovation*" (5723/08).

[328]Report from the Council to European Council on "*Key messages to the Spring European Council in the fields of Education/Training and Youth*" (6445/08)

[321] Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 21 November 2008 on *preparing young people for the 21st century: an agenda for European cooperation on schools* (2008/C 319/08)

[322] In the Lagardère/Editis merger, the European Commission set conditions to approve the merger including asset disposals. Similar approach was taken in the Universal Music Publishing/ BMG music publishing merger in 2006. (decision of 22 May 2007).

[323] Case M.2978 Lagardère/Vivendi Universal Publishing – 7.01.2004.

Securing access to cultural products and services in the marketplace will be a crucial political task in the years ahead because of the value of culture, as a means of stimulating creativity. In this context the importance of competition rules as a tool to promote a diverse cultural offering should be stressed as diversity is a catalyst of creativity. Until now competition authorities' intervention remains focused on the consideration of the effect of market concentration (a feature of cultural industries) on consumer prices rather than on the implementation of cultural diversity. This situation may change with the effective implementation of the UNESCO Convention on the Promotion and Protection of the Diversity of Cultural Expressions.

At a regulatory level the EU has adopted measures aimed at shielding local cultures, identities and industries from market forces. This includes the ability for Member States to provide a lower VAT rate for books and cinema tickets (Annex to the 6th VAT Directive), to establish quotas or investment obligations on linear and non-linear services to benefit the European audiovisual sector (the Audiovisual Media Service Directive of July 2007), to provide state aid funding for cinema and public broadcasting within certain limits, to safeguard networks of independent book sellers etc. These measures are essentially aimed at safeguarding local production capabilities and at enhancing audience access to these productions. Cultural markets in Europe remains fragmented along linguistic lines. As a result the establishment of an internal market in the audiovisual and media field remains a distant dream because of the specific nature of such markets. Broadband networks may enable more cross-border exchanges between local cultures in Europe.

5.1.2 EU's external relations and cultural diplomacy

On a global level, the trade in cultural goods is regarded by many policymakers as something which has to be regulated using a framework which is distinct from that which regulates more purely economic goods. This is a consequence of a market in which market power in the global distribution of cultural goods and services has a significant impact on the expression of cultures, their access to markets and therefore their very existence. Cultural domination is a threat to creativity. Not because it necessarily leads to the kind of homogeneity denounced by Adorno[324] in his critique of mass culture but because it negates the influence of other cultures and therefore undermines creativity goals and feeds intolerance.

Commercial domination is held responsible for the marginalisation of other cultures; this in turn leads to the adoption of protectionist measures (including the spreading of piracy) or leads to a questioning of the value of intellectual property (IP) protection as an incentive to creativity.[325]

[324] Adorno, Theodor W., *The Culture Industry Selected essays on mass culture*, Routledge, 1991.

[325] Lessig, Lawrence, professor at the Stanford Law School in "Free Culture" denouncing corporate greed in the implementation of copyright rules. These lead developing countries, notably Brazil, to request WIPO to work out a development agenda in relation to copyright.

The political debate on the role of regulation versus market forces in the cultural field has a long history and prefigures the intense discussions which now surround the relationship between regulation and freedom in other sectors, such as banking and financial services for instance.

Globalisation has stimulated calls for the international governance of cultural issues just as it has for the environment. The EC has taken the lead in promoting cultural diversity internationally. It was instrumental in the preparation and negotiation of the UNESCO Convention aimed at promoting cultural diversity. The initiative stems from the belief that there needs to be a global recognition that diversity is a key tool in driving creativity and the affirmation of identity. It affirms that creativity is fed by influences and confluences. The convention recalls the dual nature of cultural goods and services, the need for more balanced cultural exchanges and for more international collaboration, including preferential treatment for developing countries.

Culture is recognized as an important part of the EU's main co-operation programmes and instruments as well as the Union's bilateral agreements with third countries. The rapid entry into force of the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions illustrates the new role of cultural diversity at international level: as parties to the Convention, the Community and its Member States have committed themselves to strengthening a new cultural pillar of global governance and sustainable development, notably through enhancing international co-operation.

Therefore the European Community is negotiating provisions on cultural cooperation with certain developing third countries on an ad hoc basis. As an example, a Protocol has been added to the EU- Cariforum trade agreement adopted in June 2008. It aims at setting conditions to facilitate cultural exchanges without this resulting in commitments to the liberalisation of trade. In addition, a new programme – Media Mundus - fostering cultural exchanges internationally through audiovisual partnerships also subscribes to this ambition.

5.2 The EU policy on innovation

How is innovation considered by EU Policy? Both the 2006 Communication "Putting knowledge into practice: A broad-based innovation strategy for the EU" as well as the Council conclusions on "a broad based innovation strategy: strategic priorities for innovation action at EU level" refer to several forms of innovation. For instance, the Communication specifically states that "all forms of innovation need to be promoted, for innovation comes in many forms other than technological innovation, including organisational innovation and innovation in services". The document also refers several times to the development of "new innovative products and services"[326] as a key characteristic of the innovation process.

[326] P.2 it refers to « innovative products and services (…) commercialized in a large scale », p.3 it refers to the "creation and marketing of new innovative products and services in promising areas" and p.6 to "new development in goods and services".

Although, the Communication does not suggest any proper definition for the concept of innovation[327], it seems that its main reference is the Oslo Manual.[328] The manual in its third edition (2005) provides: "an innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations."[329] Whilst the manual refers to the importance of design, it has yet to acknowledge the contribution of culture-based creativity to innovation.

The Manual acknowledges that "innovation policy has developed as an amalgam of science and technology policy and industrial policy."[330] The overwhelming majority of indicators aimed at measuring innovation reflect this technology bias (R&D expenditure, patenting, graduates in science and engineering, scientific publications, access to venture capital for instance). The creativity index, proposed in Appendix 3, is aimed at addressing the shortcomings of existing innovation indexes and scoreboards with a view to take into account indicators capable of revealing the culture-based creativity potential of a given country.

In this respect it is essential that the European Commission adopts a definition of innovation that specifically includes creativity and culture-based creativity. Policy documents and EC programme guidelines still give overdue emphasis to technology innovation, functional characteristics, technical specifications, processes and organisational methods. Such processes whilst innovative may not trigger creativity. It may even kill it.[331]

Furthermore the insufficient reference to culture makes it more difficult for cultural projects or cultural and creative industries to benefit from instruments designed to foster innovation.

Take for example one of the new flagship initiatives of the EU, the European Institute of Technology (EIT). The EC recognises the importance of education in the stimulation of innovation but identifies science and engineering as key skills to support innovation. In March 2008 it agreed to the establishment of the EIT. The EIT initiative aims to stimulate innovation by gathering the best in the research, business and education sectors. The concept of innovation underlying this initiative is essentially linked to technology. Through the objectives of the Knowledge and Innovation Communities (KICs) culture is referred too very broadly in a rather sociological sense. It is yet difficult to assess how the KICs will operate. However when one examines the governing board of the EIT it is clear that research in technology fields and in the natural sciences will be the primary focus. None of the members come from the cultural sphere.[332]

When it comes to assessing how EU regulations recognise the value of culture and creativity, one discovers another challenge. Article 3 of the EC treaty – which lists the activities of the EU – identifies the promotion of

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[327] European Commission "*Putting knowledge into practice: A broad-based innovation strategy for the EU*" (COM (2006) 502 final).

[328] Oslo Manual, Guidelines for Collecting and Interpreting Innovation Data, OECD-Eurostat, third edition, 2005.

[329] Ibid p.46.

[330] Ibid p.15.

[331] Amabile, T., *How to Kill Creativity*, Harvard Business Review, Sept. 1998.

[332] http://eit.europa.eu/about-eit/knowledge-and-innovation-communities.html

research and technological development as activities to be pursued to achieve the aims of the Union. Of course, the Treaty also refers to culture. However, it limits the EU's remit to ensure that culture flourishes at Member State level (thus illustrating the logic of cultural competition). From such perspective, the EU's seeming bias with regards to fostering innovation may to some degree stem from how culture is addressed in the Treaty.

It has to be acknowledged, however, that recent initiatives from the EC indicate that there may be a shift towards integrating creativity in future innovation policy action. The new innovation scoreboard from 2008 includes more non-technological parameters than its predecessor and a document by DG Enterprise on user-centred design further explores the relationship between design as a creative activity and innovation.[333] A scoreboard on design and creativity has also recently been published by Pro-Inno Europe. Yet, it remains to be seen whether these initial attempts will be reflected in larger future initiatives.[334]

5.2.1 Funding support focused on research and technology-driven innovation

To encourage investment in innovation, the EC has a range of different instruments. They are essentially: the 7th Research Framework Programme, the Competitiveness and Innovation Framework Programme (CIP) as well as the Cohesion Policy via the Structural Funds.

In cooperation with the European Investment Bank, the Commission has also launched a Risk Sharing Finance Facility (RSFF) to support investment in research, development and innovation (the Community contributing 1 billion Euros to this facility matched by EIB funding). The creative economy could in theory benefit from such programme but it appears that cultural and creative industries do not access it. It is either not known (or promoted) in the creative industries or not adapted to its specificities.

<u>The Seventh Framework Programme</u>

The 7th Framework Programme on Research and Development (FP7) has the objective of reinforcing the scientific and technological base of European industry and fostering its international competitiveness. The programme has a budget of over € 50 billion, for the period 2007-2013. It is built around five major specific programmes:

- Cooperation: Promotion of cooperation between industry and universities in order to acquire leadership in key technology areas,
- Ideas: Encouraging fundamental research "at the frontiers of science",[335]
- People: Encouraging mobility for researchers,

[333] Commission Staff Working Document "*Design as a driver of user-centred innovation*" of 7.4.2009, SEC(2009) 501 final. http://ec.europa.eu/enterprise/newsroom/cf/document.cfm?action=display&doc_id=2784&userservice_id=1

[334] Pro-Inno Europe published in February 2009 a study attempting to measure Member States' performance in design: "*Design, Creativity and Innovation: A Scoreboard Approach*"
http://www.proinno-europe.eu/admin/uploaded_documents/EIS_2008_Creativity_and_Design.pdf

[335] Competitive European regions through research and innovation, practical guide to EU funding opportunities for research and innovation.

- Capacities: Supporting the development of knowledge economy,
- Euratom: Supporting a new energy policy.

FP7 provides a budget line entitled "Networked Media" whose objective is to address the technological challenges emerging from the digital revolution, which is characterized by the proliferation of audio-visual content. The Networked Media initiative has been allocated € 86 million[336] (out of the € 9 billion allocated to ICT Research). "Research in networked media shall ensure that the whole media chain is optimised for new ways of media consumption and creation."[337]

Interestingly, the European Commission supported the establishment of an industry network which was mandated to give the EC some directions on the priority research areas in advance of the setting up of the new FP7 programme. Among the establishment of several so called Technology Platforms, this initiative led to the establishment of the Networked and Electronic Media (NEM) Technology Platform. The Platform, set up in 2005, was aimed at addressing "the convergence of media, communications, consumer electronics and IT as a wide opportunity for future growth."[338] The composition of the network illustrates the difficulty of FP7 to engage with the content and creative industries.

It appears as if the idea of convergence has yet to be reflected in the composition of the NEM Steering Board. Whilst technology firms(large and small) are represented in very large numbers there is a very limited representation of broadcasters (BBC and the EBU) and no trace of music, film, publishing or computer animation companies. This is another missed opportunity to establish bridges and cross fertilisation opportunities between industry sectors.

The CReATE project, funded by the Seventh Framework Programme for Research and Technological Development, is focusing on the promotion of ICT-innovations in creative industries.[339] The following regions are participating: Baden-Württemberg, Rhône-Alpes, Piemonte and West Midlands. CReATE seeks to identify fields of research for promoting creative industries' competitiveness, to support strategic collaboration of innovative creative industry clusters in Europe, to develop support for SMEs in research and technology transfer and to set up a pan-European platform to connect the creative industries with IT experts and research institutions.

The Competitiveness and Innovation Programme

With a total budget of over € 3.6 billion for the period 2007-2013, the Competitiveness and Innovation Framework Programme (CIP) is the European funding instrument specially targeted at fostering the competitiveness of European firms, in particular small and medium-sized enterprises (SMEs). The programme is designed to encourage innovative activities, better access to finance as well as business

[336] ftp://ftp.cordis.europa.eu/pub/fp7/ict/docs/ict-wp-2007-08_en.pdf .

[337] http://cordis.europa.eu/fp7/ict/netmedia/mission_en.html.

[338] http://www.nem-initiative.org/.

[339] http://www.lets-create.eu (accessed August 2008).

support services. It also tries to enhance the use of the information and communication technologies (ICT) as well as the use of renewable energies and energy efficiency.

The CIP has three programmes: the Information Communication Technologies Policy Support Programme (ICT PSP), Entrepreneurship & Innovation Programme (EIP) and Energy Europe Programme (IEE).

One of the key instruments of the CIP to support SMEs in their growth and innovation activities is the Enterprises Europe Network. Launched in 2008 by the European Commission, this network is a relay centre which provides a wide range of services to companies. Combining the former Innovation Relay Centres (IRC) and Euro Info Centres, the Enterprises Europe Network is made up of 500 organisations across 40 countries. The services of the network – next to providing advice on business collaborations across boarders – concentrate on helping SMEs to access EU support programmes such as FP7. It remains that the creative sector is not making use of these facilities. The European Commission should address this point as the programme fails to benefit the non-technological sector.

The Europe INNOVA initiative provides tools and services for innovating European companies. Supported by the European Commission since 2006, the Europe INNOVA initiative aims to "inform, assist, mobilise and network – firm managers, cluster managers, investors, policy makers, and relevant associations - in the fields of entrepreneurial innovation."[340]

Composed of independent experts, Europe INNOVA aspires to promote regional development by fostering innovation through panels, network, cluster maps and financing. It identifies the following as "key industrial sectors for Europe's future competitiveness"[341]: biotechnology, Food/Drink, Machinery/Equipment, Textile, Chemicals, Energy, ICT/Electrical/Optical, Space & Aeronautics, Automotive and Eco-innovation, and two cross-cutting themes, "eco-innovation" and "fast growing enterprises".

In addition, the initiative is also heralded as a major initiative in the service sector. In 2007 the action "the European Innovation Platform for Knowledge Intensive Services" (KIS-IP)[342] has been implemented. This pan-European platform aims at strengthening the link between universities, entrepreneurship and finance so as to promote innovative start-ups in the services sector. Technological innovation as well as non-technological innovation are covered in principle.

At present, the platform targets three sectoral networks in the fields of ICT, renewable energy and satellite applications. DG Enterprise also provides several funding streams that could benefit to the design sector. As part of the Competitiveness and Innovation Programme (CIP), Europe Innova may support projects promoting the use of design for service innovation for instance.[343]

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[340] http://www.europe-innova.org.

[341] ttp://www.europe-innova.org/index.jsp?type=page&lg=en&classificationId=4955&classificationName=Sectors&cid=5133

[342] http://www.europe-innova.org/index.jsp?type=page&previousContentId=6344&cid=9207&lg=EN .

[343] The Programme provides funding possibilities for sectoral partnerships in relation to the European Innovation Platform on Knowledge-Intensive Services. Design for service is one of the areas eligible for this strand which is granted 4 million Euros in 2009.

Similarly, PRO Inno Europe, another CIP-based initiative, aims at fostering trans-national cooperation on support for innovation. With a budget of 15.5 million Euros in 2009, the programme is open for support for new forms of innovation management, including design management or service design. PRO Inno Europe has for instance funded the Design Management Europe project.[344]

Cohesion Policy (Structural Funds)

Finally innovation is also funded through the Structural Funds (ERDF[345] and ESF[346]), which are the financial instruments of EU Cohesion policy. The purpose of the Cohesion policy is to reduce regional disparities. In the current period it focuses on competitiveness, growth and jobs at regional level. A move towards knowledge-based growth is therefore at the heart of the renewed Lisbon agenda which forms the EU response to globalisation. The promotion of innovation is at the heart of EU regional policy. The broad innovation agenda covers research and innovation, exploiting ICT, entrepreneurship measures and innovation capacity in the human capital.[347]

However, on the basis of budgetary allocations as well as the existing or ongoing projects developed under the Cohesion Policy, innovation is essentially considered as technological innovation.

Over the period 2007-2013, € 344 billion will be distributed to EU Member States and regions to achieve Cohesion policy's goal, including € 70 billion for the Cohesion Policy and € 277 billion for the Structural Funds (ERDF and ESF). Of this amount 1.7% are allocated to the category "culture" whereas 25% are allocated to the above mentioned broad innovation agenda.[348] According to DG Regio € 86 billion are specifically earmarked for innovation.

Under the Regulation of 5 July 2006 on the European Regional Development Fund (ERDF)[349], the category "culture" relates to the "protection and preservation of cultural heritage", to the "development of cultural infrastructure in support of socio-economic development" and to "aid to improve the supply of cultural services through new higher added-value services". In addition, some support of the Structural Funds in the area of culture and cultural and creative industries may be covered under other categories such as urban regeneration, tourism, innovation or information society (e.g. digitisation of cultural assets). For these reasons, it is not possible to quantify precisely the total support of the Structural Funds to culture. It would be useful for the European Commission to quantify the level of support given to culture through the ERDF.

[344] www.designmanagementeurope.com.

[345] ERDF: European Regional Development Fund, instrument of the EU Regional Policy.

[346] ESF: European Social Fund, instrument of the EU Social Policy

[347] Infoview DG REGIO database, Theme Innovation, categorisation defined in the regulations (update)

[348] Infoview DG REGIO database.

[349] Regulation (EC) No 1080/2006 Of the European Parliament and of the Council of July 2006 on the European Regional Development Fund and repealing Regulation (EC) No 1783/1999 available on:
http://ec.europa.eu/regional_policy/sources/docoffic/official/regulation/pdf/2007/feder/ce_1080(2006)_en.pdf

While it is therefore possible to support cultural and creative projects in several ways (as illustrated below), consultations showed that according to regional stakeholders the somewhat narrow definition of culture will make it more difficult to get funding for cultural projects which do not follow a specific innovation agenda in the future. Cultural and creative industries' projects can most likely be funded through several innovation themes; as an example, Estonia has developed a specific window for creative industries in its National Strategic Reference Framework 2007-2013, which is the document setting up the guiding principles for the use of the EC Structural Funds at national level. However, the ERDF regulation crucially does not recognise the intrinsic contribution of cultural activity to local and regional development. For example, the idea that an open air concert season – while it may not necessarily have an immediate impact on job creation - contributes tremendously to the attractiveness of a city or region and therefore increases its long term competitiveness is not explicitly reflected in the planning documents of the structural funds, although it could get ERDF funding provided that the link with local regeneration or competitiveness is clearly made.

