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*Input paper:*

**"European cultures in the cloud":  
Mapping the impact of digitisation on the cultural sector**

Dr. Divina Frau-Meigs, Sorbonne Nouvelle University



**Ministry of Culture and Tourism  
of the Republic of Azerbaijan**



The opinions expressed in this work are the responsibility of the author and do not necessarily reflect the official policy of the Council of Europe

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This report is in relation to progress on action 2 of the Moscow agenda, "Understanding the impact of digitisation of culture", with mission to set up a platform for exchange and prepare policy orientation papers for member states (with possible future Council of Europe recommendations in the area and transversal work initiatives relating culture, media and education). The author wishes to thank Claudia Luciani, Kathrin Merkle and Lee Hibbard for their unreserved support and Siobhan Montgomery and Adrian Rodriguez-Perez for their competent help in providing the appendix for this report.

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## Introduction

This paper offers a mapping of the impact of digitisation on the cultural sector mainly as seen from the perspective of international organisations. The paper refers to recent reports as well as projects and programmes. This is followed by a mapping of main trends regarding cultural institutions and sectors. A synoptic table is appended (Appendix 1) as well as a glossary for use of reference (Appendix 2). The mapping serves as basis of the input paper to the Baku Conference: "Possible recommendations towards creating an enabling environment for digital culture and for empowering citizens". The Baku Platform Meeting is the first of a series of exchange events organised by the Council of Europe and the inputs and results of this event will be elements in a longer-term work process.

### 1. Recent reports by International Organisations on global trends for the 21<sup>st</sup> century

Several global reports have been published in 2013 that can be of use to identify high level trends that shape the global mediated culture as it is impacted by digital convergence. In general, these reports show that pre-digital institutions are increasingly aware of the impact of digitisation and try to chart strong points of the 21<sup>st</sup> century so as to launch discussions as to their future evolution. They tend to look at all sectors (education, science, economics...) so as to be able to consider how these changes impact the cultural sector. They tend to remain focused on their main remits. They see digitisation and technology as less important than the creation of an ecosystem for the cultures of information, whose status is rapidly changing due to data mining and the Internet of things. Information is key to the future of culture.

#### 1.1. UNESCO

For its World Summit on the Information Technologies (WSIS)+10 stock-taking, UNESCO has commissioned a series of reports, especially one on "Renewing the Knowledge Societies Vision" (Mansell and Tremblay, 2013) and one on "Exploring the Evolving Mediascape: Towards updating strategies to face challenges and seize opportunities" (Frau-Meigs, 2013).

The first report underlines the importance of freedom of expression and freedom of information for development and social inclusion. It makes a plea for universal access to information and knowledge, quality education for all, and respect for linguistic and cultural diversity. The report insists on the key role of learning and training processes, grassroots initiatives and stakeholders' participation, and policies to achieve a fair balance between public and private interests. It concludes on the importance of building an infrastructure for open information and learning and stresses the role of participatory networks and open data for information sharing.<sup>1</sup>

The second report offers an analysis of the role of media in culture and considers the challenges and opportunities provided by the digital world for solving problems of illiteracy and health, with a special attention to women and young people. The report considers mediated culture, from the perspective of digitisation of content. It shows the changing uses and practices related to digital culture. It considers the varied status of content (windowing, versioning, merchandizing...) and points at the new potentials for content creation (open source, crowd-funding, the commons). It offers a series of proposals for culture as the fourth pillar for development.<sup>2</sup>

Both reports can be placed within the post 2015 Millennium Development Goals as defined by the United Nations: Leave No One Behind; Put Sustainable Development at the Core; Transform Economies for Jobs and Inclusive Growth; Build Peace and Effective, Open and Accountable Public Institutions; Forge a new Global Partnership.

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<sup>1</sup><https://fr.unesco.org/post2015/sites/post2015/files/UNESCO-Knowledge-Society-Report-Draft--11-February-2013.pdf>

<sup>2</sup>[http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/wsisis/WSIS\\_10\\_Event/exploring\\_the\\_evolution\\_of\\_mediascape\\_Report\\_final\\_version\\_DFM.pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/wsisis/WSIS_10_Event/exploring_the_evolution_of_mediascape_Report_final_version_DFM.pdf)

The reports are also complemented by the *Hangzhou Declaration on Culture* (2013).<sup>3</sup> The Declaration underlines that cultural and creative industries (tourism, heritage...) as well as cultural infrastructures (museums, public theatres) are the mainspring for social cohesion, as well as for employment and income, in particular in developing countries. They also are powerful tools in the struggle against poverty, unemployment and violence. The Declaration suggests that the creative economy, fed by the power of the new technologies, can be the next new economy, succeeding the agrarian and industrial economies.

The Declaration is part of UNESCO's line of actions to include culture in the strategies of sustainable development after 2015. It underlines a need to: integrate culture in all policies for development programmes, on same footing as human rights, equality and sustainability; mobilize culture for peace and reconciliation purposes; promote culture for a socially inclusive development; take advantage of culture to reduce poverty and promote culture as a tool for sustainable development and future generations; capitalize on culture to find innovative models for cooperation.

## 1.2. UNCTAD/UNDP

For several years since 2008, UNCTAD has introduced the topic of the "*creative economy*" in the world economic and development agenda. "The creative economy is an emerging concept dealing with the interface between creativity, culture, economics and technology in a contemporary world dominated by images, sounds, texts and symbols. Today, the creative industries are among the most dynamic sectors in the world economy providing new opportunities for developing countries to leapfrog into emerging high-growth areas of the world economy."<sup>4</sup>

UNCTAD proposes a definition of creative industries that shows how they are blurring the borders with cultural industries: "The creative industries are at the crossroads of the arts, culture, business and technology. All these activities are intensive in creative skills and can generate income through trade and intellectual property rights."

Creative Industries			
HERITAGE	ARTS	MEDIA	FUNCTIONAL CREATIONS
<b>Traditional cultural expressions</b> art crafts festivals celebrations	<b>Visual arts</b> painting sculpture antique photography etc	<b>Publishing and printed media</b> books newspapers press and other publications	<b>Design</b> interior graphic fashion jewellery toys
<b>Cultural sites</b> historical monuments museums libraries archives etc	<b>Performing arts</b> live music theatre dance opera puppetry circus etc	<b>Audio-visuals</b> film television and radio broadcasting  <b>New media</b> digitized content software video games animations etc	<b>Creative services</b> architecture advertising creative R&D cultural services digital services etc

Source:

<http://unctad.org/en/Pages/DITC/CreativeEconomy/Creative-Economy.aspx>

<sup>3</sup> [www.unesco.org/.../the-hangzhou-declaration-heralding-the-next-era-of-human-development/](http://www.unesco.org/.../the-hangzhou-declaration-heralding-the-next-era-of-human-development/)

<sup>4</sup> <http://unctad.org/en/Pages/DITC/CreativeEconomy/Creative-Economy.aspx>

The 2013 report insists on the role of cities as important development actors. It offers a map of various cultural and creative industries. It places human creativity at the core of transformative changes in development. It emphasizes the need to gain skills and access in the media and information sectors. It posits culture as an enabler of development as a people-centred process. It shows that development pathways are not always replicable but that critical factors exist for success, especially intermediaries and institutions and pushes for the need for multiple strategies, including capacity-building, social cohesion and e-governance and public policy.

The report reflects a growing trend to acknowledge the existence of creative industries in conjunction with cultural industries but also in contra-distinction. The cultural industries are seen as heavily funded by government policies as public goods whereas the creative industries are seen as subsidised by the market or the industry and relying heavily on the labour input of so-called "creative individuals" for linking design to business performance.

### **1.3. Council of Europe (2013)**

Drawn up at the request of the Committee of Ministers, a recent report by the Secretary General of the Council of Europe provides an in-depth analysis of the state of human rights, democracy and the rule of law in Europe. It also looks at the Council of Europe's capacity to assist member States in complying with the European Convention on Human Rights and the standards derived from it. The report states the emergence of new international and societal challenges and that technological development alone would require new tools to uphold human rights. According to this report, the issues of protecting privacy, fighting hate speech on the Internet, the relationship between different freedoms - such as the freedom of expression and freedom of religion - are some of the new problems necessitating reflection and action. The report also recommends strengthening media literacy, intercultural skills and other democratic competences.

