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UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions:

Analysis of Parties' periodic reports and contemporary digital trends

Prepared by Octavio Kulesz

Introduction

The explosive emergence of the Internet has brought about irreversible change in the way cultural goods and services are created, distributed and consumed. Indeed, the successive waves of innovation arising from the digital realm have shaken the foundations of publishing, music and cinema, in a process that has affected both developed nations as well as those of the global South.

In this context, any discussion related to culture and creativity should at some point include the variable of digital technology. It is true that the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, adopted in 2005, makes no direct reference to the Internet or digital, and merely refers to "information and communication technologies" and "new technologies." But, thanks to this generic allusion, the Convention makes it clear that the creative sector is not immune to the changes taking place in the technological world – whatever those transformations may be.

In any case, it is essential to analyze the particular linkages that digital has established with respect to the diversity of cultural expressions since the Convention was adopted. In this regard, the reports submitted by the Parties to the Convention in 2012 and 2013² may constitute a key input. These 65 texts,³ which provide a wealth of ideas and initiatives, focus on 3 main themes:

- National policies and measures aimed at supporting the creation, production, distribution and consumption of cultural goods and services;
- Actions designed to engage civil society in cultural policies;
- International cooperation projects focused on fostering artistic mobility, consolidating market access and strengthening national cultural industries in developing countries.

Although the reports contain numerous references to the issue of digital, in general these are not related to any single common denominator but instead are spread across a wide variety of subitems. Nevertheless, careful examination makes it possible to identify recurrent themes, which we have condensed in the **first part** of the study. We have divided that information into 6 sections, which correspond to central articles of the Convention:

- A. Access to culture⁴
- B. Creativity⁵
- C. Cultural Industries⁶
- D. Public awareness and civil society participation
- E. Information and statistics8
- F. International cooperation and capacity-building in developing countries⁹

In each section, in addition to the concrete measures or initiatives, we have included references to opportunities and challenges that the Parties associate with digital. It is worth emphasizing that these challenges encompass both those obstacles that block the use of technologies as well as the threats arising from the new era.

¹ The UNESCO Universal Declaration on Cultural Diversity of 2001 does, however, refer explicitly to digital.

² In Article 9 of the Convention, it is stipulated that every four years the Parties shall provide a report on the measures taken to protect and promote the diversity of cultural expressions, both within their national territory as well as at the international level.

³ The reports can be downloaded from this link: https://en.unesco.org/creativity/mr/periodic-reports-available-reports.

⁴ Articles 2.7, 4.6 and 7.1. We have also incorporated into this section some references to the subject of sustainable development and future generations (2.6), as well as the protection of cultural expressions at risk (8.1, 8.2).

⁵ 4.1, 4.3, 6.2, 7.2 and 10.c.

⁶ 4.5, 6.2.c, 10.c.

⁷ 10 and 11.

⁸ 9 and 19.

⁹ 1.i, 2.4, 5.1, 12, 14 and 17.

In spite of the fact that the reports are relatively recent, it should be noted that the measures and problems summarized in 2012 and 2013 tend to deal with environments that can be traced back to the first decade of the century. However, if we take into account, for example, that the iPad was launched in 2010, and that it was only around 2011 that the international expansion of Netflix and the Amazon Kindle¹⁰ was consolidated, it clearly becomes necessary to re-examine the issue of the diversity of cultural expressions in light of the latest technological trends.

For this reason, in the **second part** of this study, we have analyzed 4 phenomena that perhaps due to issues of chronology have not been sufficiently addressed in the Parties' reports, but that we believe are central to the diversity of cultural expressions:

- A. The new giants of the cultural market
- B. Experimentation, digital arts and entrepreneurship
- C. Cultural policies in the age of Big Data and social media
- D. The digital South

In the Conclusion, we will summarize the findings presented in the Parties' reports in light of these new realities. In our view, the debate on the diversity of cultural expressions should not only mention digital but should incorporate the topic in a comprehensive manner. The fact is that digital is ceasing to act merely as a medium or channel and has now become integrated into the heart of culture, in both the North as well as the South.

¹⁰ The Kindle Store was introduced in Spain at the end in 2011 ("Amazon.es Launches Spanish Kindle Store", 2011); in Brazil at the end of 2012 ("Amazon Launches Brazil Kindle Store", 2012). Netflix, for its part, was launched in Latin America in July 2011 (Saba, 2011).