In the framework of URBACT[350], a network on "cultural activities and creative industries, to support urban regeneration" was co-funded from 2004 to 2006. It aimed, for instance, to encourage the exchange of experiences and good practices regarding the role of cultural activities and creative industries in the regeneration of European cities. The project therefore focused on the link between culture and urban regeneration, and analyzed examples of cities that have included culture in their urban regeneration strategies. Indeed many cities such as Amsterdam, Birmingham, Helsinki, Lille or Naples invested in cultural activities or supported creative industries so as to regenerate their deprived urban areas. Some of them transformed abandoned factory buildings into art centres (for instance the Kaapelitehdas/ Cable Factory in Helsinki[351]), other developed cultural centres with a view to fight social exclusion (the Youth Information Centre in Evosmos (Greece).

Under the "Region for economic changes" initiative[352], launched in 2006, a number of projects were co-funded by the ERDF too. "Leading by Design: Introducing Design to SMEs" (2004-2005) is one of them. The main aim of this project was to promote more "innovative, profitable and sustainable businesses"[353] through the use of design. Cooperation between design companies or students and businesses was encouraged.

The ERDF has also been funding the INTERREG programme since 1990. The aim of INTERREG is to help European regions to develop joint innovative solutions and to share expertise and development costs. For the period 2007-2013 a fourth round of programmes (INTERREG IV) has been launched. We identified some examples of investments that have been made in creative industries.

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[350] URBACT is a European Programme, funded by the ERDF, which aims to foster the exchange of experience among European cities and the capitalisation-dissemination of knowledge on all issues related to sustainable urban development. The second cycle of the Programme, UBACT II (2007-2013), follows in the footsteps of URBACT I (2002-2006), which rallied 217 cities across Europe to work in 38 different projects.

[351] "Culture and urban regeneration: Case studies' summaries".

[352] "Regions for Economic Change" is a new Territorial Cooperation objective for the 2007-13 programming period of ERDF, which aims to increase the effectiveness and efficiency of regional and urban networks.

[353] Case Study: « Leading by Design: Introducing Design to SMEs »,
http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/studies_a_en.cfm?nmenu=5

One of these is the trans-national programme dealing with creative industries relating to the North Sea region (INTERREG IV B). The project was granted funding on the basis that one of the "core interfaces for (innovation) growth"[354] is the interconnection of technological sectors with creative industries. Creative industries are considered as "assets for future development and economic competitiveness and as an important location factor for the knowledge-based economy."[355]

Under INTERREG IV B NEW, a consortium of cities led by Nantes (France) under the name of ECCE innovation raised € 4 million in 2008. The ECCE Innovation project gathers together 8 European cities throughout the North-West of Europe. It aims at fostering the innovative capacity of the creative industries in order to access new markets. It will focus on the exchange and transfer of expertise, knowledge and experience related to the cultural and creative industries at a regional level. It is an excellent example of cultural collaboration across cities and regions targeting creative industries and artists.

In November 2008 the INTERREG IVC approved another creative project: "Creative Metropoles: Public Policies and Instruments in Support of Creative Industries". This project is intended to establish and promote an efficient public support system for creative industries in the 11 participating cities (Amsterdam, Barcelona, Berlin, Birmingham, Helsinki, Oslo, Riga, Stockholm, Tallinn, Vilnius and Warsaw).

5.2.2 Conclusion: An innovation strategy that has yet to take fully account of culture-based creativity

When considering the issue of whether we should be creating a Europe of art or a Europe of science, the current President of the European Commission responded that: "*Certainly both are important, and particularly since the Renaissance, Europe has excelled at both. Constant innovation in art and science has helped Europe to enjoy rapid development and unparalleled cultural wealth* (…) *For Europe it must never be a question of art or science, but* (*…) art and science are the legs on which Europe stands.*"[356]

This recognition of the importance of culture at the highest level within the European Commission is a crucial step forward. However, until now the European Commission has done relatively little to promote a culture-based creativity strategy. Today, EU cultural policy is rather aimed at supporting cultural exchanges (with a strong focus in terms of funding on traditional cinema (Media Programme), cultural cooperation (Culture Programme) and heritage preservation (ERDF). It is driven by the ambition to support traditional cultural projects with European scale rather than by the desire to stimulate a culture-based creativity that will promote the development of a competitive and sustainable post-industrial economy in Europe.

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[354] "*Operational Programme document for the Interreg IVB North West Europe 2007-2013*", p. 50

[355] ibid p.14

[356] José Manuel Barroso, President of the European Commission, « *Europe: art or science* ?», speech at the Delft University of technology, 13 January 2006

However things are starting to change. Indeed the European Commission adopted in May 2007 a Communication setting out a European Cultural Agenda in a Globalizing World.[357] At the same time a large number of Member States are reflecting on policy strategies to stimulate cultural and creative industries. The European cultural agenda is built on three interrelated sets of objectives:

- the promotion of cultural diversity and intercultural dialogue;
- the promotion of culture as a catalyst for creativity in the framework of the Lisbon Strategy for growth and jobs;
- the promotion of culture as a vital element in the Union's international relations.

It is the first time that an EC policy document has made explicit reference to culture as a catalyst for creativity and thus linked culture to the Lisbon strategy. In the framework of the implementation of this Agenda, the Ministers of Culture of the 27 EU Member States have highlighted the role of culture in boosting creativity and innovation in Europe and recognized that a strategic investment in culture, as well as in cultural and creative industries was vital for strengthening a dynamic creative society and creating jobs in the European Union, in Council Conclusions adopted on 12 May 2009[358]. The commissioning of the present study is part of an overall reflection on the role of culture in stimulating creativity. We have also seen that the concept of creativity (albeit not necessarily linked to culture) is increasingly integrated in EU policy decisions relevant to education.

However despite recent efforts (essentially in the field of design since 2008) and isolated examples, EU innovation policy is still largely focused on technology and science. We estimate that innovation funding at EU level amounted to € 146 billion over the years 2007-2013 (FP, CIP and Structural Funds) whilst investment in culture amounted to approximately € 3 to 4 billion by combining the Cultural and Media programmes with some funding (estimates) from structural funds. Unfortunately the European Commission does not track the allocation of funding to cultural and creative industries' projects outside the Media and Culture Programmes. An innovation policy which implementation has given the prominence to technological and scientific progress is prone to lose sight that economic change is also crucially dependent on the stimulation of culture-based creativity.

Innovation policy should integrate culture-based creativity:

- The design and implementation of programmes and their guidelines seems to give innovation a sense which does not sufficiently embrace creativity in general and culture-based creativity in particular.

- Research and the FP7 have made little effort to integrate culture and creative sectors in the research programmes. Creative sectors, and especially SMEs, are not represented in some programmes, such as the NEM platform.

[357] Communication of 10.5.2007 COM(2007) 242 final

[358] Council Conclusions on Culture as a Catalyst for Creativity and Innovation. Full text: http://ec.europa.eu/culture/our-policy-development/doc/CONS_NATIVE_CS_2009_08749_1_EN.pdf.

- Financial support (whether through EC programmes or the European Investment Bank (EIB) is geared massively to science and technology in a traditional way with little consideration of the role of creative industries in the ICT uptake for instance or the role of culture-based creativity in product development.

- Support initiatives for SMEs are targeting technology set ups as a matter of priority. Whilst not specifically excluding the creative industries, major efforts remain to be done to engage with the cultural and creative sector.

- The intellectual property right strategy is focused on patent and awareness raising in the technology sector Copyright or "droit d'auteur" is not heralded as a major driver of creativity. On the contrary, EC innovation policy documents sometime questions the suitability of IP mechanisms notably in relation to rights management or reward to creation[359], focusing as a matter of priority on the development of new services rather than on the financing of creative outputs throughout the EU. Intellectual property is a key tool to reward creators and investors in creation.

- There is little statistical data on the importance of the creative sectors (currently being addressed by EUROSTAT working with national statistical offices, albeit with very limited resources[360]).

- The Innovation scoreboard is only starting now to incorporate measurements relating to creativity (albeit related to design essentially). The lack of relevant, internationally comparable statistics in this area hinders rapid development measurement tools.

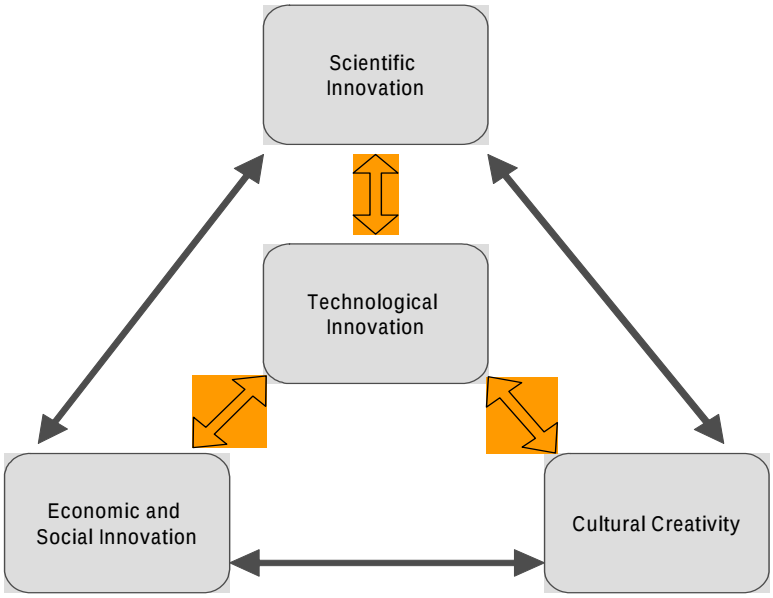
- The valuation of intangible assets should be subject to examination in the context of the review of accounting standards.

Finally it is important to acknowledge in policy documents that boundaries between business, science and technology as well as those between consumption, research and development and production are increasingly blurred. This implies that in today's economy innovation emerges as a result of business collaboration, the utilisation of new technologies in diverse domains, including the use of creativity and the engagement of users in the creation of new products and services. Creative individuals and companies from the cultural and creative industries should be considered as partners in the quest for innovation.

[359] For instance p.7 of EC communication on Innovation of 13.09.2007 (COM (2006) 502 Final or the EC attempts in 2006 to phase out "copyright levies" (right to remuneration to compensate for private copying).

[360] Eurostat, Cultural Statistics : *The cultural economy and cultural activities in the EU 27, Cultural employment in 2005*, 29 October 2007

EU policies on innovation need to recognise the cross-sectoral and multi-disciplinary aspect of "creativity" which, thus defined, mixes elements of "artistic creativity", "economic" as well as "technological innovation."



In March 2007 the European Council recognized the particular role of cultural and creative SMEs as drivers of growth and innovation in Europe[361]. On 13 March 2008 it then stated: "A key factor for future growth is the full development of the potential for innovation and creativity of European citizens built on European culture and excellence in science." Later in December the same year the Council of the European Union adopted conclusions pointing out the importance of architecture's contribution to sustainable development[362].

5.3 Overview of EU Member States' strategies to stimulate creativity

"*Culture as symbolic value, as the production of "significance", but also more down to earth as functional design that enhances user friendliness… is something difficult to imagine being without in today's economy*!"

(Dutch Strategy Paper on Culture and the Economy)[363]

[361] European Council conclusions of March 2007.

[362] Council's conclusions on architecture: culture contribution to sustainable development (OJ 13.12.2008 C319/13).

[363] Strategy paper from the Dutch Government (2005).

The contribution of culture to economic transformation and, albeit more recently, its cross-cutting capacity to stimulate creative solutions across a range of societal areas, has moved onto the agendas of policy makers throughout Europe. While a more comprehensive review of national strategies concerning the development of creativity is included in appendix 2, this short summary indicates that several countries already today invest into multi-sector strategies to integrate creativity into mainstream economic and social policy. Naturally, these attempts vary greatly in terms of how the cultural and creative sectors are defined and in terms of how their contributions are perceived (different definitions of the cultural and creative industries across the EU had already been illustrated in the study *The Economy of Culture in Europe*[364]).

The UK has been among the first Member States that have formulated a comprehensive creativity strategy. "*Creative Britain: New Talents for the New Economy*", published in 2008, addresses the role of creativity across a range of domains/issues, including the economy, education, research and innovation as well as the social sectors. The strategy on the one hand acknowledges the value of individual creativity, skills and talent while it also clearly spells out the case for healthy and dynamic copyright-based industries that create jobs and contribute to national GDP.[365] Sweden, by contrast, goes beyond a sector-based definition by shifting its focus to "the individuals and companies… whose primary function it is to create or deliver experiences in one form or another". The Swedes thereby embrace the wider concept of the Experience Industries. Denmark is embracing the toy industry (Lego) and Italy the industry of taste ("industria del gusto"), thus illustrating how each EU Member State sets different priorities in their attempt to foster their creative potential.

The trend towards acknowledging the comprehensive contribution of culture and the creative industries to development is also reflected in Germany, where the federal government has for the first time in February 2009 published a comprehensive strategy to support the cultural and creative industries. It notably argues that several economic support measures need to be reformed in order to better facilitate the inclusion of creative companies. Furthermore, it illustrates the importance that creativity and non-technological innovation play in triggering economic transformations across different industrial sectors, arguing for a rethink of traditional technology-oriented innovation policy.

France, which invented the concept of cultural policy[366], seems to remain attached to the concept of cultural industries and emphasises the social dimension of the sector over and above its economic significance. France's focus on culture is a resistance to an exclusively economic vision and illustrates French policy makers' belief that such approach would have a negative impact on identities and "true" creation.

France's sectoral definition puts the work of art as well as the work of the individual author at the centre as opposed to focussing on the industrial process leading to creation. Under this policy, France is the country in the world which is probably best equipped to support its creative industries (through notably regulation or tax

[364] Op.cit KEA p.33 and p.46.

[365] *Creative Britain: New talents for the New Economy*, Department for Culture Media and Sport (DCMS), UK, 2008.

[366] The history of the French State is intrinsically linked to the administration of art and culture. See Jacques Rigaud, *L'exception culturelle, Culture et pouvoirs sous la V Republique*, Grasset, Paris 1995 p.21 to 36.

incentives[367]). However the French administration is torn between a policy which is on the one hand essentially driven by economic consideration and on the other hand by the desire to preserve creation from economic imperatives and the logic of markets or economic liberalism ("l'exception culturelle"). This debate exists all over Europe but is the most vivid in France.[368]

Concerned that a policy for creativity may lead to the "dissolving of the unique features of the economy of culture into the general economy", France is reluctant to embrace the concept of creative industries. However in November 2006, at the initiative of the French Minister of Economy, Finance and Industry, a report was published to highlight the importance of the creative and intangible economy. This report highlights that creativity is not really integrated in industrial policy actions "which continue to privilege a very technological conception of innovation."[369] On the initiative of President Sarkozy, a Council for artistic creation was set up in February 2009 to reflect on the establishment of a creativity policy.[370]

5.3.1 A variety of approaches to support creativity in Member States

> *"In the coming years, the creative industries will be important not only for our national prosperity but for Britain's ability to put culture and creativity at the centre of our national life."*
> *(*UK Prime Minister Gordon Brown in Creative Britain, UK, 2008[371])

What becomes clear through this assessment and what is further illustrated by the review of national initiatives in appendix 2 is that some progressive Member States are currently testing a variety of policy measures to mainstream culture and creativity across different policy realms. In parallel, governments increasingly attempt to measure the actual economic and social contributions of the cultural and creative industries to society.

It should be highlighted that policy initiatives for creative industries are usually managed by Ministries of Culture apart from Finland, which has made creative industries a priority of the Ministry of Employment and Economy and in the Netherlands, which strongly links the Ministry of Culture to the Ministry of Economic Affairs in relation to policy developments. Similarly, in Germany, the Ministry for Economic Affairs and Technology is responsible for implementing the forthcoming national cultural industries strategy.

Most strategies related to creativity are deeply interwoven with governments' initiatives to stimulate the development of cultural and creative industries. Only a few of the strategies reviewed address the issue of creativity across further policy realms, such as social development, regional development, education, training and higher education as well as research and innovation.

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[367] KEA, *Tax Credits and financial supports in OECD countries for the cultural industries*, for the French Ministry of Culture, 2007.

[368] Seminar « Nouvelles frontières de l'économie numérique », Paris, 2/3 Octobre 2008.
http://www.jec-culture.org/?id_page=accueil

[369] P.59 of the Report of the Committee on the immaterial economy, French Ministry of Economy, November 2006

[370] The Council was presented as "an engine for a change of culture" and a "French response to the economic crisis".

[371] Op. cit. DCMS, 2008.

In many countries, culture is a competence dealt with at regional level. Regional cultural policies also deserve close examination. However these strategies will not be considered here as this will be considered in a subsequent study being undertaken on behalf of the European Commission and due to be released in early 2010.

CHAPTER 6
POLICY RECOMMENDATIONS

Europe has enormous cultural and creative assets: a strong education system, creative enterprises, a dynamic and culturally rich society, a good level of digital technology literacy, strong public institutions, and democratic systems of government, a wealth of ideas, artists and creative people. European brands are amongst the best in the world in technology, luxury goods, tourism, media publishing, television, music, computer animation, videogames, design and architecture. At the heart of this culture-based creativity is the capacity of artists and creative professionals to cross boundaries, to think laterally, to take risks and exercise their entrepreneurial spirit for the good of society. European creators and artists in architecture, design, fashion, cinema, music, and modern art have worldwide influence.

Despite Europe's assets, the contribution of culture to creativity is still not fully recognized in Europe. Culture is still considered on the fringe of economic and societal development. This is reflected in policy priorities.

The question for policy-makers is how to make the best use of these under-recognised assets in dealing with the great economic, social and environmental challenges of our time. Whilst the priority remains economic growth, the crisis is also an opportunity to address the future of economic development that takes into account environmental, cultural and social considerations.[372] Furthermore information technology is contributing to the emergence of new social trends that question the foundation of economic and cultural exchanges, inventing new social relations and new forms of entrepreneurship and business models. Investment in culture is an investment in creativity capable of producing economic and social benefits.