In preparation for the 10th Council of Europe Conference of Ministers of Culture "Governance of Culture – Promoting Access to Culture", held in Moscow in April 2013, the Council of Europe commissioned a number of reports.<sup>5</sup> They tend to plea for a repositioning of the Council of Europe in relation to the European Union, so that the economics of culture are duly positioned in relation to human rights and development.

The reports acknowledge huge progress in Europe, especially in the domain of culture and democracy. They consider that access to cultural goods and participation in cultural consumption and production are developing; they also point at "forms of non-participation or refusal to access the cultural good because of a need to retrench, to disconnect from the flux of content and/or of information. There is both a saturation type of syndrome and a still not fully achieved sense of giving more access to those still neglected. There are also new territories of exclusion and a constant fluidity of the interaction between areas that are active or non-active culturally (...) There is a sense of important new players that influence the cultural access and cultural participation much more than public policies. Corporations, independent private projects, advertising agencies through their campaigns are immensely more impactful and resourceful from this point of view. And their use of cultural content is central."<sup>6</sup>

Among the major recommendations, there are several needs identified: to call for more coordination at the level of member states, in terms of legislative instruments due to the transversal character of cultural policies; to focus on key areas such as human rights, education, environment and labour; to raise awareness as to the case for culture, in reference to the 2012 Helsinki report, "Counting what counts", produced by the Council of Europe's CultureWatchEurope initiative.<sup>7</sup> Other important suggestions relate to: the need for reliable research, information collection and indicators to narrow the disparities among member states; the support for the work on information services by the

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<sup>5</sup> [http://www.coe.int/t/dg4/cultureheritage/culture/Moscow/default\\_en.asp](http://www.coe.int/t/dg4/cultureheritage/culture/Moscow/default_en.asp)

<sup>6</sup> See in particular Corina Suteu, "Perspectives for the Council of Europe as the intergovernmental forum on culture in Europe and laboratory of democratic governance – challenges and perspectives, also in view of a most effective model of cultural co-operation in Europe", background paper, Moscow 15-16 April 2013 2013.

<sup>7</sup> [http://www.coe.int/t/dg4/cultureheritage/cwe/HelsinkiReport\\_en.pdf](http://www.coe.int/t/dg4/cultureheritage/cwe/HelsinkiReport_en.pdf)

Compendium, ERICarts and institutions such as IMO, the Budapest Observatory, Interarts; the empowerment of ministries of culture so that they reduce the imbalance with other private or independent bodies in influencing taste, choices and consumption.<sup>8</sup>

#### **1.4. International Federation of Library Associations (IFLA)**

The report notes increased threats related to the implications of technologies due to internet of things or semantic web such as Google Glass, Massive Open Online Courses (MOOCs) and big data, increasing government surveillance and censorship. It emphasizes increased opportunities for grassroots activism, automated machine translation, changing concepts of privacy and copyright among consumers, and a wealth of other technological developments (3D printers...).

The major trends delineated by IFLA are:

- Trend 1: New Technologies will both expand and limit who has access to information;
- Trend 2: Online Education will democratise and disrupt global learning;
- Trend 3: The boundaries of privacy and data protection will be redefined;
- Trend 4: Hyper-connected societies will listen to and empower new voices and groups;
- Trend 5: The global information environment will be transformed by new technologies.<sup>9</sup>

IFLA has joined a number of international networks and NGOs related to culture to launch the *Declaration on the Inclusion of Culture in the Sustainable Development Goals* (May 2014). The Declaration calls on governments "to ensure that targets and indicators on culture be included as part of the Sustainable Development Goals, in particular (but not limited to) those related to: Poverty eradication; Education; Sustainable cities and human settlements; Peaceful and non-violent societies; Equality; Ecosystems and biodiversity; Economic growth."<sup>10</sup>

In so doing, IFLA joins a number of NGOs in the sector of cultural diversity, such as IFACCA, Agenda 21 for culture, FICDC, Culture Action Europe, IMC-CIM, and ICOMOS. Together, they have also launched a major campaign to sensitize decision-makers at all levels on the importance of culture as a lever for change and development: *The future we want includes culture*.

#### **2. Inter-Governmental Organisations' projects and programmes (selection)<sup>11</sup>**

Global trends can also be assessed via existing projects and programmes, not only reports. They confirm the interest of major Inter-Governmental Organisations for digitalisation and the high place they give it in their agenda. They show a growing interest in information as "data" and the need to come to terms with data value chain for culture and their implications for policy-making.

##### **2.1. UNESCO**

UNESCO is among the IGOs that have alerted to the critical importance of information, with the creation of the division on communication and information (CI) and a special programme called Information For All (IFAP). This programme has workshops around preservation of digital heritage, media and information literacy as well as infoethics. The CI division has been conducting a lot of work on journalism in the digital era, the protection of bloggers, the right to information, etc. it has also promoted media and information literacy (MIL) via a number of tools and programmes, like the kit for teachers, students, parents and professionals, or the MIL curriculum or else GAPMIL (the alliance of partners for MIL). It has moved on to minorities, people with disabilities and Gender (with an alliance on gender). It has also provided Guidelines for Broadcasters on Promoting User-Generated Content and MIL and it works closely with NGOs, especially IFLA and ICA in the domain of archives and libraries.

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<sup>8</sup> See Divina Frau-Meigs, "Assessing the impact of digitisation on access to culture and creation, aggregation and curation of content" background paper, Ministerial Conference on Culture "Governance of Culture – Promoting Access to Culture" Moscow 15-16 April 2013.

<sup>9</sup> See <http://trends.ifla.org/insights-document>

<sup>10</sup> see <http://www.culture2015goal.net/>

<sup>11</sup> This section is an extension of an internal analysis by the Council of Europe's Culture and Democracy Division

The division on culture has become the division on cultural expressions and creative industries. It has done work on archiving and heritage, local languages and multilingualism, culture as a pillar of development. It can use such tools as the Convention on the protection and the promotion of the diversity of cultural expressions or the recommendation on multilingualism in cyberspace or the convention for the safeguarding of intangible cultural heritage. It has flagship projects like the virtual museum for intercultural dialogue, the Creative Cities network, the world heritage list and Memory of the World.

Most importantly, UNESCO has developed a whole trend around Free and Open access to Knowledge via information and communication technologies (ICTs). The rationale is based on the development of interoperable, non-discriminatory standards for information so as to provide access to knowledge and to infrastructures that contribute to democratic practices, accountability and good governance. Accordingly, it has developed a Free and Open Source Software Portal; it has fostered Open Educational Resources (OERs) and now MOOCs. It also promotes open access to scientific information, for development purposes. In the framework of WSIS and post 2015 goals, it has launched consultations for an Internet study based on ROAM principles: Human Rights-based, Open, Accessible and Multi-stakeholder driven, as a means of proposing principles for Internet Governance.

## **2.2. OECD**

The OECD Directorate for Science, Technology and Industry (STI) is in charge of a wide range of activities to understand how ICTs contribute to sustainable economic growth and social well-being. The OECD Digital Economy Papers series for instance cover a broad range of ICT-related issues and makes selected studies available to a wider public. They include policy reports that are of general interest for its members and beyond.

The OECD has produced reports regularly on the "App economy", mobile telephony and "electronic commerce", "the economics of personal data", "empowering consumers in the purchase of digital content products", "open access"... and even e-books. They have a tangential relationship to culture. More to the point are its perspectives on creative industries and on the measurement of culture within the wellbeing framework of the OECD. They have reviewed statistics on culture, trade and public expenditure and considered the role of non-economic international indicators (diversity in sectors like recording or audiovisual, interactive digital media...) in new classification systems.

OECD has looked at the entrepreneurial dimensions of creative industries, with issues of access to market, to training, to Intellectual Property (IP) instruments. It has also focused its attention on the public sector and its capacity for innovation in the area of data, via its Open Government Data project and its Observatory of Public Sector Innovation. It considers data-driven innovation and intangible assets as a key factor for development and growth. It strongly emphasizes the need for research, training and skilling, as well as IP rights and privacy and consumer protection.

## **2.3. European Union**

The EU has developed a whole Digital Agenda for Europe, in which traditional sectors such as cultural heritage and institutions are helped in their efforts to digitise content and make it publicly accessible. The EU has also focused on ensuring that its media policies are able to adjust to digital requirements, so as to offer users a seamless experience across media, whatever the original mode of diffusion. It has provided a number of recommendations (on film heritage), directives (on audiovisual media services, on digitisation and online accessibility of cultural material and digital preservation) and supports other instruments and institutions such as the Council of Europe's European Audiovisual Observatory to ensure integration within a unified market.