I. Analysis of the Parties' Reports

A. Access to culture in the digital era

With respect to access to culture, numerous reports make it clear that new technologies contribute towards making it simpler (Canada, Latvia, Luxemburg, Sweden), cheaper (Switzerland) and more democratic (Brazil, Denmark, Germany, Norway, Slovenia). Indeed, digital makes it possible to reduce the differences existing between large urban centres and the rest of the territory (Canada-Quebec, Poland, Viet Nam), while at the same time helping to: socially integrate minorities (for example the Maori people in New Zealand); culturally connect different generations, in particular because technology is more widely used by young people (Denmark, Dominican Republic, Egypt, Namibia); capture the attention of speakers of the same language on a global scale (Egypt, Latvia); and protect the diversity of cultural expressions with an eye to the future (European Union). In short, these technologies can contribute to social harmony (China-Macao).

With regard to the obstacles that prevent these benefits from being fully taken advantage of, it is worth highlighting the lack of infrastructure (Greece), the need for human and technical resources for digitization (Luxemburg), the poor connectivity in less populated areas (Bulgaria, Latvia, Lithuania, Romania) and the existence of a generational gap on technology-related issues (China, Latvia). Lastly, for copyright reasons, it is not always easy for users to obtain online access to twentieth-century materials (Slovenia).

The digital era also throws up new challenges. First of all, devices and contents are evolving rapidly and do not always take linguistic diversity into account, which works to the detriment of certain languages (Canada-Quebec). In addition, access is now so widespread in some countries that the competition to attract the attention of users is enormous (Canada), leading to saturation problems. Moreover, when it comes to organizing the supply of online content, the mechanisms used by the large platforms are not always transparent (France), something that – we can presume – reduces equal access. Another problem, linked in part to the previous one, is that digital tends to reinforce fragmented identities: thus, different communities that subscribe to personalized services – news, entertainment – gradually cease to belong to a shared social world (UK). Lastly, problems related to national fonts may also arise in the digital era. ¹²

Parties highlight numerous measures put in place in order to take advantage of opportunities and overcome obstacles. These are mainly projects for building telecommunications infrastructure (Argentina, China, UK, Viet Nam), particularly in rural areas. Also mentioned is the delivery of equipment, particularly computers, through plans such as "Conectar Igualdad" in Argentina, and "Computer for Everyone" in Armenia. The modernization and incorporation of digital tools into public media is highlighted in the reports from Argentina (Digital Open TV / TDA Project and "Argentina Conectada" plan), China (CNTV) and Denmark (DR – digital radio channels). Following this same line, priority has been given to the delivery of technological tools for schools, museums, libraries, cultural centres and ministries in Brazil (delivery of equipment for Points of Culture), Bulgaria (Connectivity for public libraries), Egypt (launch of the Culturama project, among other improvements), Estonia ("MUIS" IT tool, created for the digitization of museum collections), Guatemala (email accounts for all users of the Ministry of Culture), Lithuania (Programme for Renovation and Modernization of Libraries and Programme of Museum Modernization), Peru (equipment for Points of Culture, like in Brazil) and Romania (Biblionet Programme, which since 2009 has sought to facilitate Internet access from public libraries). Specific projects have also been implemented for libraries, aimed at facilitating access to audiobooks by readers with visual impairments (Italy).

¹¹ Along these lines, the unfortunate loss of 2/3 of the 50 years of Burkinabe cinematic history as a result of the rains of 2009 would suggest that new technologies can play a key role in protecting endangered cultural expressions.

¹² Mongolia emphatically states that changing its national script in 1946 proved detrimental: in this case, the difficulty was not due to the introduction of new technologies, but given that fonts are a key component of the digital era, we can imagine that transformations in modes of writing are not exempt from challenges.

In addition to the improvements in infrastructure, we encounter initiatives designed to ensure standards of training or digital literacy. These activities – vital for consolidating access to culture – are often carried out in centres built on an *ad hoc* basis. The most notable cases can be found in Argentina (NAC Points), China-Macao (courses in computing and digital reading), Denmark (media training activities run by the Media Council for Children and Young People) and Uruguay (National Plan for Digital Literacy / MEC Centres).

Lastly, it is necessary to highlight numerous measures focused on digitizing national literary, cinematographic, musical, theatrical, etc. heritage and publishing it online that are not necessarily covered by the Convention. The proposals are generally aimed at consolidating digital libraries and online databases, as can be observed in the reports from Canada (the National Film Board allows more than 2000 productions to be viewed on its website and mobile applications), China-Macao, Denmark (digitization of all newspapers published since 1668), Egypt, European Union (the Europeana library aims to digitize the entire European cultural heritage by 2025), Finland, France (Culturethèque), Germany, Greece (Biblionet), Hungary, Italy (PACI Project), Jordan, Mexico (PUMC/UNAM), Lithuania, Luxemburg, Poland (Culture+), Romania, Slovenia, Sweden and the UK (Sustained Theatre). There are also projects focused on protecting endangered cultural expressions using technological procedures: for example, the recording of 600 Baul songs (Bangladesh) or the conservation of sounds, songs and photos of Mongolian ethnic groups, in digital format.