Creativity comes from different combinations of ability and environment - in other words, personal pre-disposition and a social context. As a result, policy has a crucial role to play in setting the appropriate conditions for Europe to be a creative place across its regions, capable of educating, retaining and attracting talents. But first culture must be seen as a resource for creativity by policy makers and be given greater prominence in the broader policies on the knowledge economy, innovation and social cohesion.[373]

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[372] See *Manifeste pour les produits de hautes nécessités* – inspired by the social movement in the French Antilles, on the aspiration of giving a sense to life through the poetic and the aesthetic (as opposed to a system which "condemns life to consumption or production"). Source: *www.aboutduweb.com/poolp/public/manifeste_guadeloupe.pdf*. - February 2009.

[373] In his book *"Outliers"* Malcolm Gladwell offers an account on the importance of context and environment which set the opportunities for the expression of talents. He shows why some people achieve more than others and "the secret of their success". Talent is as much as consequence of the date of birth, hard work, emotional intelligence, historical circumstances, demographics or social contexts as analytical intelligence. For Gladwell creative people are more the result of the world in which they grew up, the circumstances which provide the opportunity to shine (for instance, the ability to succeed also depends on how old you are when transformation in society happen. Furthermore, imagination would be a better yardstick than intelligence to assess creativity. Malcolm Gladwell, *Outliers – The Story of Success*, Allen Lane/Penguin Group, 2008.

The measures proposed herewith are an integral part of the knowledge economy whose development is a priority. They aim to promote competition, collaboration across disciplines, risk taking and more importantly help individuals and societies to grow and express their singularities.[374] To be effective, these measures are correlated to technology innovation as well as social objectives (notably health, social mobility and education). They also wish to contribute to the promotion of a Europe driven by values such as solidarity, tolerance, cultural pluralism and environmental sustainability.

Looking into creativity is the opportunity to rediscover our inner creativity and to reflect over what Saint Exupery said: "Over time the clay of which you were shaped has dried and hardened, and naught in you will ever awaken the sleeping musician, the poet, and the astronomer that possibly inhabited you in the beginning."[375] The poetic can balance a vision entirely subject to economic ends and consumption.

There are first indications that world leaders have come to realise the increasing value of looking beyond the economic growth paradigms that have dominated policy making over the past decades. By referring to a new "politics of civilisation" in his recent New Year's speech, France's president Sarkozy borrows from Edgar Morin, a philosopher and sociologist who proclaims that the search for "quality of life should replace the search for quantity" and that "quantity has not brought the promised quality of life."[376] Barack Obama equally made the call for "a politics of change" a central piece of his recent campaign and presidency and puts values that go beyond instant gratification back on the agenda. First signs concerning the role that he gives to art in this process of transformation are promising. By setting up a culture transition team, the 44th President of the United-States highlighted that he is serious about art as a matter of policy. In his manifesto, Obama also strongly recognises the role and value of creative expression in society and puts forward the need to invest in art education.[377]

The overall aim of our proposals is to create a Europe that stimulates and encourages creativity and provides individuals, society, public institutions and enterprises with incentives to use culture as a tool for social and economic development.
The specific objectives are to:

- Encourage imagination and talents at school, in life, in enterprises and public institutions;
- Stimulate transversality and cross-fertilisation between learning disciplines;
- Support the development of a creative economy by integrating culture-based creativity in innovation policy;
- Promote social innovation through culture;

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[374] Singularity: (1) the quality or condition of being singular, (2) a trait making one distinct from others; a peculiarity, (3) something uncommon or unusual. Source: answers.com.

[375] Kimmelman, M., *The Accidental Masterpiece On the art of life and vice versa,* Penguin Books, p.6, 2005.

[376] Morin, E., *Pour une politique de civilisation*, Arléa, 2002.

[377] Lebrecht, N., *Barack Obama: Man with a culture plan* in http://www.thisislondon.co.uk/standard/

- Encourage cross-fertilisation between regional identities and cultures by clustering talents at European level to foster local development as well as multilingualism;
- Move from cultural competition amongst Member States to cultural collaboration to make Europe's creativity audible internationally and brand Europe as a creative place;
- Balance a policy vision subject to economic ends.

We put forward five lines of action:

1. Raise awareness about culture as an important resource of creativity;
2. Mainstream culture-based creativity in policies to foster innovation;
3. Re-direct existing financial resources or create new programmes to stimulate creativity;
4. Brand Europe as the place to create;
5. Question and tailor regulatory and institutional frameworks to support creative and cultural collaboration.

6.1 Raise awareness about culture as a resource for creativity and innovation

The recognition of culture as a resource for creativity should take place at:

- Statistical level, with a view to better grasp the socio-economic importance of arts and the creative sector as well as give more value to intangible assets;
- Learning level, by valuing imagination and creative thoughts as well as cross-fertilisation amongst learning disciplines.

6.1.1 Value the importance of creativity and intangible assets in statistics and scoreboards

Il faut apprendre à juger une société à ses bruits, à son art et à ses fêtes plus qu'à ses statistiques

Jacques Attali[378] .

Jacques Attali's words find resonance at a time when statistic projections and corporate management systems seem to have failed public trust at large. Yet, measuring the creative potentials of Europe should be understood as an exercise that ultimately helps to illustrate the importance of culture and creativity to stakeholders outside the cultural realm. Moreover, calls for increased evidence-based policy making throughout Europe are most likely here to stay. They have so far resulted in the development of a number of statistic indicator schemes which by large do not take creative or cultural factors into account and thus fall short of painting a comprehensive picture

[378] In Jacques Attali, *Bruits*, Fayard, 1977.

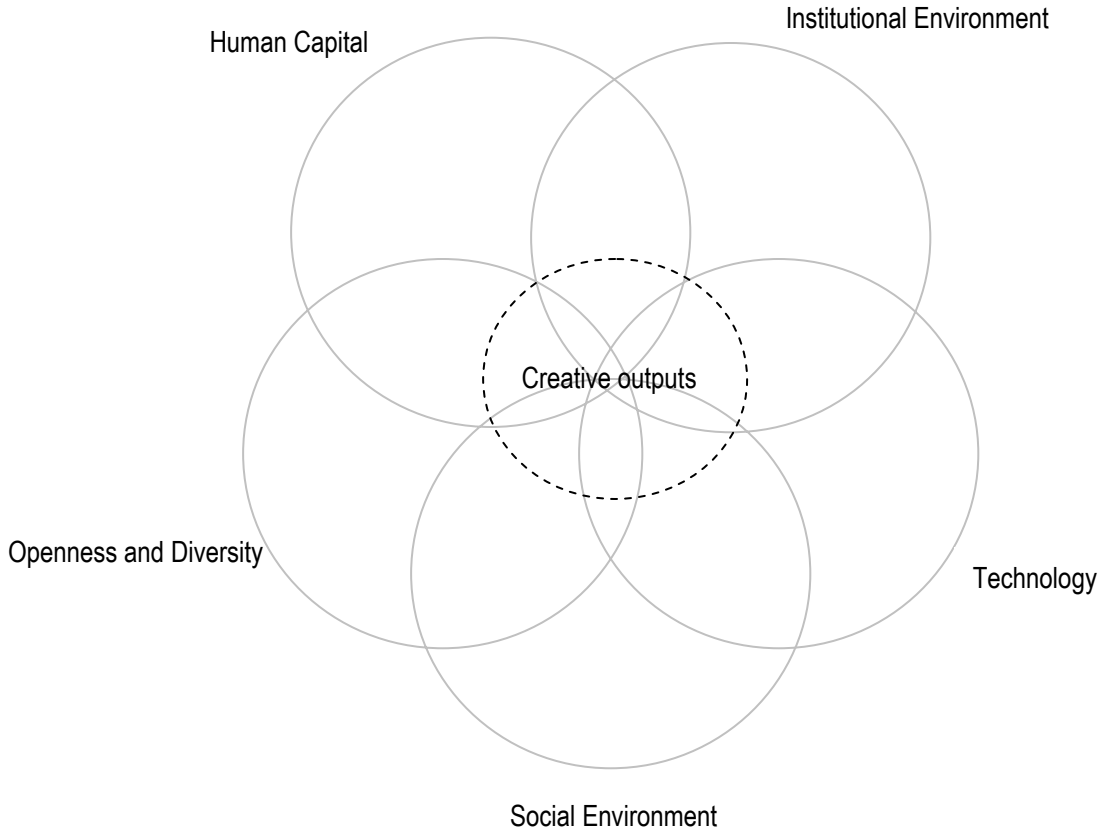
of the state of Creative Europe. 1ppendix 3 examines the possibility of establishing such indicator framework with a view to set up a European Culture-based creativity Index (ECI). A key goal of such Index would be to highlight the potential of including culture-based indicators in existing frameworks related to creativity, innovation and socio-economic development.

The proposed European Culture-based creativity Index (ECI) is a new statistical framework for illustrating and measuring the interplay of various factors that contribute to the growth of creativity in the European Union. As other indicators it measures the performance of a phenomenon using a set of indicators which highlight some of the key features of that phenomenon. It is inspired by existing indexes concerning creativity, innovation and economic performance but introduces elements that are more specifically related to art and culture in order to ensure that a cultural dimension is taken into account when measuring the creative and innovative potential of Europe. Due to the nature of the assignment the proposed creativity index is by definition primarily assessing environmental factors rather than individual creative capacities.

A focus on the cultural dimension of creativity implies taking into consideration a number of factors, many of which are usually not included in other indexes. These include, but are not limited to:

- education in art schools,
- cultural employment,
- cultural offering,
- cultural participation,
- Technology penetration,
- Regulatory and financial support to creation,
- Economic contribution of cultural industries.

We group these indicators into 6 pillars of creativity, illustrated in the graph below:



The 6 pillars of culture-based creativity are described in appendix 3 which also includes the index.

With a view to better capture the economic and social importance of culture-based creativity it is recommended to:

- Review statistical information to better capture the intangible and non-technology innovation;
- Incorporate cultural indicators in innovation scoreboards;
- Establish an index to measure the environment promoting culture-based creativity (the index is described in appendix 3).

6.1.2 Value imagination and disruptive creative thoughts

- Promote art and culture in life long learning (including formal education);
- Recognise the value of alternative education methods whose focus is on the development of individual creativity (Reggio Emilia, Waldorf, Montessori, Decroly, Steiner etc);
- Encourage the mix of competences and interdisciplinary activities (business, engineering, sciences (including social sciences) and art and design) at university level;
- Encourage creative partnerships and cross-fertilisation between the education, the cultural and entrepreneurial activities.

6.2 Mainstream culture-based creativity within policies

In spite of its potential to contribute to Europe's innovation goals and the development of a new economic and social paradigm, culture remains at the fringe of the European, national and regional projects and is not given the attention it deserves whether in the institutional set-ups or in policy priority.[379]

At EU level, the danger is also to consider Europe's cultural multi-polarity an obstacle whilst it is an incredible resource to foster creativity and innovation. As a priority the European institutions should ensure that the different EU policies aimed at stimulating innovation in the framework of the Lisbon strategy can be effectively used to stimulate culture-based creativity and engage the creative and cultural sectors. An independent study could be commissioned in this respect.

[379] History provides some explanations on the place given to culture, in contrast to science, as a capacity for innovation. The school system in Europe for instance still illustrates the importance given to mathematical reasoning over other sciences as a tool to measure intelligence and to determine social success. The place given to art and artistic expression in the curriculum reflects on the one hand the little importance granted to the stimulation of creativity through art and culture and on the other hand the belief that often confines creativity to the ability of mastering mathematical intelligence. Undoubtedly, progress requires a strong economy notably to finance scientific investigation and education), a stable political environment as well as a social consensus. Nevertheless the influence of art and human sciences as enabler of social, economic and political transformation is under-estimated. Creation leading to economic and social innovation is as much a function of artistic skills as it is of engineers or scientists. However the role played by Europe's culture in the development of the industrial and scientific revolution in Europe remains unexplored. The history of culture is told as a succession of important events or lives of great artists. It rarely examines the relationship between artistic expression, cultural diversity and economic development. Culture is also rather conceived as history (or heritage) than prophecy. In "Bruits" Jacques Attali takes the view that the ordered music of the 18th Century in Europe prefigured the industrial economies of the 19th Century. Likewise is not file sharing of music on broadband networks a premise of a new economy emphasising sharing and social networking as a value?

Fostering culture-based creativity is required in Europe:

a. Innovation, research and enterprise

There is too strong a bias towards R&D, technology and science driven innovation. The R&D focused policy should embrace creativity and contribute to foster multi-disciplinarity and interactions between art, sciences and businesses. Policy should foster:

- Integration of design thinking in businesses;
- Association of creative SMEs to research programmes on networked media;
- Promotion of multilingualism applications through creative media (dubbing, subtitling, translation);
- Clustering of research centres with art and design schools;
- Communication on sciences and research to the general public through art;
- Valuing intellectual property (copyright or "droit d'auteur") as much as industrial property (patent, trademarks) in innovation policies;
- SME policy (in the field of enterprise and information society) which engages more with SMEs in creative and cultural industries. At EU level, it could be done by helping them to participate into consultative platforms used by the EC to set its funding priorities (Cultural and creative businesses are essentially confined to programmes focused on cultural exchanges rather than on industrial policy actions).

b. Cultural, audiovisual and multilingualism

On top of its cultural exchange policy, Europe should have a cultural policy sustaining creativity. The policy should foster collaboration across countries that have a long lasting structural impact on the circulation of local cultural expressions, including languages. Digital technology offers some perspective to widen the international distribution of local language productions provided such opportunity is being used by local players ready to combine their resources and create distribution scale (The Long Tail).[380] Unless Europe makes the best of its diversity, collaborating across national and/or linguistic markets, most of its creative industries will not achieve the scale and robustness required to compete in the global market place. In the absence of infrastructure and resources, the best talents aspiring to global recognition will migrate to other continents. This would result in the marginalisation of local cultures. It would also impede the social and cultural interactions that are so important to the economic, social and cultural success of Europe.

[380] The expression ***The Long Tail*** coined by *Chris Anderson* in an October 2004 Wired magazine article[1] to describe the niche strategy of businesses, such as *Amazon.com* or *Netflix*, that sell a large number of unique items, each in relatively small quantities. (source: Wikipedia). See also KEA Newsletter, *Make VOD an Opportunity for European Film Companies*, 2007 – *www.keanet.eu*

A cultural policy should ensure that European creativity circulates within Europe and cross- fertilises innovation processes. It should promote:

- Collaboration across the numerous national or regional cultural institutions to give a European dimension to their cultural activities. Member States should move from cultural competition to cultural collaboration to make European cultures internationally audible;
- Contemporary creation as much as heritage preservation;
- Artists' mobility;
- Artistic and business projects with international scale that celebrate the common heritage of European cultures and which associate the public at large;
- Distribution of contemporary creation in literature and cinema through dubbing, sub-titling or translation;
- A vision of culture that is not subsumed to economic imperatives and ends.

c. Regional development

The EU's regional policy framework (and resulting funding allocation) currently views innovation largely in terms of science and technology. In addition the notion of "culture" used in the context of the Cohesion Policy relates essentially to the "protection and preservation of cultural heritage", or to the "development of cultural infrastructure in support of socio-economic development". The potential of culture as a resource for creativity deserves more consideration. Policy actions in Europe should include:

- Sharing of best practices in managing cultural investment for economic and social gains;
- Funding regional culture-based creativity strategies;
- Promoting cross regional partnerships to improve market access of local culture-based creativities;
- Make investment in culture a priority in regional policy instruments as part of the innovation strategy;
- Researching links between culture and regional economic and social development.
- Develop specific venture capital or investment funds in the regions to support creative industries.

d. Social policy

For culture to play its role in social policy measures should:

- Encourage local, regional and national agencies to recognise and deploy cultural resources in social and public services;

- In line with its commitment to promote and support social innovation through its programmes, the EU should encourage the use of culture as a resource for social innovation. It should highlight best practices of projects that are already supported in the pursuit of social objectives – through both cultural funds and through structural funds;
- Establish a pilot scheme to develop a creative social entrepreneur mentoring scheme for young entrepreneurs;
- Commission a series of longitudinal studies (possibly linked to EU funded projects), examining the impact of cultural activity in key social areas such as social cohesion and civic renewal;

e. Education policy

Education plays a key role in fostering creativity and art and culture contribute to such stimulation. We propose the following measures to foster creativity in Europe through Education.

- Further research the impact of increased exposure to art and culture in learning (as a tool to stimulate creativity) to highlight best practices in Europe;
- Further research the impact of culture on entrepreneurship;
- Encourage the mainstream of arts in the curricula;
- Inform students and teachers about the role and function of art and culture in developing creativity as well as the value of intellectual property;
- Promote mobility between art and design schools amongst students but also teachers. Schools of excellence in art, design, fashion should be encouraged to work together and expand their reach. Encourage multi-disciplinary curricula;
- Promote multilingualism through art and entertainment;
- Develop pilot projects on continuing training for teachers in art;
- Value competence in creative skills, manual as well as intellectual (creativity also requires “savoir faire”).

f. Other EU policy areas

Environmental Policy: mobilise creators (notably artists, architects and designers) but also creative SMEs for the objective of environmental sustainability (through a European award for instance). Research links between “Design Thinking” and ecological issues. Raise awareness on environment through culture.

Internal Market and Competition Policy: integrate cultural diversity as a competitive asset and a policy objective not as a bottleneck. This includes the full Implementation of article 151.4 of the EU Treaty on cultural diversity.

Trade and Cooperation Policy: Promote at international level the principle of cultural diversity by encouraging cultural exchanges with third countries. Use technical assistance programmes with third countries to promote trade in the creative sector and cultural exchanges.

6.3 Re-direct existing financial resources or create new programmes to stimulate creativity

Regional, national as well as EU Funds and programmes should aim at supporting:

- Creative entrepreneurs and enterprises;
- Social innovation through culture;
- Territories using culture as a tool for development;
- Culture cooperation across territories.