More interestingly, the EU has introduced a new strategy around data. It fosters the free flow of data across the EU (digital single market) while maintaining a balance between individual's privacy concerns about their data and the potential reuse of their data by the corporate sector. In its policy, the EU considers that certain data should be freely available for use and re-use, namely all the



information that public bodies produce, collect or pay for with public funding. This is perceived as a means to increase transparency, accountability and agency of citizens for improved participation. In order to achieve this goal, four to five main areas of action are being developed: open data portals; legislative measures such as the Directive on the re-use of public sector information; non-legislative measures like Open Access to facilitate use and re-use of publications and data resulting from scientific research experiments funded at least partially with public funds; funding research and innovative activities in the field of "Big Data" and "Open Data" with EU Framework Programme for Research and Innovation Horizon 2020. However, the EU is not always consistent with its balancing act and can be divided on some issues, as visible when it blocked the copyright exceptions for libraries in WIPO discussions.

#### **2.4. Council of Europe**

The Council of Europe has several flagship programmes for cultural policy. Following the 2013 Moscow Ministerial Conference, it sets the emphasis on studying digitisation and its impact on culture and a novel indicator framework on culture and democracy. Cultural policy work also includes policy reviews in member states and the Compendium database that has regular updates on member states' policies in the domain of culture including on media diversity and digitisation issues. It includes thematic as well as statistical and monitoring chapters and a good-practice and information resources sections. Another work strand is devoted to intercultural strategies and the management of cultural diversity, especially at local level (Intercultural Cities) – which offers a policy paradigm for local diversity management based on the concept of Diversity advantage, DELI (Diversity in the economy and local integration, joint programme with the EU) where the focus is on creating conditions for migrant entrepreneurship, C4I (Communication for Integration, Joint programme with the EU) which supports the creation of local networks and tools for busting myths about migrants and diversity, and MEDIANE (Media in Europe for Diversity Inclusiveness, joint programme with the EU) enabling media to include diversity in their work in terms of human resources, content and angles of coverage. The Council of Europe also looks at heritage, following a number of key Conventions in this field, and at film and audiovisual mechanisms for fostering the promotion of European diversity and creativity (European Audiovisual Observatory, Eurimages).

The Council of Europe has been taking steps to consider the role of culture in its Internet Governance strategy plan in an effort to achieve inter-sectorial synergies. The Council of Europe Internet Governance Unit held a high level conference in Graz (Austria, 2014), on the theme "Shaping the Digital Environment – Ensuring our rights on the Internet". Some of the objectives were in line with the Moscow follow-up process on issues of culture and digitisation, especially the theme of "Public service and Internet content – next generation education, cultures and freedoms in public service delivery".

In Graz, the Council of Europe supported the idea that Internet is a public commons and a critical resource. As a result, institutions serving the public interest (libraries, schools, media) were seen as a means of improving the accessibility of public services. The role of public institutions for developing capacity in their local communities was also stressed. The Council of Europe also considered that partnering with online companies was key and that Private-Public Partnerships (PPP) were needed to ensure the digital switch and optimal services for citizens. As a result there was general agreement that new frameworks were needed for private sector delivery of public services and content, and for transparent PPPs. In this context, the question of rights holders and rights regulation was seen as essential. So was the next generation education, which implies a new definition of media literacy and connection to new scientific disciplines such as "digital humanities" and "simulated environments".

### 3. Mapping per cultural sector<sup>12</sup>

The major traditional sectors of culture tend to be divided in the following pre-digital categories:

1. Visual and applied arts: ceramics, drawing, painting, sculpture, printmaking, design, crafts, and industrial design, graphic design, fashion design, interior design and decorative art;
2. Performing arts and music: music, dance, theatre and circus;
3. Cultural heritage: historical monuments, museums, archives, intangible cultural heritage and folk culture;
4. Literature and libraries;
5. Film, video and photography and gaming;
6. Mass media: newspaper, radio, television.<sup>13</sup>

These sectors have been crossed with four major transversal themes:

- a. access and participation;
- b. respect for diversity;
- c. socio-economic resources;
- d. employment.

This general and non-exhaustive mapping points to several conclusions:

- Each pre-digital sector of culture is slowly operating its transition to digital platforms and formats, though at different speeds in Europe. The analysis of key factors determining the digital performance in the major sectors shows that they have operated a transition to digitisation, though not equally distributed among sectors.
- The development of digital technologies and communication devices impact all domains of cultural life: protection and promotion of cultural heritage, cultural consumption, cultural participation and creative processes. Yet there is no digital sector identified as such, digital convergence being treated as an extension of culture (more of the same in different format) not as a paradigmatic change per se (a qualitative and quantitative change).
- The “digital undertow” or tsunami and the paradigm shift it entails, with its domino effect on culture, is under-estimated. The paradigmatic change is there, whose ever-evolving nature still needs to be specified, even though some characteristics are stabilizing: the prevalence of open-ended “ready to mediatize” online platforms; the change in behaviour of the user in a capacity to create and share; the shift from written to visual culture to text-image; the blurring of the partition between media as spectacles and media as services; the end of the partition between consumption and participation in culture; the emergence of relational goods and experiential goods that alters the nature of cultural and creative industries; the advent of e-strategies and new digital affordances that will durably affect transmission, education, information and communication (gaming, simulating, mixing, sampling, pooling, networking, curating, aggregating, crowd-sourcing, crowd-funding...); and finally the augmentation of human capacities together with the augmentation of robots with the attendant consequences on culture as an interrelated cognitive network.
- The major institutions in pre-digital sectors (libraries, museums and cinemas for instance) tend to make similar analysis concerning the nature of that paradigmatic change caused by digital convergence: these institutions have no more the monopoly of the knowledge, of

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<sup>12</sup> see appendix 2: “UNDERSTANDING THE IMPACT OF DIGITISATION ON CULTURE: How is digitisation affecting the role, functioning, reach-out, performance and key challenges faced by public cultural institutions and cultural sectors?” The mapping methodology and matrix is not exhaustive. It aims at identifying “emerging trends” in terms of opportunities and challenges for cultural institutions. For example, in the case of employment, new professions are noted or the changes experienced in the already existing professions associated to each institution (e.g. the role of librarians).

<sup>13</sup> See Compendium of cultural policies and trends in Europe, by the Council of Europe and ERICarts [www.culturalpolicies.net/](http://www.culturalpolicies.net/)

entertainment and of service; they do not differ any more by their specific layout and supporting technology or media (digital convergence has neutralized that); they have to think of their role and of their missions according to the practices and the participative and contributory uses and practices of their users. As a consequence, their positioning in terms of differentiation of the new specific layouts under a single digital format and their ways of addressing and incorporating their new users (no longer a passive "audience") are going to become crucial for their digital survival.

- What becomes important is the relationship between what is produced in the "industrial" framework and what is produced in a "non-industrial" framework (such as experimental movies, auteur videogames, and all the "pro-am movement" where amateurs are highly qualified and contribute freely in collaborative projects). Indeed, the technical convergence that exists between these two spheres reaches an unheard of level with digital technology. The technology makes practices that previously operated on specific and separate media (cinema, television, video, photography...) converge on what appears to be a mono-media. But the functions underneath this surface similarity brought about by digital convergence allow for pluralities, which are due to different regimes of text, sound and image that still prevail (especially "industrial" vs. "non-industrial").
- One of the consequences for the cultural and creative industries seems to be the change of scenes and spaces for culture, as they search for forms of differentiation (gigantic size of movie houses, relief in the cinema, kinetic simulations) and new technical and aesthetic practices. The "room" in museums, cinemas and libraries no longer is the dominant model for the reception and consumption of culture. For example, the home cinema has become widespread while at the same time, movie houses propose "other" types of contents: live operas, video games conventions, circus performances, sports events, etc. Other types of space have emerged, like medialabs, "fablabs", workshops and even "forges" where old industrial sites used to be, in central parts of cities. As a consequence, the frontiers between the industrial field and the non-industrial field tend to blur and these recombined relations need to be thought through, with long term implications for Ministries of Culture, especially in terms of how to rehabilitate old industrial spaces to turn them into local digital *terroirs* where different kinds of people can intermingle.