6.3.1 Support creative enterprises and entrepreneurs

The support whether at regional, national or EU levels would be aimed at counselling enterprises and providing financial support.

a. Advice

- Develop at EU level a template for resource centres dedicated to creative SMEs or artists/entrepreneurs with less than 20 employees. These centres would help with the administration of the company and promote European collaboration. The centre that could be hosted in existing structures aimed at informing SMEs would have the mission to encourage creators to set up their own company. The definition of "Creative SMEs" should encompass companies that help innovate in communication, branding, marketing, design. The EU could work out the mission of such centres which would then be administered at national level with some EU funding;

- Make available market information on consumer trends and practices throughout Europe to support access to foreign markets and to promote the digital shift. The Internal Market remains to be built in the creative sector which is fragmented along cultural and linguistic lines. Creative industries have a poor understanding and knowledge of consumer markets in Europe in particular in relation to the digital economy;

- Help SMEs in the cultural and creative sectors to identify clustering opportunities in research and technology projects;

- Develop at EU level the concept of creativity transfer through "a creative broker", whose role would be to enable cultural entrepreneurs and artists to reach new markets and non-creative sectors by providing culture-based creativity services.

b. Provide financial support

- Establish innovation vouchers at national level to help SMEs acquire professional skills they cannot afford (in technology, marketing, advertising, design). The idea could be developed at EU level and implemented in Member States expressing interest;
- Design specific support to sustain craftsmanship and "artisanat". Organise or fund European awards of craftsmanship, for instance;
- Support SMEs implementing a design strategy and enterprises that call on design and/or art to develop a competitive edge;
- Mobilise creators and creative SMEs for the objective of environmental sustainability;
- Help the creative sector to build collective representation through trade associations. SMEs are not sufficiently represented in the decision process relevant to innovation policies and programmes;
- Raise awareness regarding the role of public procurement in stimulating creativity.

6.3.2 Support social Innovation through culture-based creativity.

- Disseminate and support best practices in social inclusion, in education that are based on art and culture and which stimulate creativity;
- Encourage and support networks of social innovators, reward links to networks or cultural organisations and practitioners, especially where these are working on the key themes of the social agenda: young people, skills, migration, older people etc;
- A sponsored prize for social creativity, to highlight and promote good practices, could be established: one for projects, one for outstanding individuals;
- Set up a 'creative corps' – a trans-national database of creative workers with the skills and abilities to work in particular areas of social innovation;
- Identify and encourage support for key clusters of culture-based social innovation. Encourage advice, support, mentoring and funding.

6.3.3 Support collaborations and give a European dimension to territorial clustering,

- Promote collaboration through structural funds between cities and regions using culture and creative sectors for local development;
- Encourage through ICT, Research programmes and structural funds networking between creators and creative companies, research centres and technology companies with a focus on research in business models that suit a linguistically and culturally fragmented market;
- Support the networking of companies that enable interactions between art and businesses with a view to exchange best practices.

6.3.4 Support cultural collaboration across territories to promote pan European creativity projects

- Support cultural projects that have a Pan-European reach and which promote in the general public the fabric of "European creativity". The aim of the projects should be to celebrate the common aspects of European culture but also contribute to create social links and solidarity amongst citizens of Europe;
- Support initiatives from national public bodies or cultural institutions which work together on large scale pan European events or projects. (For instance national film institutes could be supported if willing to collaborate to set up a VOD portal on cinema with media literacy objectives[381]);
- Review the priorities of the MEDIA programme to emphasise support for digital distribution. Encourage sub-titling of films on digital distribution platforms to promote multilingualism;
- Mandate EIB to set up a specialist structure devoted to lending to creative industries including SMEs;
- Encourage private investment in the cultural and creative sectors (building bridges with the financial community).

6.4 Brand Europe as the place to create

Partly because of its rich and long history, Europe has an image as an 'old place'. This can sometimes detract from contemporary realities.. Efforts should be made to brand Europe as the place to create, to imagine, to express talent; a place that nurtures and values originality and difference. Some approaches might include:

- Express European values in artistic projects with international dimension (EU sponsored exhibitions). The EU brand should be associated with modernity and the contemporary.[382] This includes support to joint initiatives from museum to develop international exhibitions celebrating European cultures and sciences;

- Support to promote winners of European prizes in literature[383], music[384], cinema[385], design[386], crafts and architecture. Most of these prizes already exist but lack visibility amongst professionals and the European public. Very significant public resources are required for marketing and promotion as establishing such prizes is not a viable commercial proposition in the initial stage.

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[381] KEA report to the European Parliament, Cultural Committee, *Feasibility Study on VOD*, June 2008 (www.europarl.eu).

[382] "Contemporary Art in Europe", imagined by Fabrice Bousteau and Beaux Art Magazine ("Contemporary Art Exhibition to Unite" organised in Reims in 2008)[382].or Comité Colbert " savoir faire awards"[382].

[383] Prix du Livre Européen – www.livre-européen.eu

[384] Border Breakers Awards http://www.european-border-breakers.eu/description.html.

[385] The European Film Awards - http://www.europeanfilmacademy.org/.

[386] European Design Awards- http://www.ed-awards.com/.

The world should know Europe's talents. Works that are rewarded should then be distributed in the different local languages throughout Europe. In the medium term winning a European Prize in the different categories should be the equivalent of winning a Nobel, an Oscar, or a Grammy award for instance;

- Use technical assistance programme with third countries to fund initiatives of B2B matchmaking and market research. Technical Assistance Programme with third countries (notably China, Brazil and India) would promote IPR enforcement through business exchanges and licensing. Promote cultural and creative trade exchanges with SMEs in third countries. Help the establishment of a structured dialogue between European and third countries' creative businesses.

- Promote multilingualism, including minority languages (spoken by approximately 50 million Europeans!) which are sources of differentiation and singularity. Creative industries such as cinema and TV coupled with technology innovation in digital subtitling are best placed to support a multilingualism policy. Winners of major European Prizes in literature and films should access translation fund to support international distribution.

- Review or consider EU investment into major international culture trade fairs based in Europe. In exchange for such investments selected major trade fairs should contribute to the promotion and marketing of European creative projects or European prizes referred to above.

6.5 Question and tailor regulatory and institutional support for culture-based creativity

> *"Human capital is key. The more it is developed, the better we are (…). Much of it comes from people – their ability to innovate, to think anew, to be creative. Such people are broad-minded: they thrive on curiosity about the next idea; they welcome the challenge of an open world. Such breadth of mind is enormously enhanced by interaction with art and culture."*
>
> Tony Blair

- Review accounting standards developed by the International Accounting Standard Board (IASB) and the valuation of immaterial assets in companies' accounts.

- Value intellectual property standards as the best way to stimulate creativity. Provide for adequate enforcement mechanisms.

- Support to rights management initiatives from right holders that ease the copyright licensing process across the EU. Rights licensing should not act as a deterrent to international distribution of European content.

- Audit national and European regulations that make collaboration more difficult at European level or stifle Europe as a place of confluence. For instance:

    - Review co-production treaties to facilitate audiovisual co-productions.

    - Harmonise withholding tax requirements in relation to artistic performances and artists'royalties.

    - Facilitate acquisition of visas for foreign artists.

    - Review taxation to support cultural consumption (VAT).

    - Promote sponsorship and tax credit schemes for art and creative activities by highlighting best practices

- Set up a task force within the European Commission to oversee implementation of the creativity policy, in accordance with article 151.4 of the EU Treaty. Alternatively, create the position of commissioner in charge of devising and implementing a creativity policy. The task force should report to the cultural committee of the European Parliament and to Member States in the framework of the Open Method of Coordination set up to reflect on creative industries.

Epilogue

A culture-based creativity policy is the opportunity to associate the irrational, imagination, poetic, abstraction, spiritual with the "rational", scientific and materialist set up of our societies. It is about inspiring our societies with alternative values and objectives to statistical as well as productive ends and short-term benefits. Art and culture can make a vital contribution to the achievement of objectives that reconcile the creation of wealth with sustainability and harmonious social development. Art and culture can help to transcend purely economic or utilitarian constraints. Creative people can assist in thinking and implementing a different world provided their skills and expertises are duly recognised as catalysts of transformation. We all have a role to play, both as citizens and consumers in drawing on the power of culture and creativity to help deliver new, more sustainable ways of living and working. We have entered a period characterised by enormous economic, social and environmental challenges. The development of a genuinely ambitious policy for creativity associating art and culture should contribute to address many of those challenges. In turn the "culture we create will determine our fate"[387].

It is time to take the creative risk of valuing imagination, the poetic, the symbolic, the aesthetic or the spiritual (features of culture-based creativity) as factors of innovation, social progress and European integration.

[387] Op.Cited. M.Csikszentamihaly (1996).

APPENDICES

APPENDIX 1
THE SCIENTIFIC DEFINITIONS OF CREATIVITY

We will consider the psychological approach then turn to a more socio-cultural vision of creativity.

1. The psychological approach

This approach to the field focuses on the individual and attempts to explain how thoughts, are influenced by biology, intelligence and unconsciousness. Throughout history there have been divergent views on creativity and it is only since the 1950s that psychologists decided to consider the concept. They challenged the belief in the existence of an absolute standard of judgement in defining genius which, at least since the period of Romanticism had been understood by many as akin to a supreme gift bestowed on individuals either by God or by nature.[388] The idea of creativity as a quality "attributed to a superhuman force" or "originating with the gods" no longer has any widespread currency.

1.1. Biology

Biologists have examined specific regions of the human brain without however being able to explain creativity. According to R.K Sawyer[389], decades of study have found no evidence that creativity is localised to any specific brain region. "In fact, all of the evidence suggests that creativity is a whole-brain function, drawing in many diverse areas of the brain in a complex systemic fashion. The hypothesis is that varied stimulation, in nature (visual or audio stimulation, in general multi-sensorial), or in intensity can influence the creative process." As Howard Gardner has observed "You could know every bit of neurocircuity in somebody's head, and you still would not know whether or not that person was creative." [390]

1.2 Personality approach

Personality can be defined as a set of characteristics possessed by a person which will impact on their way of apprehending things, their motivation and their behaviour. Psychologists' interest in creativity in the 1950's focussed on scientific and technological creativity. It was felt that the lack of creativity would mean the risk of abandoning the supremacy to the Soviet Union (arms' race) or Japan (robots). Great efforts were made at the time to develop tests enabling to identify creative individuals.

At the centre of all personality measures stands the intelligence test. Before research into creativity became an autonomous area of study, psychologists had to prove that IQ and creativity were different traits and required different measures. Intelligence was defined as required convergent thinking, proposing a single right answer, while creativity was said to require divergent thinking, the ability to imagine different answers.

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[388] Bryant, William D. A. and Throsby David, Ginsburgh V.A. & Throsby D. *Creativity and the behaviour of artists,. Handbooks of the economics of art and culture,* vol. 1, North-Holland, 2006, p.512

[389] Sawyer R.K, Explaining Creativity, *The science of Human Innovation*, Oxford University Press, 2006.

[390] Gardner, H. *Creators: Multiple Intelligence* in K.H Pfenninger and V&R Shubik, The Origins of Creativity (p117-143), New York: Oxford University Press, 2001.

Prof. J.P. Guilford, one of the most active psychologists on creativity, built up a map of personality containing over 120 traits, where 24 of them were components of "divergent thinking".

The main finding of this approach is that the capacity to think differently, even the ability to reason in metaphors constitutes an element of creative competence. Therefore one can argue that the advancement of art and culture is based on the capacity to foster free-flowing, metaphorical thought within the imagination of individuals.

1.3 The psychoanalysis perspective

The psychoanalytical perspective has long associated creativity with access to unconscious modes of thought, sometimes called primary access thoughts. According to Freud, the creative insight emerges into consciousness from primary process thought. Freud argued that creativity involves the same mental processes as daydreams, fantasies, and neuroses.
Similarly Sternberg and Lubart, highlight internal tensions as source of creativity: "Creativity arises from the tension between conscious reality and unconscious drives."[391] Many traditional views of Freud interpreted him as suggesting that writers and artists produce creative work as a way to express their unconscious wishes in a publicly acceptable fashion. However, this relatively straightforward view of his work has been contested by many modern Freudian analysts, especially those associated with the post-structuralist movement, and they have argued that Freud's ideas about creativity are more complex than this.

1.4 Cognitive psychology

Cognitive psychology is branch of psychology that investigates internal mental processes. This approach seeks to understand the mental representations and processes underlying creative thoughts. Graham Wallas & Richard Smith, in their work *Art of Thought*, published in 1926, presented one of the first models of the creative process.[392]

Psychologists take the view that there is no such thing as a "creativity quotient" (like there is an I.Q.) and that creative people are creative in a specific sphere of activity, a particular domain.[393] An important part of the creative process is familiarity with prior works, and the internalising of the symbols and conventions of the domain. Creativity results when the individual somehow combines theses existing elements (part of his culture) and generates a new combination.

Inspiration will often come from cultural activities such as reading, watching films, visiting exhibitions, listening to music, travelling or strolling in the park. Creativity builds on existing conventions and the ability to interpret them in new ways. It is often diverse cultural influences that will stimulate inspiration. "Culture

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[391] Sternberg, J. and Lubart, Todd I., *The concept of Creativity: Prospects and Paradigms*, Handbook of creativity, Edited by Robert J. Sternberg, 1999, 2007.

[392] Source Wikipedia

[393] Csikszentmihalyi, *Society, culture and Person: A System View of Creativity* in R.J Sternberg, The nature of Creativity, NY Cambridge University Press.

influences are key elements. Culture is a limitless thing. It is all around. You do not have to be Italians to open a pizza joint."[394]

According to the cognitive approach creativity is the result of conscious, deliberate, rational thinking. But reason gets inspired by the unconscious, the irrational, the emotional. Creativity is both the infant of rationalism and irrationalism.

2 The contextualists

The contextualists, relying on the thinking of sociologists and anthropologists, have highlighted the importance of the social environment in which creativity takes place and the judgment of the peer group that « decides» on the creative status.

Contextualists argue that creativity is fed by contacts with other creative communities. This view is prevalent in the field of visual arts or music composition where artists often gather in a cluster, such as they did in Paris, Vienna or Berlin a century ago or New York, San Francisco and Hollywood since the 1950's[395] and live in interacting artistic communities.

Group creativity is a fundamental part of cultural production such as theatre, dance, film, music, just as it is in science or technology research. Most important creative products require a team or an entire company, integrating many specialised workers (a film director, a scriptwriter and a cinematographer on film sets for instance). In effect, creators are mostly part of an orchestra trying to play in tune.

This view also holds that the individual is the product of a culture and of his social environment. "Socioculturalists define creativity as a novel product that attains some level of social recognition. First of all, a creative idea or work must be novel. Yet novelty is not enough, because a novel idea may be ridiculous or nonsensical. In addition to novelty, to be creative an idea must be appropriate, recognized as socially valuable in some way to some community." [396] This perspective has been developed by writers such as Teresa Amabile who proposed a consensual definition of creativity: "a product is creative when experts in the domain agree it is creative, meaning that the appropriateness is defined by social groups, and it's culturally and historically determined." [397]

The artist Marcel Duchamp felt that the viewer was an essential part of the creative process. The artist initiates the creative act, he said, but it is up for the viewer to complete it, by interpreting its meaning and its

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[394] Simon, Paul, Graceland and The Rhythms of the Saints in 1000 Songs to change your life, Time Out Group 2008 (p.54).

[395] Currid, Elizabeth, *The Warhol Economy: how fashion, art and music drive New York City*, Princeton University Press, 2007.

[396] Op.cit, Sawyer, R Keith p 27.

[397] Amabile, T., *Social Psychology of Creativity* NY Spring Verlag, 1983.

place in art history."[398] The public, the audience or "specialist intermediaries" (for instance, critics, for instance) have a say on what is creative.[399]

In the same vein, Csikszentmihalyi, when attempting to define when and how creativity emerges, stresses the following elements: "There is no way to know whether a thought is new except with reference to some standards, and there is no way to tell whether it is valuable until it passes social evaluation. Therefore, creativity does not happen inside people's heads, but in the interaction between a person's thoughts and a socio-cultural context. It is a systemic rather an individual phenomenon." [400]

This approach suggests that creativity originates from a cultural and social environment. Amabile also highlights the importance for society to develop and advance creativity. For her the most creative people are those that are intrinsically motivated and respond to external motivating factors that influence their creativity (family, school, workplace). Creative work is as much a hobby as a professional occupation. She establishes [401] correlations between creativity, environment and emotion which shape our vision of creative capacity.

The notion of creativity is complex. It requires understanding at individual, social and cultural levels. Creativity puts in motion mental and psychic mechanisms which result in something, a discovery, a work of art, a performance. The mechanisms become the expression of the creative power. However it is essential to stress the importance of contexts, place and social conventions.

3 The multi-disciplinary perspectives

This approach is typified by the work of Robert Sternberg and Todd Lubart.[402] They contend that creative performance results from a confluence of six different individual characteristics - intellectual processes, knowledge, intellectual style, personality, motivation and the person's environmental context; investment in improving any of these could improve creativity. The researchers stress the importance of intellectual capacities:

a) the synthetic ability to see problems in new ways and to escape the bounds of conventional thinking;
b) the analytic ability to recognise which of one's ideas are worth pursuing and which are not;
c) the practical-contextual ability to know how to persuade others of the value of one's ideas.

They highlight the capacity to think in a non-linear way.

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[398] Tomkins Calvin, *The Lives of Artists*, Henry Holt publishing (p.212), 2008..

[399] Csikszentmihalyi uses the term "field" to refer to the group of intermediaries and Pierre Bourdieu in *Les Règles de l'Art* analysed the field as a market transaction between producers and consumers.

[400] Csikszentmihaly, Mihaly*, Flow and the psychology of discovery and invention*, Harper Perennial (p.24), 1996.

[401] Hanna, Julia**,** *Getting Down to the Business of Creativity*, May 14, 2008.

[402] Sternberg, R. and Lubart, T., *An Investment Theory of Creativity and its Development*, Human Development 34, 1991.

Creativity involves a combination of cognitive elements that involve the ability to "connect ideas", "to see similarities and differences", be "unorthodox"," be "inquisitive" and "to question societal norms".[403] Many of these personality elements are common to artists and creative people.

4 Conclusion on research findings

Invariably, artists and cultural practitioners – that's to say some of the people who most evidently display creative skills - find creativity difficult to describe. Creativity remains a very complex phenomenon which cannot be reduced to a formula.

We propose the following summary of the different approaches to defining creativity.

Creativity would be:

- a cognitive process which is triggered by motivation and interest in the new and which has no intrinsic link to the ability to score highly in intelligence tests for example
- not genetic
- usually the result of long periods of hard work and the acquisition of knowledge, as spontaneity requires a fertile ground
- is usually related to a specific field of activity
- requires an audience assessment and is subject to cultural constraints (the social process) or subject to industrial constraints (in many of the creative industries).

In his book "Outliers" Malcolm Gladwell[404] offers an account on the importance of context and environment which set the opportunities for the expression of talents. He shows why some people achieve more than others and "the secret of their success." Talent is as much as consequence of the date of birth, hard work, emotional intelligence, historical circumstances, demographics or social contexts as analytical intelligence.

For Gladwell the response to the question "where are these persons from?" will provide more answers on the creativity capacity of a person than the response to the question "what is this person like?" Creative people are more the result of the world in which they grew up, the circumstances which provide the opportunity to shine (for instance, the ability to succeed also depends on how old you are when transformation in society happens).[405] Furthermore, imagination would be a better yardstick than intelligence to assess creativity.[406]
The different perspectives highlight that creativity comes from different combinations of ability and personal environment in other words individual pre-disposition and a social context.

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[403] Sternberg, Robert J. and Lubart, Todd I *The concept of Creativity: Prospects and Paradigms; Handbook of creativity*, Edited by Robert J. Stenberg, 1999, 2007.

[404] Gladwell, Malcolm*, Outliers – The Story of Success*, Allen Lane/Penguin Group 2008. He shows for instance that a Nobel Prize winner can come from any school and the best high school students do not perform better p.81.

[405] ibid p.62 and 65. Bill Gates, Paul Allen, Steve Ballmer, Steve Jobs, Eric Schmidt were all born between 1953 and 1956; the perfect age to be part of the digital revolution which started in 1975.

[406] Ibid p.86-90 on divergence and convergence testing that creativity and intelligence alone are not correlated.

APPENDIX 2
REVIEW OF A SELECTION OF NATIONAL STRATEGIES AND INITIATIVES TO STIMULATE CREATIVITY ACROSS THE EU

Member States reflecting on cultural / creative industries

The economic contribution made by creative industries has been measured in a large number of Member States (Bulgaria, Denmark, Estonia, Finland, Germany, Italy, Latvia, Lithuania, the Netherlands, Spain, Sweden and UK). The state of reflection on policies varies from one country to another: Some Member States are still at a mapping stage. Others are working on developing policies in significant ways.

Bulgaria – In 2007 the Bulgarian Ministry of Culture carried out, with the assistance of the World Intellectual Property Organisation, the first comprehensive mapping of copyright-based industries in the country. This first survey was undertaken as a manifestation of the "*adherence of the Bulgarian government to the principle that IP protected knowledge is of key importance for the wealth of the nations*."[407] The Bulgarian government is currently preparing a more detailed mapping of its creative industries.

Czech Republic – There is no separate strategy for creative industries. But the "*National Cultural Policy from 2009 – 2014*" includes creativity and creative industries in its objectives to increase competitiveness in other sectors as well as to foster professional and personal development of citizens.[408]

Germany – The German federal government is developing a national creative industries strategy.[409] In a strategy paper issued in October 2007 by the Department for Economic Affairs and Technology, the government acknowledges the need to consider the economic as well as the cultural role of the sector and to examine and optimise all policy issues that relate to its future development.[410] In this context, the government has commissioned an independent study which is currently being carried out. The study examines the structural challenges and the economic potential of Germany's cultural and creative industries.

Greece – The Eommex, the Hellenic Organisation of Small-Medium Sized Enterprises & Handicraft, carried out a mapping of creative industries in January 2009 ("*The Economy of Culture – Cultural and Creative*

[407] *2007 WIPO Study of the copyright-based industries in Bulgaria*, Bulgarian Ministry of Culture, 2007, p.3.

[408] *National Cultural Policy from 2009-2014*, Czech Ministry of Culture, p. 4.

[409] See Website of the federal government: http://www.bmwi.de/BMWi/Navigation/Wirtschaft/Branchenfokus/kultur-kreativwirtschaft,did=246488.html?view=renderPrint&page=3 (accessed August 2008).

[410] BMWI (2007), Initiative Kultur- und Kreativwirtschaft, http://www.bmwi.de/BMWi/Redaktion/PDF/J-L/konzept-kulturwirtschaft,property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf (accessed August 2008).

Enterprises in Greece"). Greece has included in its mapping of creative industries those firms which produce handicraft and artistic products.[411]

Hungary – A first document stressing the importance of culture and creative industries in social development and in shaping national identity and tourism was released in December 2006 ("*Guidelines for Cultural Modernisation*"). The document set the following priorities: to contribute to rural development with national cultural development programmes; to strengthen the partnership between culture and education; to reinforce Hungary's cultural identity and to promote cultural tourism.

Latvia – The first mapping of creative industries in Latvia was carried out in 2007. The document was designed at improving the understanding of creative industries in Latvia. The Ministry of Culture prepared in the summer of 2008 the "*Informal Report on Creative Industries' Aspects*" for the Cabinet of Ministers. After this informal report, the Latvian government has started reflecting on measures to foster creative industries.

Slovenia – The examination of creativity heads has two dimensions: on the one hand, creativity is promoted in connection with the attitude of entrepreneurs, employees and youth, and on the other hand, is seen in connection with innovation, especially design.[412]

Sweden – In its 2007-2013 plan of regional policy the Swedish Government referred to culture and heritage as important elements to regions' innovative development and competitiveness.[413] In 2008 the Ministry of Culture and the Ministry of Enterprise and Energy decided to co-operate in order to advance economic potential within the cultural sphere and to consider the importance of culture in creating an innovative business climate. In September 2008 the Government decided upon an action plan to be elaborated for the promotion of creative industries. This action plan follows the recommendations drawn up in 2008 by the ITPS, the Swedish Institute for Growth policy Studies, which suggested to the government the elaboration of a common broad policy in order to develop strategic measures for the creative industries.

Finally we would like to highlight a regional initiative from the Nordic region (Denmark, Finland, Iceland, Norway and Sweden) which is developing a joint approach to the creative industries in order to gather data on the sector's performance and develop policies benefiting creative industries. In the Green Paper "*A Creative Economy Green Paper for the Nordic Region*" released in 2007, the Nordic region is conceived as representing a means of connecting all aspects of the creative industries and the wider economy.[414] KreaNord, the working group set up to make recommendations for a Nordic strategy addressed to creative industries should finish its work by 2010.

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[411] *The Economy of Culture – Cultural and Creative Enterprises in Greece*, Eommex, 2009, p. 4.

[412] *National and regional policies for design, creativity and user-driven innovation: Thematic Report- Executive Summary*, Pro Inno Europe, Inno Policy Trendchart, p.19.

[413] *A National Strategy for Regional Competitiveness, Entrepreneurship and Employment 2007-2013*, Swedish Ministry of Enterprise, Energy and Communications, 2007, p.15.

[414] *A Creative Economy Green Paper for the Nordic Region*, Nordic Innovation Centre, 2007, p.13-14.

National initiatives supporting creative / cultural industries

Over the last five years a large number of Member States have adopted strategies to promote the growth of creative industries. The latter are perceived as a very important engine of economic development.

Denmark – The strategy "*Denmark in the Culture and Experience Economy - 5 new steps – the Danish Growth Strategy*" issued in 2003 aims at better exploiting the synergy between the cultural and corporate sectors and aims to promote the potential for growth in the culture and experience economy through the strengthening of conditions pertinent to innovation, allowing improved access to knowledge, fostering competence and strengthening incentives available to the culture and experience economy for commercial production.[415]

Estonia – In Estonia there is no single national strategy to promote creative industries but rather a number of different initiatives. These initiatives are all based on the 2007 Operational Programme on Entrepreneurship and Economic Environment. The Ministry of Culture is developing different sub-sector strategies (e.g. design, museums, libraries, cultural heritage, handicraft, and architecture).

Finland – Finland has stressed the necessity to create a favourable operating environment to enhance creative industries at regional and national levels as well as to develop high-quality products which are internationally competitive.[416] The Ministry of Employment and Economy is preparing a specific Creative Industries Development Project.

Italy – The "*White Book on Creativity*"[417] aims at developing an Italian model to foster creative industries in the country. Italian creativity is reflected in a model which prioritises quality of life and community wellbeing. Italy has included "the industry of taste" (*industria del gusto*) which is primarily based on individual aesthetic preferences in relation to areas such as fashion, gastronomy and the agro-food industry.[418]

Lithuania – The 2007 "*National Strategy for the Development of Creative Industries*" is designed to gather, analyse and disseminate information about the development of the creative industries in Lithuania. It also proposes policies to professionalize the sector and develop a favourable environment.

Netherlands – The interaction between creativity and prosperity has been highlighted by the Dutch strategy "*Our Creative Potential – Paper on Culture and Economy*" issued in 2005. The strategy seeks to boost the economic use of culture and creativity in the Netherlands. To fulfil this objective, the Dutch government has launched the Programme for the Creative Industries aiming at improving the interaction between creative

[415] *Denmark in the Culture and Experience Economy - 5 new steps – the Danish Growth Strategy*, Danish Ministry of Culture, 2003, p.14.

[416] *Development Strategy for Entrepreneurship in the Creative Industries Sector for 2015*, Finnish Ministry of Trade and Industry (since 1 January 2008 Ministry of Employment and Economy), 2007, p.4.

[417] *Libro Bianco sulla Creativitá*, Commissione sulla Creativitá et Produzione di Cultura in Italia, Italian Ministry of Culture, 2007

[418] Ibid., p. 251.

businesses and other industries or education, improving financial support, reviewing the intellectual property regime, intensifying internationalisation as well as the professionalization of the sector.[419]

Poland – The "*National Strategy for the Development of Culture 2004-2013*" is focused on balancing the development of culture in regions. The effectiveness in cultural management, the increase of participation regarding accessibility of artistic education and cultural goods and services and the development of cultural infrastructure have also been set as objectives of the strategy.[420]

Spain – The "*Plan to Promote Creative Industries*" was published in 2008. It seeks to implement new financial mechanisms to support creative industries, in particular focusing on small and medium-sized enterprises (SMEs).[421]

UK – In its "*Creative Britain: New Talents for the New Economy*" published in 2008, the British government proposed detailed measures to establish a Creative Britain. It is the most far reaching programme in Europe as it examines all aspects of policy ranging from education, to research and innovation aspects including strategies on IPR or the promotion of the UK as the world's creative hub.[422] In October 2008, the UK Government commissioned Lord Carter to undertake a review of Digital Britain and this will also have an impact on policies designed to stimulate creativity and innovation.

Member States with sector specific strategies (essentially in relation to design and architecture)

Some Member States have adopted specific strategies essentially in the field of design which is identified as a key sector for economic competitiveness. In general policy documents recommend the setting up of dedicated design centres, the promotion of design in enterprises, notably SMEs, through financial support, the provision of business training to designers and support for international marketing. Policies on architecture emphasise the importance of the preservation of the cultural heritage and the value of architecture as a mean to promote sustainable economic development as well as social cohesion.

Austria – In 2005, the Austrian National Parliament passed resolution no. 91/E (XXII GP) aimed at defining the architectural policies of the country. The legal document states that "Architecture creates, defines and informs human spheres of living and human relationships. Hence is it a determinant factor of our quality of life as well as an important cultural factor. In addition, architecture as part of the creative economy also provides important impulses for a number of industries."[423] Among the various objectives of this architectural policy are the preservation of the cultural heritage and an increase in public awareness of the importance of contemporary architecture and building culture.

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[419] *Our Creative Potential – Paper on Culture and Economy*, Dutch Ministries of Economic Affairs and of Education, Culture and Science, 2005, p. 4.

[420] *Résumé of the National Strategy for the Development of Culture in 2004-2013*, Polish Ministry of Culture, p. 12.

[421] *Plan de Fomento de las Industrias Culturales*, Spanish Ministry Of. Culture, 2008, p. 2.

[422] *Creative Britain: New Talents for the New Economy*, Department for Culture, Media and Sport, UK, 2008, p. 6.

[423] Available at: http://www.baukulturreport.at/index.php?idcatside=129&sid=acd1a42a61b4638e9e32cb2a537e54b0

Denmark – With its 2007 strategy "*DesignDenmark*", the Danish government aims to promote the use of design in the economy. To fulfil these objectives, the strategy sets the following priorities: to raise awareness of the potential of design for the corporate sector[424] and to enhance collaboration between design and other corporate sectors[425]; to strengthen the internationalisation of Danish design[426] and to enforce IPR protection.[427]
The same year, the Danish government adopted a policy on architecture ("*A Nation for Architecture Denmark – Settings for Life and Growth*"). Its aim is to stimulate architectural quality in a broad sense – from single-family detached houses to national planning, from education to global marketing.[428]

Estonia – The Estonian government adopted in 2003 its policy document "*Establishing the basis for the Estonian design policy measures*". The SPINNO Programme of Enterprise Estonia has been supporting design and innovation since 2004.[429]

The Programme for Implementing the Architectural Policy for the period 2004-2008 was ratified by the Estonian Parliament on 17 June 2004. The programme has three objectives: to increase the architectural administrative effectiveness of national and local government under the guidance of experts, to support the architectural education and research, and to foster international contacts for Estonian architecture.[430]

Finland – "*Design 2005*" is the Finnish Programme for Industrial Design Technology. The Programme is designed to strengthen the competitiveness of Finnish production. It gave priority to increasing expertise in design through education and research.[431] Other priorities were to develop the utilisation of design in product development and business strategies and to develop the competence of design firms and strengthen their service operations.[432]

Ireland – For the period 2002-2005 the Irish government pursed an "*Action on Architecture*", a policy on architecture. Among its objectives was the promotion of innovation in architecture notably through the fostering of young designers and architectural projects.[433]

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[424] *DesignDenmark*, Danish Government, 2007, p.12.

[425] Ibid., p.14.

[426] Ibid., p.19.

[427] Ibid., p.30.

[428] *A Nation of Architecture – Denmark Settings for Life and Growth*, Danish Government, 2007, p 4.

[429] *National and regional policies for design, creativity and user-driven innovation: Thematic Report- Executive Summary*, Pro Inno Europe, Inno Policy Trendchart, p 8.

[430] The Programme for Implementing the Architectural Policy for the period 2004-2008 available at: http://www.arhliit.ee/uploads/files/the_prog._implementing_the_architectural_policy_20042008.pdf

[431] *Design 2005 – The Industrial Design Technology Programme*, Finnish Funding Agency for Technology and Innovation, p.2.

[432] Ibid., p.4.

[433] "Action on Architecture 2002-2005" available at :
http://www.efap-fepa.eu/dbfiles/document_0052_en_AOAwithcover.pdf

Latvia – The Programme for Promotion of Business Competitiveness and Innovation for 2007-2013 highlights the role of design to boost the competitiveness of companies. The programme enhances the utilisation of professional design in industrial businesses, promotes design audits in companies and the provision of design consulting services to increase the added value of products.[434]
The Latvian Ministry of Culture is currently planning an architectural policy. The latter is defined in the draft "*Guidelines for Architectural Policy*" for the period from 2008 to 2015. Its aim is to promote and support "*the creation and sustainability of high quality living space through high value architecture*".[435]

Netherlands – The "*Designworld- Premsela Policy Plan 2009−2012*" lays down policy proposals for design.[436] It has a strong social and cultural element. The plan recommends making professionals, young people and society more aware of the value of Holland's design heritage and its importance for cultural identity; enhancing exchange of best practice and reinforcing networks between designers; placing design and fashion in an ethical perspective; promoting the participation of society in design; organising conferences and debates on design, and developing a design methodology in order to tackle social issues.

The Netherlands has pursued an architecture policy since the beginning of the 1990s with the aim of promoting spatial quality. The third policy document, "*Shaping the Netherlands*", defined the architectural policy of the country for the period from 2001 and 2004. Under this policy, the government launched several activities to foster increased architectonic and spatial quality at every level and to highlight and increase the input of design disciplines in architectural projects. For the period 2005-2008, the Netherlands set up an "*Action Plan on Spatial Planning and Culture*" that combined both architectural policy and the Belvedere policy (aimed at promoting the influence of cultural history in spatial planning).[437]

Poland – Polish industrial design is being fostered through the Operational Programme Innovative Economy 2007-2013 in the framework of the EU Structural Fund. The programme is designed to help prepare a manual on the design of new products; raise awareness through the promotion of good practices; design e-learning activities, and organise seminars addressed to both entrepreneurs and designers.[438]

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[434] *Programme for Promotion of Business Competitiveness and Innovation for 2007-2013*, Latvian Ministry of Economics, 2007, p.44.

[435] Guidelines for Architectural Policy 2008-2015, Latvian Ministry of Culture, p.12.

[436] *Designworld – Premsela Policy Plan 2009-2012*, Premsela Foundation, 2008, p.6-7.

[437] The Dutch Ministry of Education, Culture and Science, of Housing, Spatial Planning and the Environment, of Agriculture, Nature and Food Quality, of Transport, Public Works and Water Management, of Economic Affairs, of Defence and of Foreign Affairs, *Action Programme on Spatial Planning and Culture – Architecture and Belvedere Policy – 2005-2008,* September 2005, available at:
http://www.efap-fepa.eu/dbfiles/document_0053_en_spatialplanning.pdf

[438] *National and regional policies for design, creativity and user-driven innovation: Thematic Report- Executive Summary*, Pro Inno Europe, Inno Policy Trendchart, p.18.

Spain – The "*Programme for Design Support*" for the period 2007-2013 seeks to improve the competitiveness of small enterprises. It has been developed by the Ministry of Industry, Tourism and Commerce.[439]

UK – "*The Good Design Plan*" adopted in 2008 aims at building the UK's capacity to support the effective use of design in business and the public sector. The policy recommendations are focussed on; the development of a design-innovation programme to support public service innovation; the launching of a platform for community-led innovation and public engagement to improve people's life and create sustainable communities; the interaction between design and education under a national Design Skills Alliance.[440]

Member States which have integrated creative industries' support in their innovation policy

Some Member States have specifically integrated creativity in their innovation policies.

Austria – The "*Third Austrian Report on Creative Economy*" of 2008, based on the study "The Contribution of Creative Industries to the Innovation System in Austria" of 2008, provides an exhaustive overall analysis of the innovation potential of activities within the creative industries. It examines product-and process innovation, education and the skills of employees, the use of new technologies as well as the need for innovation from other parts of industry to show that creative industries innovate in their own sector but are also fostering innovation in other parts of the economy.

Finland – The Innovation Strategy of 2008 underlines that the development of innovation depends on the fostering of creativity.[441] It also stresses the connection between innovativeness and individuals' creativity and skills.

Germany – Industrial design activities are designated as R&D activities and public funding is made available through various R&D and innovation programmes.[442]

Greece – In its Strategic Plan for the Development of research, technology and Innovation 2007-2013, the Greek government identified cultural heritage as one of its thematic areas. The objectives pursued are to develop scientific knowledge in the field and preserve and use this knowledge to ensure the integrity and authenticity of cultural heritage, and to develop innovative tools, products and services with cultural content in order to link heritage to tourism and the leisure economy.[443]

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[439] Ibid p.20.

[440] *The Good Design Plan – National Design Strategy and Design Council Delivery Plan 2008-2011*, UK Design Council, 2008, p.19, 22, 26.