## Bibliographical references

- Beaude, B. *Internet : Changer l'espace changer la société*, Paris: FYP Editions, 2012
- Benkler, Y. *The Wealth of Networks. How Social Production Transforms Markets and Freedom*, New Haven: Yale UP, 2006.
- Berkman Center for Internet and Society at Harvard University. *Next Generation Connectivity. A Review of Broadband Internet Transitions and Policy from Around the World, 2010* Report available at <http://cyber.law.harvard.edu/pubrelease/broadband/>
- Bernié-Boissard, C. Dominique Crozat, Claude Chastagner et Laurent-Sébastien Fournier (dir.), *Développement culturel et territoires*, Paris: L'Harmattan, 2010.
- Bouquillion, P. (dir.), *Creative economy, creative industries : des notions à traduire*, Saint-Denis: Presses universitaires de Vincennes, 2012.
- Cardon, D. *La démocratie Internet*, Paris: Seuil, 2010.
- Donnat, O. *Les Pratiques culturelles des Français à l'ère numérique, Enquête 2008*, Paris: Ministère de la culture et de la communication / La Découverte, 2009.
- Doueihy, M. *Pour un humanisme numérique*. Paris: Le Seuil, 2011.
- Dutton, W. et al. *Freedom of connection, Freedom of expression*. Paris: UNESCO, 2011.
- Fourmentraux, J.-P. *Art et Internet. Les nouvelles figures de la création*. Paris: CNRS Éditions, 2010.
- Fourmentraux, J.-P. *L'œuvre virale. Net art et culture Hacker*. Bruxelles: La Lettre Volée, 2013.
- Frau-Meigs, D. *Media Matters in the Cultural Contradictions of the 'Information Society'*, Strasbourg: Council of Europe Publishing, 2011.
- Frau-Meigs D. and Kiyindou A. (eds). *Glossaire critique sur la diversité culturelle à l'ère numérique*. Paris: Documentation française (forthcoming)
- Gold, K M. *Debates in the Digital Humanities*, Minneapolis: University of Minnesota Press, 2012.
- Lescure, P. *Contribution aux politiques culturelles à l'ère numérique*, Rapport à Madame la Ministre de la culture, mai 2013.
- Perrin, T. *Culture et Eurorégions. La coopération culturelle entre régions européennes*, Bruxelles: Éditions de l'Université de Bruxelles, 2013.
- Saez, G. et Jean-Pierre Saez (dir.), *Les nouveaux enjeux des politiques culturelles. Dynamiques européennes*, Paris : Éditions La Découverte, 2012.
- Sciadas G. (ed). *From digital divide to digital opportunities*. Québec: Orbicom, 2010.
- Wu, T. *The Master Switch: The Rise and Fall of Information Empires*. New York: Knopf, 2010.
- Zittrain, J. *The Future of the Internet and How to Stop it*. New Haven: Yale UP, 2008.

## APPENDIX 1

### **UNDERSTANDING THE IMPACT OF DIGITISATION ON CULTURE: How is digitisation affecting the role, functioning, reach-out, performance and key challenges faced by public cultural institutions and cultural sectors?**

#### **INTRODUCTION**

This report explores some general trends of digitisation of culture. Specifically, it maps emerging trends on how digitisation is affecting:

- cultural institutions in terms of their role, functioning, outreach, performance and key challenges
- as well as selected cultural sectors.

These trends will be understood in broad terms and, in line with the Council of Europe's background documents for the Baku Conference<sup>14</sup>, will be assessed along the following aspects or dimensions:

- a. access and participation,
- b. respect for diversity,
- c. socio-economic resources,
- d. employment.

The impact of digitisation on culture will be mapped in terms of opportunities (+) and challenges (-). The mapping table below offers a more detailed analysis of the above dimensions and the interaction between them.

#### **THE MAPPING: GENERAL TRENDS**

In general terms:

- **Digital technologies have proved to be a tool that allows for a wide range of new uses for culture** (e.g. launch of new artistic projects, distribution of content, audience development or a marketing tool for e-commerce, etc.). Digital distribution, being cheaper and quicker (digitisation of content reduces duplication and distribution costs) also enables cultural institutions to reach new and larger audiences. However, **in the short term, the development of online services and digitisation of content carries additional costs.**
- **Digital technologies also provide a tool for co-creation**, as is shown by the booming of user-generated content. However, **new issues on copyright and content licensed need to be addressed** if we want to keep this trend or positively contribute towards it.
- On the other hand, digital technologies also generate new needs, as **in the digital era it becomes necessary to assess users' habits, expectations and tastes**. Fortunately, social networks provide cultural organizations not only with the means to assess these needs, but also offer the possibility of reaping benefits from reaching out potential audiences.
- Finally, a key challenge posed by digital technologies has to do with capabilities: **new literacy skills, such as basic reading and competence with digital tools, are required in order to reap the benefits of these technologies** (both by users and cultural institutions professionals).

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<sup>14</sup> MinConfCult(2013)7, CDCPP-Bu(2013)10 and CDCPP(2014)9

Specific trends for the following cultural sectors<sup>15</sup> are identified in the mapping task:

#### **Visual and applied arts:**

- The role of museums in the digital era needs to be revisited. **Museums need to become centers for shared experiences and not just collections of objects.** New technologies, and specially social media, will play a key role in this transformation: devising innovative online learning programmes and activities not only guarantee universal access, but helps in engaging the public in the museums.
- In the short term, this transformation will **require additional funding and expertise in installing and maintaining these new technologies.** When calculating the effectiveness and efficiency of the deployment of employees and resources, new performance agreements and indicators will have to be developed.

#### **Performing arts and music:**

- New recording technologies and the ease of distribution through the internet has allowed for a multitude of micro-music production companies to crop up and has given **more autonomy to musicians and groups.** Many music groups have decided to self-publish and self-produce, often choosing free licenses for their albums, thus favouring the viral spread of their works.
- Theatre can be taken to audiences in a wider income bracket than traditional theatre audiences through live broadcasts in cinemas. **Live broadcasts have been found to stimulate interest in theatre.** They are not confined to lower income audiences, and have become a substitute venue if tickets are sold out or for people not wanting to travel. Live broadcasts are particularly frequented by people in the over 60 age group.

#### **Cultural heritage:**

- **Digital technologies allow memory institutions to provide public access to increasing amounts of material with fewer constraints.** However, current copyright legislation blocks the spread of this content as it does not yet foresee exceptions for its use. The lack of expertise by traditional staff also difficult fully embracing the new potentialities of digitisation. Public private partnerships on this matter bring new opportunities but also pose new challenges.

#### **Literature and libraries:**

- The development of electronic books has resulted in a revolution of the publishing sector. **More forms of literature tend to be published digitally, which challenges the existence of the traditional points of sale.** However, some studies suggest that cost of producing digital copies will continue to justify the existence of bookshops.
- In the digital era, **the role of libraries needs to be revisited.** On the one hand, when it comes to their traditional roles, the increase in licensing and copyright restrictions make their curatorial and distributional tasks difficult. On the other hand, they can be used for the provision of new services, such as physical access to networks.

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<sup>15</sup> In this paper the following domains of culture are considered under the main categories of culture: (a) Visual and applied arts: ceramics, drawing, painting, sculpture, printmaking, design, crafts, and industrial design, graphic design, fashion design, interior design and decorative art; (b) Performing arts and music: music, dance, theatre and circus; (c) Cultural heritage: historical monuments, museums, archives, intangible cultural heritage and folk culture; (d) Literature and libraries; (f) Film, video and photography and gaming; and (g) Mass media: newspaper, radio, television.

## **Film, video and photography**

- **TV and film are the main drivers in digital growth in the creative industries thanks to new business models for consumption.** There has been a corresponding significant increase in employment in this sector. Online video is likely to provide the terrain for the next digital revolution.

## **Mass media:**

- New access opportunities have been provided by live streaming of programmes and webcasting of internet-produced content, meaning that mass media consumption is fragmented across an even wider range of products and services. **Digitised mass media can foster social cohesion and integrate linguistic and regional communities**, although content in minority languages may be marginalised if not profitable. There has been no increase in human or financial resources in this sector.