[441] *Proposal for Finland's National Innovation Strategy*, Ministry of Employment and the Economy, Finland, 2008, p.4.

[442] *National and regional policies for design, creativity and user-driven innovation: Thematic Report- Executive Summary*, Pro Inno Europe, Inno Policy Trendchart, p.11.

[443] *Strategic Plan for the Development of research, technology and Innovation 2007-2013*, Ministry of Development, Hellenic Republic, 2007, p.74-75.

Malta – In its National Strategic Plan for Research and Innovation 2007-2010, Malta has highlighted energy-environment as one of the key areas for public funding. In 2008, the government introduced incentives and training in relation to energy saving buildings through notably innovative design. Moreover, the Malta Enterprise Act of 2007 has as one of its key objectives the promotion of design.[444]

Netherlands – The promotion of creativity is also the aim of the 2008 Strategic Research Agenda of the ICT Innovation Platform for Creative Industry. The platform is proposing to make available to the creative industries a number of financial support vouchers: for the production of creative ideas, or the coaching of creative entrepreneurs.[445]

Spain – The programme InnoEmpresa (2007-2013) aims at fostering innovation in SMEs with design as a focus area.[446]

[444] Ibid p.15.

[445] Ibid, p.16.

[446] Ibid, p.20.

APPENDIX 3
TOWARDS A CREATIVITY INDEX: MEASURING EUROPE'S CREATIVE POTENTIAL

A number of indicators have been established by international organisations and government bodies such as the OECD or the European Union to measure social and economic developments in different countries. PISA is the OECD's Programme for International Student Assessment and ranks countries according to their student's abilities for full participation in society.[447] The World Values Survey assesses the state of social, cultural and political values of different countries around the world. Its results feature in several international comparator exercises.[448] In the economic domain, the World Economic Forum has been assessing the competitiveness of nations for nearly three decades.[449] Its global competitiveness report examines the factors enabling national economies to achieve sustained economic growth and long-term prosperity. The Index identifies 12 pillars of competitiveness, including innovation, technology, human capital ("to nurture a well educated workforce") and institutions (including intellectual property). As is the case with many indicators, it does not recognise the role of creativity in fostering innovation.

As part of its Lisbon Strategy the European Commission in 2000 developed a European Innovation Scoreboard to provide a comparative assessment of the innovation performance of EU Member States. This scoreboard has developed into an important tool of pan-European policy learning and succeeded in putting innovation high on the agenda of policy makers in European Member States and Regions. It is based on a wide range of indicators covering structural conditions, knowledge creation, and innovation but has for long underestimated the role that creativity plays in the innovation process. As will be shown in this section, this may be subject to change in the near future.

Measuring creativity is most certainly as challenging as measuring innovation. Innovation can rely on data that is already captured by Eurostat, the European statistical body: this includes number of science and engineering graduates, R&D expenditure, venture capital expenditure in ICT, patent application, etc. However, European and national statistical agencies collect far less detailed data concerning the role of creativity, such as number of art students, expenditure in film, games development or A&R.[450]

Despite this lack of data, the following examines different strategies for measuring creativity at the individual as well as environmental level. On the basis of this assessment we concluded that it is preferable to build a creativity index that focuses on the social and economic factors that influence creativity. In order to identify indicators that could be included in an ECI we reviewed national and international indexes linked to innovation, creativity and cultural consumption.

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[447] See PISA Online, http://www.pisa.oecd.org/ (accessed January 2009).

[448] See data sets at the project website: http://www.worldvaluessurvey.com/ (accessed January 2009).

[449] The Global Competitiveness Report 2007-2008 Palgrave Mc Millan, 2007.

[450] Artist & Repertoire – money invested by record companies to sign and develop new artists.

1.1 Measuring individual creativity: a challenging task

Traditional notions that considered creativity as a divine ingenuity have not passed the test of time and belong to the past. At the individual level, creativity is nowadays often considered as an individual capacity to make unusual associations and to develop unexpected solutions. Yet, research long stayed clear of any attempts to measure this creative capacity by means of standardised tests, as it was believed that standard evaluations could not capture the full nature of a person's creative abilities.[451]

In this context, several psychological experts have attempted to define and measure creativity in the past 50 years. For example, Guilford[452] made the distinction between two kinds of thinking. While convergent thinking aims at providing the "single best, correct answer", divergent thinking seeks to "generate new and unexpected answer". The latter characterises our western understanding of creativity. In terms of measuring creativity three aspects of thinking are generally evaluated: *fluency* (quality of answer), *flexibility* (variability of idea categories in the answers) and *originality* (uncommonness of answers). *Elaboration* (complexity and completeness of answers) or *effectiveness* (link to the constraints of the real world) may also be included in some tests.

The most widely used test concerning individual creativity is the Torrance Test of Creative Thinking (TTCT), developed for the first time in 1966. It includes two sections: a verbal section ("thinking creatively with words") and a non-verbal one ("thinking creatively with pictures). The first section provides data on *fluency, flexibility and originality.* The second one attempts to measure *fluency, flexibility*, *elaboration, abstractness of titles* and *resistance to premature closure.*

However, as previously illustrated creativity is also context-dependent. It can be assessed by analysing psychological properties ("personality attributes"). The two main methods to measure such the non-cognitive aspects are biographical inventories and personality tests. The first seeks to collect data on people's life history such as experience, family background, hobbies, education or life achievement. One of the first biographical inventories was developed in 1968 by Schaefer and Anastasi.[453] As for the second approach, it aims at assessing personal properties such as extraversion, emotion, tolerance, independence or values.

Opinions on reliability, validity and necessity of any of the above ways to test creativity diverge and its context dependency may be a key reason for this. Wallach[454] concludes that "tests tell us little about talent." And while it is possible to test creativity in theory it is not clear whether a person that scores high in a test will also produce creative outputs in real life. That said, creativity tests are today certainly better predictors of potential creativity in real life than, say, IQ tests or school grades.[455] In any case, many scholars (such as

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[451] Cropley A. J., *Creativity in education and learning : a guide for teachers and educators*, Routledge Falmer, London and New York, 2001.

[452] Guilford, J P., Creativity, *American Psychologist,* 5, 1950, p.444-54.

[453] Schaefer, C E and Anastasi, A., A biographical inventory for identifying creativity in adolescent boys*, Journal of Applied Psychology,* 52, 1968, p.42-48.

[454] Wallach, M A, Tests tell us little about talent, *American Scientist*, January-February 1976, p.57-63.

[455] Cropley A.J., A five-year longitudinal study of the validity of creativity tests, *Australian Journal of Psychology*, 6, 1972, p.119-24.

Helson[456] or Kitto, Lock and Rudowicz[457]) suggest considering the results of individual creativity tests as indicators for potential creative abilities rather than as clear proof of a person's creativeness.

For Sternberg[458], creativity is as much attitude as ability. Creative personalities enjoy risk taking, intrinsic motivation, curiosity, autonomy, flexibility and divergent thinking. As such, creativity is again largely dependent on social and environment factors. It is therefore not only a capacity but a process emerging from interaction between an individual and his or her social and cultural environment.

Nevertheless, large international surveys, such as PISA or TIMMS, measure some aspects of creativity. Yet, they mainly make use of convergent thinking tests. In a short review of these tests Ernesto Villalba concludes that they are not very reliable and that creativity remains context dependent, thus illustrating the difficulty to compare levels of creativity from one country to another.[459]

Taking these different perspectives and commentaries into account it becomes clear that measuring creativity remains a difficult proposition. Similarly to other cross-national indicators we therefore suggest to focus on the environmental factors that stimulate creativity rather than to measure creative capacities. As such, the ECI will include a range of indicators concerning the creative potential of any EU Member State.

1.2 Review of existing indexes

To review all possible indicators which could potentially contribute to benchmarking the creative potential of EU Member States the team assessed several creativity- and innovation related indexes. These can broadly be grouped in three categories:

1. Indexes that measure factors of creativity
2. A Cultural Life Index that measure the cultural vitality of a society
3. Innovation Indexes: Characteristics of the indexes – objectives and scope

[456] Helson, R., A longitudinal study of creative personality in women, *Creativity Research Journal*, 12, 1999, p.89-102.

[457] Kitto, J, Lok, D and Rudowicz, E, Measuring creative thinking : an activity-based approach, Creativity *Research Journal*, 7, 1994, p.59-69.

[458] Sternberg (2006).

[459] Ernesto Villalba – On creativity – JRC Scientific and Technical Report European Communities, 2008.

INDEXES	OBJECTIVE	SCOPE
Creativity Indexes		
Hong Kong Index[460]	- capture the characteristics of the socio-cultural parameters and illustrate the interplay of various factors that contribute to creativity.	Set of cognitive, environmental and personality variables that interact to create creative outputs in Hong Kong's territory.
Euro-Creativity Index[461]	- list elements that would attract the "creative class" to a location	The "3Ts": Technology, Tolerance and Talent
Flemish Index[462]	- benchmark regional innovation	Technical innovation, entre-preneurship and openness of society.
Cultural Life Index		
Finnish Report[463]	- compile indicators of cultural life	The cultural sector including: music, dance, theatre, fine arts, cultural heritage, libraries, cinema and video, magazines and newspapers.

[460] The "*Hong Kong Creativity Index*" developed by the Home Affairs Bureau of the Hong Kong Special Administrative Region Government published in November 2004.

[461] The "*Euro-Creativity Index*" developed in the report "Europe in the creative age" by Florida and Tinagli in 2004 on the basis of "The Rise of the Creative Class" published in 2002.

[462] "*A Composite Index of the Creative Economy*" by Bowen, H.P., and Sleuwaegen, L. from Vlerick Leuven Gent Management School and W.Moesen from the Catholic University of Leuven, 2006.

[463] The report prepared for the Finnish Ministry of Education and Culture by Picard, R.G., Grölund, M. and Toivonen, T. on the "*Means for Overall Assessment of Cultural Life and Measuring the Involvement of the Cultural Sector in the Information Society*" published in 2003.

Innovation Indexes		
EIS[464]	- rank the most innovative Member States	Technological innovation
Oslo Manual[465]	- have a better understanding of the innovation process	Economic output as well as human capital (education, talent)

1.2.1 The Hong Kong Index (HKI)

With 88 indicators, the HKI is the richest and most thorough attempt to "illustrate the interplay of various factors that contribute to the growth of creativity."[466] It encompasses four domains – human, social, cultural and institutional – that contribute to such growth. It also highlights that "the accumulated effects and interplay of these different forms of capital are the measurable outputs/outcomes of creativity."[467] As such, the index was a source of inspiration in relation to identifying relevant indicators for the ECI, especially with regards to the following areas:

- human capital (notably educational qualifications)
- the social capital conducive to creativity (including level of tolerance and diversity)
- cultural participation as well as cultural offering (museums, venues) as a factor to simulate creativity
- institutional parameters conducive to creativity (intellectual property, fiscal incentives, technology infrastructure).
- Outcomes of creativity (importance of creative industries)

However, the extensive scope of the HKI is also challenging with regards to the purpose of our assignment. As it mixes a range of indicators that are related to technology roll out and scientific advances it may be somewhat prone to undermining the impact that cultural factors have on creativity. Furthermore, the vast amount of indicators used seems impractical for a trans-national survey, due to reasons of data collection

[464] The "*European Innovation Scoreboard 2007*" prepared by the Directorate-General for Enterprises and Industry of the European Commission under the Lisbon Strategy.

[465] The "*Oslo Manual: the Measurement of Scientific and Technological Activities, Guidelines for collecting and interpreting innovation data*", 3rd Edition, a joint publication of OECD and Eurostat , 2005.

[466] "*A Study on Hong Kong Creativity Index*" commissioned by the Home Affairs Bureau of the Hong Kong Special Administrative Region Government published in November 2004.

[467] Ibid.

and availability. A European index requires fewer indicators to remain manageable across disciplines for which data can be collected.

1.2.2 The Euro-Creativity Index

This 2004 follow-up European version of Richard Florida's work in the US, published in collaboration with UK-based think tank Demos, further elaborates the importance of place in a global competition to attract talents and creativity to Europe's cities and regions. Florida's index has certainly acted as a source of inspiration in relation to the development of our openness and diversity indicators – both factors contributing to the establishment of an environment that is conductive to creativity and innovation (see description of our main pillars of creativity in 1.3).

However, the definition of creativity used in Florida's Euro-Creativity Index is much broader than the one used in this study. For example, a large number of indicators selected for his index are assessing science-based factors of creativity (patents, R&D expenditure, number of scientists, etc.) and have thus not found their way into our index, which is related to culture. Other criticisms of the index include the argument that the correlations between different data sets are not sound and don't allow to make the conclusions that Florida brings forward.[468] Nevertheless, given the big focus that public as well as private bodies put on creativity his theory's contemporary relevance seem unquestionable.

1.2.3 The Flanders Index

The Flanders Creativity Index has been developed by Flanders DG, a regional body responsible for fostering entrepreneurship and innovation in Flanders as well as to stimulate economic relations with several creative partner regions throughout the world (Baden Württemberg, Catalonia, Flanders, Lombardy, Maryland (USA), Nord-Pas-de-Calais, Quebec (Canada), Rhone-Alpes, Scotland). As such, it has a distinct regional focus and could not be applicable for cross-country comparisons.

Similarly to the Florida Index the Flanders Approach considers creativity to be a much wider concept than the one used in this study and links it to notions of scientific and technological innovation and entrepreneurship. It does not, however, put any remarkable emphasis on the role of culture in stimulating creativity. The Flemish Index gives great importance to the notion of openness and explains that a city environment in terms of urban population and diversity (share of foreigners and of foreign students in total population) has an impact on creativity. As will be seen, this notion of openness will be reflected in our set of indicators.

1.2.4 The Finnish report

The Report on Cultural Life by the Finnish Ministry of Education and Culture is a compilation of indicators of cultural life (62 indicators). It is broken down into three sub-indices: cultural availability, cultural participation

[468] Malanga, S. The curse of the Creative Class, *City Journal*, winter, 2004, pp 36-45 or Boschma, R.A. and Fritsch, M. *Creative class and regional growth – Empirical evidence from Eight European Countries*. The Jena Economic Research Papers, 2007.

and cultural production. It enables to weight the creative potential of a country in relation to the availability of cultural resources and cultural participation. It serves to illustrate the importance of cultural participation and infrastructure to stimulate creativity and divergent thinking in a given society. It is assumed that a rich cultural environment benefits creativity and that social life triggered by cultural activities supports the creative economy.[469]

1.2.5 The European innovation scoreboard

The European Innovation Scoreboard was introduced under the Lisbon strategy and first published in 2001. Since then, it has provided an annual assessment of the innovation performance of EU Member States. The assessment is based on a wide range of indicators covering structural conditions, knowledge creation, innovative efforts by firms, and outputs in terms of new products, services and intellectual property.

It has to be acknowledged that the Innovation Scoreboard has successfully contributed to putting innovation on the policy agendas of national and regional policy makers alike throughout Europe. Yet, to some extend, this may be the result of a somewhat controversial ranking of EU Member States' innovation capacity, which has led to criticism of underlying methods and selected indicators. For example, Schimbany et al detected a certain high-tech bias in the Scoreboard and claimed that such would favour countries with a certain industrial structure although innovation could also take place outside high-tech sectors.[470] This bias of EU innovation policy (and especially funding) towards technology has long been criticised by European content stakeholders.

However, the most recent publication of the 2008 Scoreboard (released in January 2009) recognises such bias and highlights the importance of non-R&D innovation, including creativity and design:

"An important part of non-R&D innovation is creativity and design. As a contribution to the 2009 European Year of Creativity and Innovation, a Design, Creativity and Innovation scoreboard was constructed using a range of novel indicators. The analysis of this scoreboard shows that countries with a good creative climate tend to have higher levels of R&D and design activities and also strong overall innovation performance. These findings point to the need to consider design and other non-R&D activities as part of the broader approach to innovation policy as well as to the strong links between creativity and innovation."[471]

Yet, while non-R&D indicators (such as innovation expenditure not related to R&D) are included in the actual Scoreboard the creativity and design related indicators will be published as part of a separate document in 2009. Preliminary findings of this document were taken into account during the course of this assignment by discussing similar approaches taken at a European Commission-organised workshop the measurement of creativity.

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[469] See in particular Elizabeth Currid, *The Warhol Economy, How Fashion, Art and Music Drive New York City*, Princeton University Press, 2007.

[470] Schibany, Andreas and Gerhard Streicher, "*How not to compare innovation performance: A critical assessment of the European Innovation Scoreboard*", Joanneum Research, 2008.

[471] UNU-MERIT, European Innovaiton Scoreboard 2008, Inno Metrix, 2009.

With regards to the 2007 version of the Scoreboard we adopted indicators concerning the following:

- The relevance of ICT infrastructure as a tool to enable the development of creativity[472]
- Ways to measure human capital formation in society

There are several interferences of the new design-related innovation indicators which will be included the 2009 paper on creativity, design and innovation and the creativity indicator proposed in this study. These include:

- Approaches to measure the value of creative education
- Cultural expenditure
- Approaches to measure openness and tolerance in society
- Value added by cultural and creative industries to national GDP

A difference is, however, that the EIS indicators are primarily geared towards innovation by enterprises while the proposed indicators in this assignment examine the wider contribution of culture to creativity in economic and social domains in the EU.

1.2.6 The Oslo manual

The Manual is the basis for most innovation surveys in the EU and around the world. Encompassing a wide range of possible innovations, the third version of the Oslo Manual offers us a rich understanding of the innovation process.[473] Contrary to the previous Manual, it does not focus exclusively on technological innovation (product and process innovations) but also includes organisational and marketing innovations. For the first time, the 3rd version of the Manual investigates the field of non-technological innovation and the linkages between different innovation types. However, as is the case with the European Innovation Scoreboard, the Manual does little to consider the role of culture and creativity in fostering innovation.

In conclusion of the existing indexes or reports are based on different definitions of creativity and innovation. They have different objectives and scopes with different geographical remit. They essentially focus on scientific and technology innovation and take little account of art and culture as an indicator of creativity. However, what they have in common is to highlight concepts that are relevant to assess creativity:

- human capital (education)
- technology infrastructure and usage
- social environment (including attitude towards diversity)
- industrial property
- institutional and regulatory environment.

[472] http://ec.europa.eu/information_society/tl/research/index_en.htm DG Information Society.

[473] OECD, Guidelines for Measuring Innovation Data, The Oslo Manual, http://www.oecd.org/ (accessed January 2009).

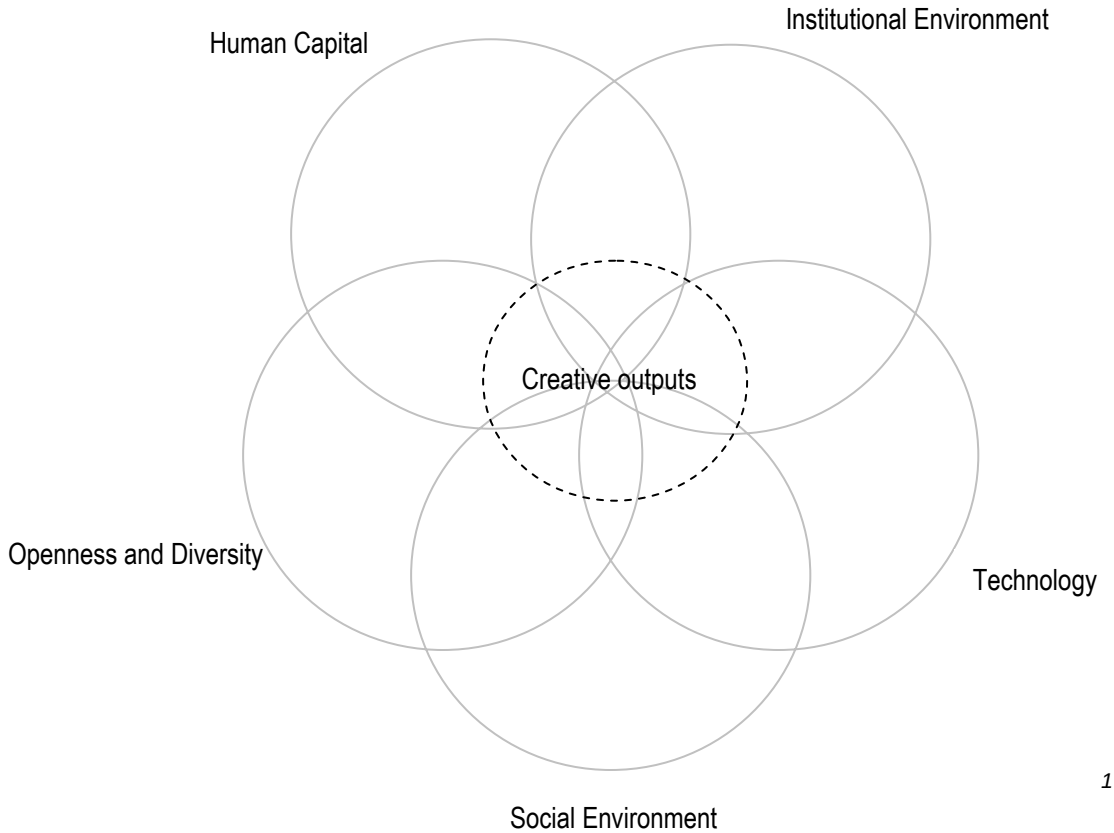
1.3 Establishing the European Creativity Index (ECI)

The European Creativity Index (ECI) is a new statistical framework for illustrating and measuring the interplay of various factors that contribute to the growth of creativity in the European Union. As other indicators it measures the performance of a phenomenon using a set of indicators which highlight some of the key features of that phenomenon. It is inspired by existing indexes concerning creativity, innovation and economic performance but introduces elements that are more specifically related to art and culture in order to ensure that a cultural dimension is taken into account when measuring the creative and innovative potential of Europe. Due to the nature of the assignment the proposed creativity index is by definition primarily assessing environmental factors rather than individual creative capacities.

A focus on the cultural dimension of creativity implies taking into consideration a number of factors, many of which are usually not included in other indexes. These include, but are not limited to:

- education in art schools
- cultural employment
- cultural offering
- cultural participation
- technology penetration
- regulatory and financial support to creation
- economic contribution of cultural industries

We group these indicators into 6 pillars of creativity, illustrated in the graph below:



1.3.1 Analysis of the pillars of creativity

1.3.1.1 Human Capital

Human capital – defined by the OECD as "the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being." – has long been acknowledged to stimulate economic growth and social progress.[474] While it is shaped by a range of external factors (including economic status and cultural norms and values) learning and education are important indicators concerning the levels of human capital in any given society.[475] Increasingly, the role of lifelong learning is also acknowledged as essential in stimulating human capital formation.

Chapter four of this report illustrated the vital role that learning and education have in facilitating the development of creative talents. Nevertheless, there are also arguments opposing this positive influence of education and training on creativity. After all, education often provides us with thought patterns most common to society and not necessarily with the tools to exploit original ideas and disrupt the status quo. Are we "educating people out of their creativity", as Robinson claims?[476] Following this line of thought, Claxton[477] highlights that traditional teaching is mainly built on dispositions of analytical thinking and tends to neglect other qualities of mind, such as imagination, intuition and intrinsic curiosity – skills that are key to creativity.

Policy documents increasingly seem to acknowledge that the way we learn and develop human capital needs to involve more interdisciplinary, non-cognitive and communicative approaches.[478] As shown in Chapter four, culture-based interventions in schools, higher education and life long learning can facilitate this creativity shift in learning: "The arts provide an environment where the learner is actively engaged in creative experiences, processes and development."[479] "Research indicates that introducing learners to artistic processes, while incorporating elements of their own culture into education, cultivates in each individual a sense of creativity and initiative, a fertile imagination, emotional intelligence and a moral "compass", a capacity for critical reflection, a sense of autonomy, and freedom of thought and action.[480]

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[474] OECD, "*The Wellbeing of Nations – The Role of Human and Social Capital*", OECD, 2001.

[475] Barro, R.J., "Education and economic growth", in Helliwell, J.F.ed. *The contribution of Human and Social Capital to Sustained Economic Growth and Well-Being*, OECD, 2001.

[476] Robinson K., "Do schools kill creativity?" at the TED conference. (*http://www.ted.com/index.php/talks/ken_robinson_says_schools_kill_creativity.html*)

[477] Claxton G., "Cultivating positive learning dispositions", to appear in Harry Daniels et al. *Routledge Companion to Education*, Routledge, 2008.

[478] OECD, ibid

[479] UNESCO "Road Map for arts education" The World conference on Arts Education: building creative capacity for the 21st Century, Lisbon 6-9 March 2006.

[480] For examples of research studies and evidence, refer to the reports from preparatory meetings for the World Conference on Arts Education; cf. LEA International at http://www.unesco.org/culture/lea.

Education in and through art also stimulates cognitive development and can make how and what learners learn more relevant to the needs of modern society."[481]

On the basis that culture plays an important role in fostering the creative dimensions of human capital we suggest a number of indicators related to:

- The potential of culture- and arts-based education (primary, secondary, tertiary) to help foster creative talents.
- The level of creative talents coming out of tertiary education and in cultural employment.

A table listing all indicators and sub-headings is included under section 1.3.2.

1.3.1.2 Openness and diversity

Contemporary notions of economic development put increasing emphasis on the link between open and diverse societies and their creative capacity – particularly so in an economic development context. While more research concerning this causation is certainly needed some evidence exists.

Jane Jacobs was the first to suggest that diversity and the exchange of ideas are a source of innovation and thus play an important role in the creation of powerful and dynamic cities.[482] The exchange between different people from diverse cultural backgrounds increases the diffusion of information. Through a "learning by doing" effect among creative people in a given city innovative solutions and ideas emerge. Pilati and Tremblay further review this notion of a creative city in their article "Cité créative et District culturel; une analyse des thèses en présence."[483]

Similarly, Richard Florida showed that creativity cannot flourish without a creative climate characterized by "a culture that's open-minded and diverse."[484] Regional economic growth is powered by creative people, who prefer places that are diverse, tolerant and open to new ideas. Diversity increases the likeliness that a place will attract different types of creative people. Greater and more diverse concentrations of creative capital in turn lead to higher rates of innovation, high-technology business formation, job generation and economic growth. Importantly, the cultural offering of a city or region (whether indicated by the number of opera houses or the number of underground punk rock bands) makes a place more attractive to these creative talents. Indeed, many argue that there is a highly dynamic relationship between today's creative entrepreneurs (that are increasingly seen as the motor of the general economy) and the publicly funded arts venues (which stimulate creatives to develop new products and services).

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[481] UNESCO Roadmap *Ibid.*

[482] Jacob, J., *The Death and Life of Great American Cities*, Random House Publishing Group, New York, 1993.

[483] Pilati, T. and Tremblay, D.-G., "Cité creative et District cultural; une analyse des thèses en présence »*, Géographie économie*, société 2007/4, Vol. 9, pp. 381-401.

[484] Florida, R.,*The Rise of the Creative Class*, Basic Books, 2002.

On a different level, evidence shows that several substantive freedoms – including freedom of expression and the requirement to access a plurality of information sources – impact on individuals' most basic ability to realise their full potential. Sen's capabilities approach to development economics is a major contribution in this field.[485] Nussbaum further develops his line of reasoning and examines the importance of more imaginative, artistic and spiritual ways of individual expression in relation to one's ability to fulfil individual potentials.[486] The basic idea of such a capability approach is that people who have access to cultural and information resources as well as the freedom to express themselves creativeness and imaginatively stand better chances to lead a better life.

We suggest a range of indicators that link issues of openness, diversity and media pluralism to the cultural domain. Of course, the cultural offering within a certain territory is also vital to fostering openness and creativity. This important aspect will be included in a separate pillar described below.

1.3.1.3. Cultural environment

Today, few policy strategies in European Member States link cultural participation and the performance of the cultural and creative sectors to the general progress of society. "Successful societies in the 21st century will be those that nurture a spirit of creativity and foster the cultural activity which goes hand in hand with it" claims a British policy document from 2001.[487] John D. Ong, Chairman Emeritus of the BF Goodrich Company claims the same for his business: "People who create in our companies - whether they are scientists, marketing experts or business strategists, benefit from exposure to art. They cannot create when they work and live in a cultural sterile environment."[488]

The cultural environment – our concert venues, galleries, book stores and cinemas (to name but a few) – are essential to the development of a creative society. They are the hotspots of disruptive debate and provide ground for argumentation, idea development and networking beyond one's restricted circle of contacts. As Elizabeth Currid points out, "creativity would not exist as successfully or efficiently without its social world – the social is not the by-product – it is the decisive mechanism by which cultural products and cultural producers are generated, evaluated and sent to the market."[489] Culture is a driver of creativity precisely because of its "social properties". Moreover, various studies have demonstrated that museums and galleries are "places where creativity can flourish"[490] because they "encourage people to think differently, to take and transmit ideas and to generate new things based on the creativity of the past."[491]

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[485] Sen, A., "Capability and Well-being", in The Quality of Life, edited by Nussbaum, M. and Sen, A., Oxford: Clarendon Press, 1993.

[486] Nussbaum, M.C., *Women and Human Development: The Capabilities Approach*, Cambridge University Press, Cambridge, 2000, p.78

[487] UK Department of Culture, Media and Sport, *"Culture and Creativity: The Next Ten Years", 2001 a Green Paper.*

[488] Available at: http://www.bcainc.org/news.asp.435.html .

[489] Currid, Elizabeth, "*The Warhol Economy; How Fashion Art and Music drive New York City*", Princeton University Press, 2007.

[490] Hooper-Greenhill E., Dodd J., Gibson L., Phillips M., Jones C., Sullivan E., Museums, Libraries and Archives Council and Renaissance, *What did you learn at the museum today? Second study: evaluation of the outcome and impact of*

Yet, it is the exposure to arts and culture that will make people creative – not the mere existence of the earlier. Evidence shows that cultural participation – which we measure by looking into level of attendance at cultural events and participation in cultural activities for lack of better statistical data – produces new ideas and innovative ways of expressing oneself.[492] Tony Travers of the London School of Economics and Stephen Glaister of Imperial College of London highlighted in a report entitled *Valuing Museums: Impact and innovation among national museums*[493], that "a student visiting a fine art gallery may find inspiration for a stage design or a fabric. A child visiting a science museum may find inspiration for school that would otherwise be missing. These kinds of spontaneous use of museum and gallery holdings can together be seen as creativity." Similarly, a recent study by Engage looked into the learning benefits of engaging with galleries of contemporary art and living artists. It shows that cultural participation helps people to discover intrinsic resources of talent, ingenuity and aesthetic judgment.[494]

In line with this argumentation we suggest indicators linked to the cultural offer as well as the cultural participation in a given Member State.

1.3.1.4 Technology

The fast development of digital technology transforms the global cultural sphere. In the past ten years technology has had both disruptive and unifying effects in art and the cultural and creative industries, unleashing individual creativity and creating a virtual cultural commons while dismantling traditional business models. As such, identifying indicators concerning the role of Information and Communication Technologies (ICTs) in transforming culture and creativity is a contentious task and bound to create lively debate. However, what is clear is that ICTs will be at the heart of innovative economic and social developments in the 21st century and that they are a main means to unleash Europe's creative potential.

As shown by Manuel Castells, digital technology has set free two opposing processes taking place at the same time: On the one side, culture is becoming global as media companies are able to reach out to the entire planet and provide a plethora of creative content to diverse audiences. On the other side, culture becomes customised, personalised, user-generated and more local.[495] It also shifts increasingly from being focused around experience to engagement. Audiences turn into participants and consumers into creators. Digital is a key driver of this transformation as it enables individuals to express themselves in novel ways and to connect and share their creations with communities of interest around the globe.

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learning through implementation of Education Programme Delivery Plans across nine Regional Hubs, Research Centre for Museums and Galleries Citation, Leicester, RCMG, 2006.

[491] Travers, T. and Glaister, S., *Valuing Museums: Impact and innovation among national museums*, National Museums Directors' Conference, United Kingdom, 2004.

[492]Cultural Initiative Silicon Valley, Creativity Community Index Study: Measuring Progress Toward A Vibrant Silicon Valley 2003.

[493] Op cit : Travers, T. and Glaister, S., 2004.

[494] Report *Inspiring Learning in Galleries* published by Engage, London 2008.

[495] Manuel Castells, *L'ère de l'information. Vol. 1. La société en réseaux*. Paris, *Fayard*. 1998.

Helmut Anheier and Yudhishthir Raj Isar, in C*ultures and Globalization: the Cultural Economy* [496], point out that "the technological products made available to individuals can turn many into creators themselves: from the personal computer and digital camera to the cell phone, humankind inhabits an increasingly networked world in which communication and personal expression and development reign supreme."

In essence, culture and technology share a reciprocal benefit: By facilitating the creative process technology enables new forms of expression. Artists and creative content in turn drive technology to new levels of sophistication. Personal computers run software for musical composition, for choreography, theatre design and architecture. New technologies also produce new forms of creative activities in areas such as computer animation, sound synthesis or digital graphics.

Our indicators concerning the roll out of digital technology infrastructure and equipment try to capture this reciprocity between culture, creativity and ICT proliferation.

It would have certainly been interesting to integrate further current trends in digital media production and consumption in our framework: For example, indicators concerning the development of new business models related to open-innovation, open content (e.g. the proliferation of open content licences such as Creative Commons in different Member States) or open source products would have been of interest in this respect. However, data concerning such phenomenon is limited. The uptake of creative user-generated content would certainly also be of interest in this context and more research in this area is needed.[497]

1.3.1.5 The institutional environment

The well being of societies and countries is clearly linked to the transparency, accountability and resilience of their regulatory institutions, as highlighted by several NGO's such as Transparency International.[498] Michael Porter also identified the clear links between a country's competitiveness and several institutional factors, including the rule of law and the appropriateness of public policies.[499]

Residing primarily within the remit of Member States, cultural policies and support initiatives for creativity and the creative industries are diverse across the EU (as shown in Chapter five). By assessing each Member States indirect and direct investments into culture we propose to assess a country's ambition to foster an ecosystem conductive to creativity:

- A fundamental mechanism to stimulate creativity and reward creative people or investment in the cultural and creative industries is copyright (or authors' right). Copyright is the equivalent to patent

[496] Anheier, H. and Raj Isar, Y., *Cultures and Globalization: the Cultural Economy*, Sage, Los Angeles, London, New Dehli, Singapore, 2008.

[497] The authors of this study suggest the commissioning of a short content analysis concerning the share of cultural content within a sample of member profiles on UCG sites such as Myspace, BEBO or Facebook in all European Member States.

[498] The latest Corruption index for the EU and central Europe can be accessed on www.**transparency**.org *(accessed January 2009)*

[499] Porter, M. E., *The Competitive Advantage of Nations*, Macmillan, London, 1990.

in R&D; its function is to provide a monopoly right to protect creators and promote investors in creativity. We propose to evaluate the level of remuneration granted to a category of right holders. We suggest the remuneration collected by authors of musical works and music publishers because they are relatively easy to track with the support of rights management societies in the music field.

1.3.1.6 The Creative outputs

Europe's cultural and creative industries are increasingly considered to be drivers of creativity and economic growth throughout the economy. The National Endowment of Science, Technology and the Arts' *analysis of the Community Innovation Survey 2004 and input-output data* concerning the trade between creative companies and companies operating outside the creative industries *showed that firms who spend twice the average amount on creative inputs are 25% more likely to introduce product innovations*. It also showed that *firms that have supply chain linkages with creative industries typically offer more diverse and higher quality products than those who don't.*[500]

This causation has been a primary interest of this report and we therefore suggest including statistics concerning the performance of the cultural and creative industries as indicators concerning the creative potential of a country. To be sure, this does not imply that the economic contribution of the sector in terms of GDP is equal to its economic relevance for the general economy. It simply recognises that the cultural and creative sectors are an important motor of creativity and innovation in Europe.

In this context, the index below includes indicators related to the economic contribution of the cultural and creative industries to a Member State's GDP as well as indicators concerning outputs of the sector.

1.3.2 The European creativity index

The ECI is thus composed of 32 indicators, grouped over six sub-indexes.