**Figure I: Mapping the impact of digitisation on cultural institutions and sectors**

		<b>Access and participation</b>	<b>Respect for Diversity</b>	<b>Resources</b>	<b>Employment</b>
<b>OVERALL</b> <b>General common trends</b>		<ul style="list-style-type: none"> <li>+ "The internet can be simultaneously used for a <b>variety of new purposes</b> – as a platform to launch new artistic projects or to distribute content, as an audience development or a marketing tool, or also for e-commerce, etc."<sup>1</sup></li> <li>+ "Digital distribution [...], being cheaper and quicker, enables authors and creative industries to reach <b>new and larger audiences</b>."<sup>2</sup></li> <li>+ New content, processes and markets created at a rapid pace.<sup>3</sup></li> </ul>		<ul style="list-style-type: none"> <li>+ "Digitisation of content is <b>reducing duplication and distribution costs</b>."<sup>4</sup></li> <li>- Developing online services carries initial <b>additional costs</b>.<sup>5</sup></li> </ul>	<ul style="list-style-type: none"> <li>- Some job loss due to strong restructuring.<sup>6</sup></li> </ul>
		<ul style="list-style-type: none"> <li>+ "Booming <b>user-generated-content trends</b> is a clear indication that users have plenty of interest in co-creation."<sup>7</sup></li> <li>- "This issue raises questions related to <b>copyright</b> and <b>content licensing</b>."<sup>8</sup></li> </ul>			
		<ul style="list-style-type: none"> <li>+ Creator brought closer to the consumer.<sup>9</sup></li> <li>- It becomes necessary to assess "the demand side - <b>the users, their habits, expectations and tastes</b>."<sup>10</sup> - Consumers likes and dislikes are followed online.<sup>11</sup></li> </ul>		<ul style="list-style-type: none"> <li>+ "<b>Social networks</b> offer cultural organizations the possibility of reaping benefits from reaching out to potential audiences."<sup>12</sup></li> <li>+ <b>Expanded revenues</b> through new business models.<sup>13</sup></li> </ul>	
		<ul style="list-style-type: none"> <li>- "<b>Deficiencies in reading and digital literacy skills remain barriers to accessing online resources</b>."<sup>14</sup></li> </ul>			



<b>Visual and applied arts</b>	Visual and applied arts	<ul style="list-style-type: none"> <li>- What role for museums in the digital era? "Museums will be places where people can go to experience something first-hand that they can't get through and incredibly detailed and complete description that is always accessible. <b>Museums need to become centres for shared experiences</b> and not just collections of objects."<sup>15</sup></li> </ul>			
		<ul style="list-style-type: none"> <li>+ "Museums can ensure their objects and works of art are accessible physically and virtually by devising a range of <b>innovative online learning programmes and activities.</b>"<sup>16</sup></li> <li>+ <b>Social media</b> has been "identified as essential to engage the public in the museum."<sup>17</sup></li> <li>+ "Accessing information in this way [...] gives the visitor a <b>sense of control</b> over their trip."<sup>18</sup></li> </ul>	<ul style="list-style-type: none"> <li>+ "<b>Technologies [...] offer museum-goers various levels of interpretation</b> in a pre-established segmentation."<sup>19</sup></li> <li>- "Museum programmes that categorize and to some extent segregate participants by audience classifications served to advance tailored and age-appropriate pedagogies, but are <b>now less effective at engaging people on multiple levels in fluid social groups.</b>"<sup>20</sup></li> </ul>	<ul style="list-style-type: none"> <li>- Museums have "<b>problems funding and installing the technology</b>" (social media tools, websites).<sup>21</sup></li> </ul>	<ul style="list-style-type: none"> <li>- "Online resources [...] <b>require significant staff</b> to establish, maintain and develop them."<sup>22</sup></li> <li>- "<b>Employees [...] will have to be spread</b> across new product combinations."<sup>23</sup></li> </ul>
		<ul style="list-style-type: none"> <li>- "Content must be designed for <b>deployment on multiple electronic platforms.</b>"<sup>25</sup></li> </ul>		<ul style="list-style-type: none"> <li>- "When calculating the effectiveness and efficiency of the deployment of employees and resources [...] <b>new performance agreements and indicators will have to be developed.</b>"<sup>24</sup></li> </ul>	<ul style="list-style-type: none"> <li>- "It is [...] essential that those in charge of content <b>master the various digital platforms, and their potential.</b>"<sup>26</sup></li> </ul>

<b>Performing arts and music</b>	Music industries			<p>+ Music industry reports a <b>spectacular growth in digital revenues</b>: 1000% in 2005-2011.<sup>27</sup></p> <p>+ <b>Crowd-funding</b> is increasingly important for the music industry.<sup>28</sup></p>	<p>- <b>Employment in the music industry declines</b> in EU-27 countries except Poland.<sup>29</sup></p>
		<p>+ <b>"New recording technologies and the ease of distribution</b> through P2P [peer-to-peer] networks, social networks and the Web 2.0."<sup>30</sup></p>	<p>+ <b>"A constellation of micro-music production companies has cropped up [...]</b> defying the monopoly and the authority of the large record companies."<sup>31</sup></p>		<p>+ <b>"Musicians and groups have gained more autonomy."</b><sup>32</sup></p> <p>- "Many of the <b>traditional roles of record companies</b> have changed dramatically."<sup>33</sup></p>
		<p>+ <b>"Many music groups have decided to self-publish and self-produce</b>, often choosing free licenses for their albums, thus favouring the viral spread of their works."<sup>34</sup></p> <p>+ "Culture consumption through file-sharing networks functions as a point of entry for a <b>type of consumption that is more closely tuned into consumers interests.</b>"<sup>35</sup></p>			
		<p>+ <b>New business models</b> provide customers with easy access to music (e.g. Spotify).<sup>36</sup></p>		<p>- <b>Still has to prove itself more monetarily</b> – Spotify losses are mounting, because the majority of users are free subscribers and there is still insufficient monetization of this model through advertising; although there is a potential for huge profitability with continued growth.<sup>37</sup></p>	

	Performing arts	<ul style="list-style-type: none"> <li>+ <b>Theatre can be taken to wider audiences</b>, (e.g. UK's National Theatre Live -launched 2009- brings real-time performances to cinemas across the UK and around the world).<sup>38</sup></li> <li>+ Broadcast live in cinemas is open to people in a wider income bracket than traditional theatre-going audiences.<sup>39</sup></li> </ul>			
		<ul style="list-style-type: none"> <li>+ <b>Live broadcasts encourage more to go to the theatre.</b><sup>40</sup></li> <li>+ Live broadcasts are a <b>substitute venue when theatre tickets are sold out</b>, or for people not wanting to travel.<sup>41</sup></li> <li>+ Live broadcasts are <b>popular with the over 60 age group.</b><sup>42</sup></li> </ul>		<ul style="list-style-type: none"> <li>- If audiences respond too well to live broadcasts, this could <b>cannibalise traditional revenues.</b><sup>43</sup></li> <li>+ There are promising signs that live screenings are a <b>sustainable, self-financing business model</b> for the National Theatre.<sup>44</sup></li> </ul>	

<b>Cultural heritage</b>	Memory institutions	<ul style="list-style-type: none"> <li>+ "Memory institutions are being transformed into organisations that could provide <b>public access to increasing amounts of materials</b> without being constrained by time, distance, or physical capacity."<sup>45</sup></li> <li>- Current copyright legislation does not foresee <b>exceptions for the use of digitised material.</b><sup>46</sup></li> <li>- "<b>Bit-rot</b>": that means that bits are conserved but not the required programs to interpret them.<sup>47</sup></li> </ul>			
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		<ul style="list-style-type: none"> <li>+ New opportunities for <b>public-private business models</b>.<sup>48</sup></li> <li>+ "By partnering with [...] private companies who have digital competences, <b>museums can take advantage of such know-how and provide digital access to cultural heritage</b>."<sup>49</sup></li> <li>- "<b>The risk of combining the public and the market role is a possible loss of (public) money and loss of audiences</b>, amounting to a huge destruction of value."<sup>50</sup></li> </ul>		<ul style="list-style-type: none"> <li>+ <b>New forms of financing</b> (e.g. crowd-funding for historical monuments allows long-term sustainability).<sup>51</sup></li> </ul>	<ul style="list-style-type: none"> <li>- <b>Gap in understanding:</b> heritage institutions may not understand the technical process of digitisation whilst external parties' technicians may not necessarily understand the material.<sup>52</sup></li> </ul>
		<ul style="list-style-type: none"> <li>+ "[With] mobile internet [...] <b>museums and galleries can turn their existing content into living, multi-faceted experiences</b> for visitors."<sup>53</sup></li> </ul>			<ul style="list-style-type: none"> <li>- "<b>Mobile technologies in museums require staff to 'think digitally'</b> and to apply this mindset across all aspects of their work."<sup>54</sup></li> </ul>