HUMAN CAPITAL	DATA SOURCES
The potential of culture- and arts-based education to help foster creative talents	
1. Number of hours dedicated to arts and culture in primary and secondary education	"Key data on education in Europe in 2005", by DG EAC, Eurydice and Eurostat, available on Eurydice website: www.eurydice.org/
2. Number of art schools per million population	European Leagues of Institutes of the Arts (Elia) website: http://www.elia-artschools.org/
• The level of creative talents coming out of tertiary education and in cultural employment	
3. Tertiary students by field of education related to culture	Eurostat, "Cultural statistics", available on: http://epp.eurostat.ec.europa.eu/
4. Cultural employment in total employment	"Cultural statistics in Europe", Edition 2007, published by Eurostat, p.54

OPENNESS AND DIVERSITY	DATA SOURCES
Attitude in population	
5. % of population that express tolerant attitudes toward	EUMC and SORA

[500] Bakhshi, H. et al., Creating Innovation, NESTA, 2008.

minorities	
6. Share of population interested in arts and culture in other European countries	"European cultural values", 2007, Eurobarometer 278 requested by DG EAC
Market data	
7. Market shares of non-national European film	The European Audiovisual Observatory: http://www.obs.coe.int/
8. Level of Media Pluralism in European Member States	Study on Media Pluralism Indicators carried out on behalf of DG Infosoc[501]
9. Share of non-nationals in cultural employment	Eurobarometer 278

CULTURAL ENVIRONMENT	DATA SOURCES
Cultural Participation	
10. Average annual cultural expenditure per household	Eurostat, "Cultural statistics", available on: http://epp.eurostat.ec.europa.eu/
11. Percentage of persons participating in cultural activities at least one time in the 12 months	Eurostat, "Cultural statistics", available on: http://epp.eurostat.ec.europa.eu/
Cultural offering	
12. Number of public theatres per capita	Data available from relevant national minister
13. Number of public museums per capita	Data available from relevant national minister
14. Number of public concert halls	Data available from relevant national minister
15. Number of cinema screens by countries	The European Audiovisual Observatory: http://www.obs.coe.int/

TECHNOLOGY	DATA SOURCES
16. Broadband penetration rate	Eurostat , « Sciences and technology » : http://epp.eurostat.ec.europa.eu/
17. Percentage of households who have personal computer and video game console at home	"Cultural statistics in Europe", Edition 2007, published by Eurostat, p. 142

REGULATORY INCENTIVES TO CREATE	DATA SOURCES
Financial support	
18. Tax break for artists or people who work in the creative sector	"Etude sur les crédits d'impôt culturels à l'étranger », mai 2008, KEA European Affairs, p. 37
19. VAT rates on books, press, sound recordings, video, film receipts, freelance authors, visual artists	*Creative Europe,* ERICarts Report presented by the Network of European Foundations for Innovative Co-operation, 2002, p.100
20. Tax incentives concerning donations and sponsoring	"Etude sur les crédits d'impôt culturels à l'étranger », mai 2008, KEA European Affairs, p. 28
21. Direct public expenditure on culture	"The Economy of Culture", 2006, KEA, MKW, Turun Kauppakorkeakoulu, p.125
22. Level of state funding to cinema	The European Audiovisual Observatory, "KORDA": http://korda.obs.coe.int/web/search_aide.php
23. Level of state funding to public TV	The European Audiovisual Observatory: http://www.obs.coe.int/
Intellectual Property	
24. Amount of right collected by authors in music per capita	Available from the International Confederation of Societies of Authors and Composers: http://www.cisac.org

[501] Currently developed by the University of Leuven as part of a DG Information Society and Media Study on Media Pluralism Indicators in Europe: http://ec.europa.eu/avpolicy/info_centre/library/studies/index_en.htm (January 2008).

OUTPUT CULTURAL PRODUCTION	DATA SOURCES
Economic contribution	
25. Values added of creative industries as % of GDP	"The Economy of Culture", 2006, KEA, MKW, Turun Kauppakorkeakoulu, p. 66
26. Turnover in music industries per capita	IFPI website: http://www.ifpi.org/
27. Turnover in book industries per capita	Eurostat, "Cultural statistics", available on: http://epp.eurostat.ec.europa.eu/
28. Turnover in cinema industries per capita	The European Audiovisual Observatory: http://www.obs.coe.int/
Other outcomes of cultural activities	
29. Number of feature films produced per year and per capita	European Audiovisual Observatory, Yearbook 2007 on "Film and home video"
30. Number of recordings released per capita	IFPI website: http://www.ifpi.org/
31. Number of books published per year and capita	UNESCO, Institute for Statistics, "Culture and Communication": http://www.uis.unesco.org
32. Number of design applications per million population	OHIM/Eurostat

APPENDIX 4
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APPENDIX 5
PERSONS INTERVIEWED AND CONSULTED DURING THE COURSE OF THE STUDY

By alphabetical order of surname

Tsveta Andreeva, Senior Expert, European Integration and International Cultural Cooperation Directorate, Ministry of Culture, Bulgaria

Pia Areblad, Chief Executive, CEO, Tillt, Region of Västra Götaland, Sweden

Charlotte Arwidi, Innovation policy development, European Commission, Enterprise and Industry Directorate-General,

Hasan Bakhshi, Research Director, Arts and Innovation, NESTA, U.K.

Eleonora Belfiore, Assistant Professor, University of Warwick, U.K.

Malte Behrmann, Secretary General, European Games Developer Federation, Germany

Kateřina Besserová, Head of Cinematography Section, Media and AV Department, Ministry of Culture, Czech Republic

Pia Betton, director, 180° Academy, Denmark

Vladimír Bína, Research Coordinator for Culture and Media, Ministry of Education, Culture and Science, the Netherlands

Egil Bjornson, Senior Teaching Fellow, University of Warwick, U.K.

Valérie Bobo, Founder, Mona Lisa, France

Lene Bornemann, Director,Arts in Business, Denmark

Fabrice Bousteau, Redacteur en chef, Beaux Arts Magazine, France

Anne Marie Boutin, Président, APCI - Agence pour la promotion de la création industrielle, France

Olivier Bronckaert, Executive Film Producer, Les films du fleuve, Belgium

Tom Brookes, Director Government Affairs EMEA, Apple, Belgium

Gunther Broucke – Manager 'the art of conducting' Brussels Philharmonic Vlaams Radio Orkest

Chiara Cardogna, Researcher, Department of Foreign Affairs, Italy

Philippe Chantepie, Chef du département des études, de la prospective et des statistiques , Ministère de la culture, France

Boyun Choe, PhD student, University of Warwick, U.K.

Ieva Cire, Cultural Policy Department, Ministry of Culture, Latvia

Marc Clerkx, Senior Project Manager, Flanders DC, Belgium

Christopher Clouder, CEO, European Council For Steiner Waldorf Education, U.K.

Gianna Lia Cogliandro – Secretary General of the European Network ENCATC

Pascal Cools, General Manager,Flanders DC, Belgium

Alastair Creamer, Co-founder, Creamer and Lloyd, U.K.

Ioana Crugel, European Project coordinator, ACCR (European Network for Cultural Centres), France

Cristina Da Milano, Researcher, ECCOM, Italy

Philippe Degeneffe, Vice-President, Corporate Affairs, Dragone Productions, Belgium

Mary Ann DeVlieg, Secretary General, IETM (International Network for contemporary performing artists), Belgium

Milena Dragicevic Sesic, Professor, University of Arts Belgrade, Serbia

Peter Dröll, Head of Unit, Innovation policy development, European Commission, Enterprise and Industry Directorate-General,

Frédérique Dumas, Directrice, Orange / Studio 37, France

Jan Fabre, Theatre-maker, Troublelyn, Antwerp, Belgium

Philippe Feillard, Direction Financière, Responsable du marketing stratégique, Peugeot Citroën PSA, France

Astrid Fiddelers, Project coordinator, Amsterdam Historical Museum, Netherlands

Marian Fitzgibbon, Head of the School of Humanities, Athlone Institute of Technology, Ireland

Sabine Frank, Deputy Secretary General and Coordinator of the Civil Society Platform for Intercultural Dialogue, Belgium

Paul Gardien, Vice President Research Development and Innovation, Philips Design, The Netherlands

Germaine Gazano, Market Research & Consumer Knowledge Dior cosmetics, France

Agnieszka Ginko-Humphries, Project Manager, The Bielskie Artistic Association Grodzki Theatre, Poland

Fernando Gómez, General subdirectorate of International Cultural Cooperation - Subdirección General de Cooperación Cultural Internacional, Ministry of Culture - Ministerio de Cultura, Spain

Nina Gran, Specialist Planner, Cultural Office Helsinki, Finland

Andrea Granelli, Advisor to the European Commission for Information Society affairs, Kanso Consultants, Italy

David Guile, Professor, London Institute of Education, U.K.

Nina Gunia-Kuznetcova, General Director, Valerian Gunia Union of Young Theatre,

Simon Hadjidimoff, Professor La Cambre, Brand Design Manager – Artengo, Belgium

Simon Hampton, Director, European Public Policy & Government Relations, Google, Belgium

Ilkka Heiskanen, Secretary General, Finnish Association of Culture and Media Researchers, Finland

Volker Heller, Head of Cultural Department, Senate Chancellery for Berlin, Germany

Julie Hervé, Policy Officer - Culture, Eurocities, Belgium

John Hines, Dove Global R&D Operations Manager, Unilever, U.K.

Bart Hofstede, Senior Policy Advisor, Ministry of Education, Culture and Science, The Netherlands

Katarina Höög, Enheten för kultur och kulturskapares villkor Kulturdepartementet, Ministry of Culture, Sweden

Matt Hunter, Leader Consumer Experience Design Practice, IDEO, U.K.

Fabrice Hyber, Artiste, France

Péter Inkei, Director of the Regional Observatory on Financing Culture in East-Central Europe, The Budapest Observatory, Hungary

Joris Janssens, Researcher, Vlaams Theater Instituut, Belgium

Kirsi Kaunisharju, Councillor for Cultural Affairs, Kulttuurivientiyksikkö - Cultural Exports Division / Opetusministeriö - Ministry of Education , Finland

Alain Kerlan, Director of Department for Educational Science, Universite Lyon 2, France

Zsuzsa B. Kiss, Chief Counsellor, Ministry of Education and Culture, Hungary

Steven Kyffin, Senior Director Research Development and Innovation, Philips Design, The Netherlands

Cajsa Lagerkvist, Head of Exhibitions and Research, The Museum of World Culture, Sweden

Anita Lehikoinen, Director, Ministry of Education, (Aalto University) Helsinki, Finland

Patrick Le Quément, Chief Designer, Renault, France

Maria de Lourdes Lima dos Santos, President, Observatorio das Actividades Culturais, Portugal

Lotta Lekvall, Director of Nätverks, Vice-President of the European Network ENCATC (Sweden)

Gerald Lidstone – Director Institute for Culture and Entrepreneurship, Goldsmith College University, UK

Lise Lyck, Associate Professor, Centre for Tourism and Culture Management, Copenhagen Business School, Denmark

Rasius Makselis, Head of Strategic Planning, Ministry of Culture, Lithuania

Per Mangset, Professor, Telemark University College, Norway

Ruth-Helene Melioranski, Manager of the Estonian Design Centre

Hannah McBain, Creativity and Change Consultant,BBC, U.K.

Hristina Mikic, Lecturer, Higher School for Business Studies

Jacek Mikuszewski, Senior specialist, Department of Cultural Strategy and European Funding, Ministry of Culture and National Heritage of the Republic of Poland

Françoise Montenay, Présidente du conseil de surveillance,Chanel SAS, France

Jens Nielsen, Professor, Research Center for Business Development and Management, Copenhagen Business School, Denmark

Pieter Noordzij, Manager Business Development, High Tech Campus Eindhoven, The Netherlands

Dr. Claus Noppeney, Managing Director, CNC Consulting, Berlin, Germany

Truus Ophuijsen – ELIA, deputy director

Jan Opstrup Poulsen, Special Advisor, Ministry of Culture, Denmark

Thomas Paris, Universitaire, HEC / Polytechnique, France

John Parton, Strategic Generating Demand Unit, Nestlé, Switzerland

Lucia Pawlikova, State Advisor, Ministry of Culture, Slovakia

Séverine Peruzzo, Project Assistant, HI-Culture, France

Matúš Petričko, Theatre Manager, Divadlo z pasaza, Slovakia

Chantal Pirlot, Administrateur Délégué,Promothea/CIRIUS, Belgium

Roberto Pone, Consultant & Project Manager, Kanso, Italy

Elisabethe Ponsolle des Portes, CEO, Comité Colbert, France

Andy Pratt, Senior Lecturer, London School of Economics , U.K.

Martin Prchal, AEC Chief Executive *Association Européenne des Conservatoires, Académies de Musique et Musikhochschulen (AEC)*

Hans Joachim Richter, Director Corporate Communications, Nestlé Nespresso, Switzerland

Hans Robertus, Senior Director Research Development Innovation Design, Philips Design, The Netherlands

Christian Salez, CEO, Delvaux, Belgium

Esther Sayers, Head of Raw Canvas + education programmes, Tate Modern, U.K.

Maria Scherbjal, Project Manager, Theatre Grodski, Poland

Enno Schmidt, Artist and Lecturer for Social Sculpture, Frankfurt, Germany

Prof. M.J.W. Schouten, Dean, Department of Industrial Design, University of Technology Eindhoven, The Netherlands

Alain Seban, Directeur, Centre Pompidou, France

Richard Seymour, CEO, Seymour Powell, U.K.

Norbert Sievers, Executive Director, Kulturopolitische Gesellschaft, Germany

Ragnar Siil, Head of Development Department, Ministry of Culture, Estonia

Jaro Slavik, Business Development Manager Eastern Europe, Warner Music, Austria

Cas Smithuijsen, Director, Boekman Foundation, The Netherlands

Yrjö Sotamaa, Rector, Professor, University of Art and Design Helsinki, Finland

Philip Spedding, Senior Manager, Arts and Business, U.K.

Jorunn Spord Borgen, Senior Researcher, NIFU STEP Norwegian institute for Studies in Innovation, Research and Education, Norway

Jan Stavik, Managing Director, Norwegian Design Council, Norway

James Stevens, Responsible for overseeing the “Find your Talent” programme,DCMS UK, U.K.

Petra Tarjanne, Senior Adviser, Ministry of Employment and Economy, Finland

Barbara Taylor, Programme Director, Engage, the National Association for Gallery Education, U.K.

Zlatko Teodosievski, Director, National Art Gallery Skopje, Republic of Macedonia

Michael Thomson, President, Bureau of European Design Associations (BEDA), U.K.

Patricia Thomson, Professor of Education, University of Nottingham, U.K.

Baiba Tjarve, Assistant in Cultural Management, Latvian Academy of Culture, Latvia

Mireille Toussaint, Direction Stratégie et Produit Groupe, Innovation et prospective, Peugeot Citroën PSA, France

Maxime Traband, Orange/FT Group,Orange, France

Laurent d'Ursel, Artiste, Belgium

Ingrid van der Wacht, Project Manager, City of Eindhoven, Design Connection Brainport (Design Management Europe)

Philip Vanneste, Head of the Office of Innovatie Centrum,Innovatie centrum, Eindhoven, The Netherlands

Marianne Verkest, Arteconomy, Belgium

Inga Wellmann, Creative Industries Consultant, Berlinpolis, Berlin, Germany

Armelle Weismann, Directrice Associée, Troistemps, Paris, France

Rolf Witte, International Relations Officer, German Federation for Cultural Youth Education, Germany

Shân Wareing, Dean, Centre for Learning and Teaching in Art and Design, University of the Arts London, U.K.

Dr. Adrian Woolard, Head of BBC Innovation Culture Team, BBC, U.K.

Karsten Xuereb, Attache for Cultural and Audiovisual Matters, Government of Malta, Belgium

Karolina Zielinska, Ministry of Culture and National Heritage, Poland

APPENDIX 6
LIST OF PARTICIPANTS AT THE ROUNDTABLE ORGANISED ON 3 FEBRUARY 2009

Pia Areblad
Chief Executive, CEO Tillt, Region of Västra Götaland, SE
Tillt, Region of Västra Götaland, SE, Göteborg

Malte Behrmann
Secretary General
EGDR - European Games Developers Federation, Berlin

Valérie Bobo
Founder
Mona Lisa - Art for Business Development, Paris

Lene Bornemann
Director
Arts in Business, Frederiksberg

Valéria Cantoni
Managing Director
Trivioquadrivio, Milano

Christopher Clouder
CEO
European Council for Steiner Waldorf Education, Brussels

Pascal Cools
General Manager
Flanders DC, Antwerp

Marie Anne DeVlieg
Secretary General
IETM (international network for contemporary performing arts), Brussels

Jo de Wachter
Director of Outreach Programmes
IMEC (bio and nanotechnology research centre), Leuven

David Edwards
Founder

Le Laboratoire, Paris

Bernd Fesel
Project manager city of creativity
Ruhrmetropole 2010, Essen

Ilona Kish
Secretary General
Culture Action Europe, Brussels

Simon Hadjidimoff
Product Designer

Joost Heinsius
Kunstenaars & Co, Amsterdam

Michael Hutter
Research Director, "Cultural Sources of Newness"
Social Science Research Centre Berlin, Technical University Berlin, Berlin

Philippe Le Moine
Director External Relations
Festival d'Avignon, Avignon

Giovanna Massoni
Creative Lab, Brussels

Alok Nandi
Architempo, Brussels

Claire Newman-Rebaud
Chargé de Mission Europe - Culture et Industries Créatives
Nantes Métropole, Nantes Cedex 9

Paul Owens
Director
BOP Consulting, London

Francesca Palchetti
Università degli Studi di Urbino, Urbino

Chantal Pirlot
Administrateur Délégué
Prométhéa, Brussels

Elisabeth Ponsolle des Portes
CEO
Comité Colbert, Paris

Ragnar Siil
Head of Development Department
Estonian Ministry of Culture, Tallinn

Jan Stavik
Managing Director, Norwegian Design Council, Vice President Bureau of European Designers Associations
Norwegian Design Council, Olso

Roberto Travaglini
Specialist in cognitive studies and psychopedagogy
Università degli Studi di Urbino, Urbino

Milica Vukovic
Government Relations Manager
Design Council, London

Armelle Weismann
Directrice Associée
Troistemps, Paris

KEA EUROPEAN AFFAIRS

Philippe Kern
Managing Director

Jan Runge
International Project Manager

Elodie Vaisberg
European Affairs consultant

Allison Reekie
Events Manager

Elodie Cadiou

European Commission

Odile Quintin
Director-General, DG EAC

Katarina Mathernova
Deputy Director-General, DG REGIO

Vladimir Šucha
Director, DG EAC

Xavier Troussard
DG EAC

Sylvain Pasqua
DG EAC

Anna Athanasopoulou
DG EAC

Charlotte Arwidi
DG ENTR

Marta Beck
ESTAT

Lewis Dijkstra
DG REGIO

Pascal Dissard
DG RTD

Pierre Godin
DG REGIO

Cristina Marcone
DG EAC

Anna Melich
BEPA

Candelaria Negri Biasutti
DG EAC

Marielle Riche, DG REGIO