<b>Literature and libraries</b>	Publishing	<ul style="list-style-type: none"> <li>+ <b>Print publishing and electronic books:</b> "we are likely to see a growth of a dual business model".<sup>55</sup></li> <li>+ "Works will tend to fall into one or the other according to different market niches. [...] <b>some forms</b>, like encyclopaedias and other technical manuals, <b>will tend to be published digitally</b>."<sup>56</sup></li> </ul>		<ul style="list-style-type: none"> <li>- <b>Negative growth rate for print publishing</b>.<sup>57</sup></li> <li>+ "<b>Making titles available in an e-book format increases sales of the paper versions</b>."<sup>58</sup></li> </ul>	<ul style="list-style-type: none"> <li>- <b>Job numbers decline in print publishing</b> (e.g. by 6% from 2003 to 2010 in EU-27).<sup>59</sup></li> <li>+ "The cost of producing physical copies will continue to justify the <b>existence of bookshops, distributors and traditional points of sale</b>."<sup>60</sup></li> <li>+ <b>Traditional points of sale could be enhanced by online retail or other means of direct distribution</b>.<sup>61</sup></li> </ul>
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		<p>+ <b>Social markets:</b> new technologies will allow writers to forge relationships with the community of potential readers.<sup>62</sup></p> <p>+ Social markets “promote an <b>economic model based on services</b> rather than on book sales.”<sup>63</sup></p>		<p>+ Social markets “open up possibilities of <b>crowd-funding and content-subscription models</b>.”<sup>64</sup></p>	
		<p>+ <b>Automated translation dissolves language limitations</b> between communities.<sup>65</sup></p> <p>- “Automated translation will change the way we communicate, <b>but will it increase our understanding?</b>”<sup>66</sup></p>	<p>- “What is the cultural impact of using <b>machine translations</b> without the benefit of <b>cultural context?</b>”<sup>67</sup></p>	<p>- “Automated translations will challenge existing <b>business models</b> and <b>regulatory frameworks</b>.”<sup>68</sup></p>	
	Libraries	<p>+ <b>Libraries</b> as a new space for physical access to electronic networks.<sup>69</sup></p>		<p>- <b>Increase in licence and copyright restriction makes curatorial and distributional tasks of libraries more difficult.</b><sup>70</sup></p>	
		<p>- “How can libraries be vehicles for serendipitous discovery if the dominant <b>mode of search</b> is algorithm-based?”<sup>71</sup></p>	<p>- “Will students in Kenya have access to MOOCs [(Massive Online Open Courses)] and open educational resources incorporating local content? What impact could this have on <b>cultural identity?</b>”<sup>72</sup></p>		

<b>Film, video and photography</b>	Video and Photography	<p>+ Many professionals believe that online video will be the next digital revolution. <b>Growth in online video consumption is tremendous.</b> Used by professional and non-professional users alike.<sup>73</sup></p> <p>+ Online video will not replace TV, but only complement it.<sup>74</sup></p> <p>- "Pay-per-view services: <b>paywalls</b> and <b>fees per download</b> exclude the poor."<sup>77</sup></p>		<p>+ <b>Online video services use advertising to recoup part of their cost.</b><sup>75</sup></p> <p>- New field of online video barely visible in terms of revenue data yet.<sup>76</sup></p>	
	Film	<p>+ <b>Increased consumption on film and TV through new business models</b> (e.g. Subscription revenues).<sup>78</sup></p>		<p>+ "<b>Film production costs have dropped dramatically</b> as digital equipment has become more powerful and less expensive. We are soon to enter a time filmmakers will be able to produce high-quality film for digital devices at 1 percent of the cost of the same production with traditional tools [...] [These] create an important blurring of the line between amateur and professional."<sup>79</sup></p> <p>+ <b>Subscription revenues grew</b> by nearly €20 billion (2.5 x revenue of 2001).<sup>80</sup></p> <p>+ "Revenue split between a multitude of providers."<sup>81</sup></p>	<p>+ <b>Significant driver of job growth.</b><sup>82</sup></p>
	Gaming	<p>+ <b>Increase in consumption in online gaming.</b><sup>83</sup></p> <p>+ <b>Gaming is fully embraced by the industry:</b> Facebook, iTunes Apple store networks were used to full extent; free apps are also used.<sup>84</sup></p>		<p>+ <b>Gaming revenues increased</b> from 3.6€ billion in 2001 to €10.5 billion in 2011. It peaked in 2008 and dropped off with the economic crisis.<sup>85</sup></p>	

<b>Mass Media</b>	Radio, television and newspapers	+ Consumers <b>media consumption is fragmented across an even wider range of products and services.</b> <sup>86</sup>		- Individual advertising bodies will not be able to count on the same revenues as in the past. <b>New advertising formats to be explored.</b> <sup>87</sup>	
		+ New role of media on the <b>promotion of cultural diversity.</b> <sup>88</sup>	+ New role to fosters <b>social cohesion</b> and integrates linguistic and regional communities. <sup>89</sup>	- No increase in <b>human or financial resources</b> leads to an endemic crisis. <sup>90</sup>	
			- <b>Some cultures and languages</b> considered as not generating enough traffic or revenue <b>may be marginalised.</b> <sup>91</sup>		
	Radio and television	+ "New opportunities: <b>live streaming</b> of existing over-the-air programmes and <b>webcasting</b> of new internet-produced content." <sup>92</sup>			
		+ <b>Increased access</b> through internet TV platforms. <sup>93</sup>	+ <b>Internet TV platforms increase breadth of content offered</b> , and offer the possibility of uploading content. <sup>94</sup>		
	Newspapers	- <b>Stagnating offline circulation.</b> <sup>95</sup>	- "Relaxation of regulatory regimes has led to <b>concentrations of media</b> in a few companies: threats to pluralism." <sup>96</sup>	- <b>Change in newspaper revenues structure</b> – eg Financial Times (UK): advertising once accounted for 85% of the revenue (2001), and by 2011 had gone down to 35-40%. <sup>97</sup>	+ The traditional role of <b>journalists</b> is being revisited. <sup>101</sup>
			- "More quantity of online information but less quality creates new patterns of demand: ' <b>headlines overviewer</b> '." <sup>100</sup>	- "Capture of original content by online platforms saps economic gains of <b>publishers.</b> " <sup>98</sup> + <b>New creative ways of financing:</b> "cooperatives, "medios unipersonales", crowd-funding, non-profit media, shareholder readers, etc." <sup>99</sup>	

				<ul style="list-style-type: none"> <li>- <b>"Only 10% of digital newspapers' readers are willing to pay."</b><sup>102</sup></li> <li>+ "Communities –and working with these communities- becomes an essential part of <b>business [if engaged] readers are increasingly willing to pay.</b>"<sup>103</sup></li> </ul>	
				<ul style="list-style-type: none"> <li>- "More than 50% of users think that if they pay for <b>content online</b>, they should have the right to copy it and share it."<sup>104</sup></li> </ul>	



## APPENDIX 2

### GLOSSARY

**Augmentation:** Human Enhancement Technologies (HETs), in connection with the Internet of things and big data, make it possible to enhance humans with embarked systems (tablets, captors, glasses...) and to enhance machines so that they simulate human intelligence (robots, intelligent cars and roads...).

**Big data:** Data have grown in size because they are gathered and aggregated by many devices and sensors (mobile, remote, microphones, radio frequencies, wireless). These large data sets are being analysed by statistical programmes and algorithms so as to generate information that reveals deep relationships, patterns of behaviour and allows for prediction and for modelling of uses.

**Cloud computing:** Cloud computing is a mean for moving from the server-client relationship of web 1.0 to the distributed and dynamic environment made possible by Web 2.0 and IPV6 norm. It builds on shared services over a networked infrastructure to achieve economies of scale. As a result there are certain risks and legal issues such as privacy, security, ownership and sharing of proprietary and/or public data resources.

**Commons:** relate to the natural and cultural resources freely accessible to all members of a given society, such as parks or lakes. By extension they have been applied to Internet and software as critical resources for the digital environment, which should not be transformed into private property.

**Data mining:** refers to the computational process of discovering patterns in large data sets so as to extract information from them and transform them into understandable and usable elements. The process is perceived as a means of large-scale data processing that can be used to trace users and profile information for marketing and political purposes.

**Digital affordances:** refers to the possibilities of action available in the environment and perceived by the user. Digital media offer a set of affordances by the practices they allow and facilitate (mix, remix, comment, navigate, post, blog...). They empower collective and individual users to perform new tasks, to organize new movements, etc.

**Digital divide:** describes the gap between those who have easy access to information, the information-rich, and those who do not have such access, the information-poor. It is prolonged by gaps in skills and productivity. It often re-enforces already existing economic, social and cultural inequality between groups in a society.

**Digital dynamics:** refers to the possibility of bridging the digital divide by public, private and civic policies aimed at providing connectivity, training, services and enabling environments to help individuals use the tools to which they are given access, regardless of their economic and cultural status.

**Digital humanities:** area of research, teaching, and creation at the intersection of pre-digital disciplines (art, literature, archaeology, music...) and computing. They consider how digital tools are enhancing social sciences thanks to data visualisation, text mining, simulated environments and online publishing.

**Fablab** (*fabrication laboratory*): refers to a small-scale workshop offering the possibility of personal creation via digital tools made easily accessible. It is generally equipped with all sorts of small-scale computer facilities (3D printers...) that enable users to make their own smart devices and products, tailored to local needs.

**Forge:** a management system to facilitate the collaborative development of software, via the Internet network. It can assemble a number of competences around the project, such as designers and users, all working in a contributive manner.

**Internet of Things (IoT):** refers to the equipment of all objects and people with identifying devices (sensors, captors, QR codes...) so as to monitor and manage them via their virtual representation online. Such advanced connectivity between people, things and places could facilitate inventory of stock but also enable content creators and owners to control their work by tracing use and applying copyright.

**Mediascape:** coined by Arjun Appadurai (1990), to describe the way the global cultural flows are constructed by print and electronic media. They control the digital capabilities of production and dissemination of information. They have a ubiquitous and invasive presence that actually impacts the physical and symbolic landscape in people's minds, altering their perception of reality.

**Mediated culture:** calls attention to the fact that access to the physical, material dimensions of culture (sculpture, painting, dance...) and their attendant institutions (libraries, museums, cinema houses, theatres...) are more and more dependent on their virtual representation and their online presence for visibility and legitimacy.

**Netroots:** coined by Jerome Armstrong (2002) to describe how social networks, blogs, wikis and online media generate political activism from the bottom up. They reflect new forms of political agency, outreach and organization beyond traditional forms of political participation that relate to ideas of participatory democracy or e-democracy.

**Open data:** refers to the notion that specific kinds of data should remain freely available to everyone, without proprietary restrictions such as copyright or patents. It relates to the principle of openness in Internet governance, and goes with similar movements around open source, open content and open access. Governments are encouraged to take open-data initiatives for the sake of transparency and accountability.

**Open source:** refers to the notion that the source code of a computer program is made available to any user for his/her own use and for modification from the original design if need be. This movement came as a response to proprietary software enclosure, as a part of the digital commons, to facilitate collaborative efforts among programmers to improve upon existing software and find adequate solutions for local communities.

**Para-curatorial practices:** pre-digital curation used to be done by museum, archive and library professionals. Digital curation refers to the interaction with social media where digital tools allow for the mining, compiling, filing and archiving of cultural assets. Digital curation is more and more practiced by non-professional amateurs who build their own categories for selecting, collecting and classifying digital images, texts and files. These user-centred para curatorial practices can invert the evaluation system of culture as users become trend-setters and reputation-builders.

**Portal effect:** refers to the tendency of pure players such as the GAFAM (Google, Apple, Facebook, Amazon and Microsoft) to offer a whole package of services such as news, entertainment content, messaging, search, social networking, so as to keep users within their digital platforms. They compete for their time and attention as part of their conglomerate image and can restrict access to users with specific features that discourage them to browse elsewhere thus restricting de facto cultural pluralism and diversity.

**Pro-am movement:** refers to the fact that online amateurs can produce content of a similar quality to that of professionals, with crowd-sourcing and crowd-funding capacities and affordances. They will do it

freely, in a collaborative manner, with expected gains in reputation and digital presence.

**Remix:** a remix is a derivative artform that is similar to yet different from an original work. Digital affordances make it possible to take multiple perspectives on the same piece, creating differences while keeping the reference to the original more or less explicit. The issue of intellectual property and licensing becomes a problem as the Internet allows for very easy publishing and redistribution of remixed works, that can be considered either as derivative or original and that can be monetized or not.

**Semantic Web:** coined by Tim Berners-Lee (2001) to promote a common standard for data formats on the World Wide Web. It aims at creating a web of data for better use and sharing of existing data across applications and systems.

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## Endnotes for table in Appendix 1

- <sup>1</sup> Uzelac A (2011), "Digitisation – How to full exploit opportunities?", *European Culture Forum*, p. 2
- <sup>2</sup> *ibid*
- <sup>3</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *The Digital Future of Creative U.K.: The Economic Impact of Digitization and the Internet on the Creative Sector in the U.K. and Europe*, p. 23
- <sup>4</sup> Uzelac A (2011), *op. cit.*, p. 2
- <sup>5</sup> *ibid*
- <sup>6</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *op. cit.*, p. 18
- <sup>7</sup> *ibid*; see also: International Federation of Library Associations - IFLA (2013), *Riding the Waves or Caught in the Tide? Navigating the Evolving Information Environment*, IFLA Trend Report, p. 6
- <sup>8</sup> Uzelac A (2011), *op. cit.*, p. 2; see also: IFLA (2013), *op. cit.*, p. 6; United Nations Educational, Scientific and Cultural Organization - UNESCO (2013), *The Hangzhou Declaration. Placing Culture at the Heart of Sustainable Development Policies*, p. 4
- <sup>9</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *op. cit.*, p. 23
- <sup>10</sup> Uzelac A (2011), *op. cit.*, p. 3; see also: Sexton C (2013), "Mobile museums: where things stand", at Network of European Museum Organizations - NEMO, *Museums in the Digital Age*, NEMO 21st Annual Conference Documentation, p. 15
- <sup>11</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *op. cit.*, p. 23
- <sup>12</sup> Uzelac A (2011), *op. cit.*, p. 3
- <sup>13</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *op. cit.*, p. 28
- <sup>14</sup> IFLA (2013), *op. cit.*, p. 8; See also The Royal Society of Edinburgh (2013), *Spreading the benefits of digital participation. An interim report for consultation*
- <sup>15</sup> Popke M (2012) in Fogelman P (2012), "Art Museums in the Age of Participation", at National Gallery of Ireland, *The Challenges-Facing Museums On-Site and Online in the 21<sup>st</sup> century and Future Forecasting: The Challenges Facing Museums and Cultural Institutions*, p. 27; see also: Wallace H (2012), "Are Museums Maximizing the Potential of Digital Media?", at National Gallery of Ireland, *op. cit.*, p. 84
- <sup>16</sup> Bourke M. (2012), "Future Forecasting and the Challenges Facing Museums", at National Gallery of Ireland, *op. cit.*, p. 16
- <sup>17</sup> Bourke M. (2012), *op. cit.*, p. 13; see also: Wallace H (2012), *op. cit.*, p. 88
- <sup>18</sup> Bourke M. (2012), *op. cit.*, pp. 16-17
- <sup>19</sup> *ibid*
- <sup>20</sup> Fogelman P (2012), *op. cit.*, p. 28; see also: Wallace H (2012), *op. cit.*, p. 84-86
- <sup>21</sup> Bourke M. (2012), *op. cit.*, p. 13
- <sup>22</sup> *ibid*
- <sup>23</sup> Weide S, Meijer M, Krabshuis M (2012), "Agenda 2026: Study on the Future of the Dutch Museum Sector", at National Gallery of Ireland, *op. cit.*, p. 54
- <sup>24</sup> *ibid*
- <sup>25</sup> Blanchette M (2012), "Museums and their digital double: New technologies are revolutionising the dynamic between museums and their public", at ICOM News 65(1), p. 8
- <sup>26</sup> *ibid*
- <sup>27</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *op. cit.*, p. 40; see also: IFPI (2011), *Music at the touch of a button*, IFPI Digital Music Report
- <sup>28</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *op. cit.*, p. 40
- <sup>29</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *op. cit.*, p. 18
- <sup>30</sup> FCFForum (2010), *How-to for sustainable creativity in the digital era*, p. 6
- <sup>31</sup> *ibid*
- <sup>32</sup> *ibid*
- <sup>33</sup> *ibid*
- <sup>34</sup> *ibid*
- <sup>35</sup> FCFForum (2010), *op. cit.*, p. 8
- <sup>36</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *op. cit.*, p. 15
- <sup>37</sup> *ibid*
- <sup>38</sup> National Endowment for Science, Technology and the Arts - NESTA (2010), *Beyond live. Digital innovation in the performing art*; see also: NESTA (2010b), *Culture of Innovation. An economic analysis of innovation in arts and cultural organisations*, pp. 7-8
- <sup>39</sup> NESTA (2010), *op. cit.*
- <sup>40</sup> *ibid*
- <sup>41</sup> *ibid*
- <sup>42</sup> *ibid*; see also: NESTA (2010b), *op. cit.*, p. 32

- 
- <sup>43</sup> NESTA (2010b), op. cit., p. 4
- <sup>44</sup> NESTA (2010b), op. cit., p. 6
- <sup>45</sup> CONSERVAS/Xnet et al. (2014), *Sustainable Models for Shared Culture. Case Studies and Policy Issues*, p. 108
- <sup>46</sup> CONSERVAS/Xnet et al. (2014), op. cit., p. 109; see also: Klimpel P (2013), at NEMO, op. cit., p. 8
- <sup>47</sup> IFLA (2013), op. cit., p. 6
- <sup>48</sup> UNESCO (2013), op. cit., p. 5
- <sup>49</sup> Klimpel P (2013), op. cit., p. 9
- <sup>50</sup> CONSERVAS/Xnet et al. (2014), op. cit., p. 111
- <sup>51</sup> Uzelac A (2011), op. cit., p. 6
- <sup>52</sup> CONSERVAS/Xnet et al. (2014), op. cit., p. 44; see also: Klimpel P (2013), "Where do museums stand in the digital age? Private companies, heritage institutions and the civil society", at NEMO, op. cit., p. 10
- <sup>53</sup> Uzelac A (2011), op. cit., p. 4; see also: UNESCO (2013), op. cit., p. 5
- <sup>54</sup> Sexton C (2013), op. cit., p. 18
- <sup>55</sup> FCForum (2010), op. cit., p. 11
- <sup>56</sup> *ibid*; see also: Holton B (2010), *Public Libraries in the Digital Era*, p. 26
- <sup>57</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 12
- <sup>58</sup> Holton B (2010), op. cit., p. 27
- <sup>59</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 17
- <sup>60</sup> FCForum (2010), op. cit., p. 11
- <sup>61</sup> *ibid*
- <sup>62</sup> *ibid*
- <sup>63</sup> *ibid*
- <sup>64</sup> *ibid*
- <sup>65</sup> IFLA (2013), op. cit., p. 5
- <sup>66</sup> *ibid*
- <sup>67</sup> *ibid*
- <sup>68</sup> *ibid*
- <sup>69</sup> Mansell R, Tremblay G (2013) *Renewing the Knowledge Societies Vision for Peace and Sustainable Development*, UNESCO Creative Economies Report, p. 18-20
- <sup>70</sup> Frau-Meigs D (2013), *Assessing the impact of digitisation on access to culture and creation, aggregation and curation of content*, p. 8; see also: Holton B (2010), op. cit., p. 19
- <sup>71</sup> Zacharilla L (2013) in IFLA, op. cit., p. 4
- <sup>72</sup> IFLA (2013), op. cit., p. 5
- <sup>73</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 33
- <sup>74</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 30
- <sup>75</sup> *ibid*
- <sup>76</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 33
- <sup>77</sup> Mansell R, Tremblay G (2013), op. cit., p. 30; see also: Frau-Meigs D (2013), op. cit., p. 8
- <sup>78</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 27
- <sup>79</sup> Lessig L (2001), *The Future of Ideas*, p. 124
- <sup>80</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 13
- <sup>81</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 22
- <sup>82</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 17
- <sup>83</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 13
- <sup>84</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 34
- <sup>85</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 32
- <sup>86</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 29
- <sup>87</sup> *ibid*
- <sup>88</sup> Frau-Meigs D (2013), op. cit., p. 19
- <sup>89</sup> *ibid*
- <sup>90</sup> *ibid*
- <sup>91</sup> Frau-Meigs D (2013), op. cit., p. 20; see also: Reflection Group on Bringing Europe's Cultural Heritage Online (2011), *The New Renaissance*, p. 23
- <sup>92</sup> Frau-Meigs D (2013), op. cit., p. 19
- <sup>93</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 19
- <sup>94</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 27
- <sup>95</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 13
- <sup>96</sup> Frau-Meigs D (2013), op. cit., p. 20
- <sup>97</sup> Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), op. cit., p. 14
- <sup>98</sup> Frau-Meigs D (2013), op. cit., p. 11
- <sup>99</sup> Casero-Ripollés A (2014), "¿Por qué casi nadie quiere pagar por el periodismo en Internet?", *Agenda Pública*, p.3
- <sup>100</sup> Casero-Ripollés A (2014), op. cit., p. 1

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<sup>101</sup> Casero-Ripollés A (2014), op. cit., p. 3

<sup>102</sup> World Association of Newspaper and New Publishers – WANIFRA (2010), *New Revenue Models for Newspaper Companies: The Paid vs. Free Content Debate*

<sup>103</sup> CONSERVAS/Xnet et al. (2014), op. cit, p. 36

<sup>104</sup> WANIFRA (2010), op. cit., p. 34

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## Bibliographical references for Appendix 1

- Blanchette M (2012), "Museums and their digital double: New technologies are revolutionising the dynamic between museums and their public", at ICOM News 65(1)
- Casero-Ripollés A (2014), "¿Por qué casi nadie quiere pagar por el periodismo en Internet?", *Agenda Pública*
- CONSERVAS/Xnet et al. (2014), *Sustainable Models for Shared Culture. Case Studies and Policy Issues*
- FCForum (2010), *How-to for sustainable creativity in the digital era*
- Frau-Meigs D (2013), *Assessing the impact of digitisation on access to culture and creation, aggregation and curation of content*
- Holton B (2010), *Public Libraries in the Digital Era*
- IFPI (2011), Music at the touch of a button, IFPI Digital Music Report
- International Federation of Library Associations - IFLA (2013), *Riding the Waves or Caught in the Tide? Navigating the Evolving Information Environment*, IFLA Trend Report
- Künstner T, Le Merle M, Dr Gmelin H & Dietsche C (2013), *The Digital Future of Creative U.K.: The Economic Impact of Digitization and the Internet on the Creative Sector in the U.K. and Europe*
- Lessig L (2001), *The Future of Ideas*
- Mansell R, Tremblay G (2013) *Renewing the Knowledge Societies Vision for Peace and Sustainable Development*, UNESCO Creative Economies Report
- National Endowment for Science, Technology and the Arts - NESTA (2010), *Beyond live. Digital innovation in the performing art*
- National Endowment for Science, Technology and the Arts - NESTA (2010b), *Culture of Innovation. An economic analysis of innovation in arts and cultural organisations*
- National Gallery of Ireland, *The Challenges-Facing Museums On-Site and Online in the 21<sup>st</sup> century and Future Forecasting: The Challenges Facing Museums and Cultural Institutions*
- Network of European Museum Organizations – NEMO (2013), *Museums in the Digital Age*, NEMO 21st Annual Conference Documentation
- Reflection Group on Bringing Europe's Cultural Heritage Online (2011), *The New Renaissance*
- The Royal Society of Edinburgh (2013), *Spreading the benefits of digital participation. An interim report for consultation.*
- United Nations Educational, Scientific and Cultural Organization - UNESCO (2013), *The Hangzhou Declaration. Placing Culture at the Heart of Sustainable Development Policies*
- Uzelac A (2011), "Digitisation – How to full exploit opportunities?", *European Culture Forum*

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World Association of Newspaper and New Publishers – WANIFRA (2010), New Revenue Models for Newspaper Companies: The Paid vs. Free Content Debate