B. Creativity

Creativity in the digital era is another subject worthy of mention. For some Parties, it is clear that the new technologies can result in greater visibility for artists (France); they also help to stimulate creation (Luxemburg, UK) and to eliminate geographical barriers for authors (Brazil). Also, the fact that young people from the poorest sectors can use these new tools to create constitutes a great opportunity for social inclusion (Uruguay).

With regard to the challenges, there is a danger that in the digital era artists are not adequately remunerated (Switzerland) and that the works produced may not always be of the highest quality, owing to a lack of expertise (UK).

The measures adopted in this area are aimed primarily at helping creators. Here we find: awards for creation (such as in the case of Germany with the Annual Computer Game Prize); training, in particular in the audiovisual sector (as occurs in the UK with the First Light / Second Light project for training young digital filmmakers, and in Egypt with the Arab school of cinema and television via the Internet); online promotion (Monaco); and experimental residencies (for example in Portugal, which operates the Residences Network Programme to explore the intersection between art and technology). In addition, some countries have set up digital creation centres or laboratories, in particular Brazil (Núcleos de Produção Digital / NPD and XPTA.LAB), Portugal (Creative Labs) and Uruguay (Culture factories). Cuba also emphasizes its interest in promoting the creation of digital media in the coming years.

C. Cultural Industries

The reports look extensively at the issue of the cultural industries. With regard to opportunities, it is essential to point out that digital means greater competitiveness (France, Latvia), cost reduction (Greece), job creation (Finland, Germany), new international markets (UK, Canada, China) and the possibility of taking full advantage of the single European market (European Union, Latvia).

The main obstacle facing the industry when it comes to taking advantage of these benefits is that they do not always have the necessary know-how to produce to a high digital standard (Burkina Faso, Egypt). In addition, the migration of entire sectors such as TV can prove complex (France).

Now, the challenges arising from the digital age itself are dealt with in greater detail. First of all, dematerialization and the disappearance of the physical medium are presented as a problem (France, Switzerland) that can threaten the survival of many traditional cultural circuits (something that might be understood for example from the situation of newspapers in Norway). Moreover, the arrival of new distributors emerging from the Internet can lead to increased economic and financial concentration (France), which warrants discussion on the need to introduce quotas (*idem*). It is also noted that global e-commerce tends to prioritize goods and services offered in English, which may lead to a decrease in demand for the translation of works into other languages (Greece). Globalization also intensifies the standardization of musical production in favour of the Anglo-American model (France). Lastly, several Parties underline the need to examine in detail the issue of copyright in the digital era (Austria, Côte d'Ivoire, Poland) and to tackle the threat of piracy (Burkina Faso, France).

The measures implemented in the domain of the cultural industries are extremely varied. The first large group of initiatives is related to help with digitization and modernization. Although the EU mentions generic support for innovation and competitiveness (CPI, Creative Europe, INNOVA), the assistance provided by the countries is mainly targeted towards sectorial programmes. Within the publishing segment, mention is made of specific assistance policies for innovation in the book sector, e.g. in Canada (renewal of the Book Fund in 2009), Côte d'Ivoire and Uruguay (establishment of a publishing cluster focused on innovation). In the audiovisual field, many countries have actively helped to digitize cinemas (Austria, USA, Germany, Netherlands, Sweden, UK) and TV stations (New Zealand), fund new projects (Canada, France), disseminate films on social networks (UK: Digital Innovation in Distribution) and set up audiovisual clusters (Uruguay) or hubs (Argentina: "Polos" programme for digital TV). In the field of music, the most noteworthy cases are those of Canada (Restructuring of the Music Fund) and the European Union (Media Plan 2007). Also mentioned is the support – albeit to a lesser extent – for video games: in 2008, for example, France set up a support fund that has awarded financing to 60 projects. Lastly, in the newspaper industry, it is necessary to single out the case of Norway, which is quite unusual, since the support measures are not aimed at migrating the industry to digital standards but rather at preserving paper editions.

Parties also point towards a fair number of regulations introduced as a result of the new technological environment. In particular, this involves changes in the legislation governing the functioning of media industries, as can be seen in China (Regulations for the Publishing of Electronic Publications, 2008), France (HADOPI law in 2009, to combat online piracy; Law on Fixed Price for e-books, adopted in 2011), Montenegro (Law on Electronic Media, 2010), Peru (National Audiovisual Bill), Syria (Media Law, 2011) and Viet Nam (amendments to the Publishing Law in 2008 and 2011, and to the Law on Intellectual Property in 2009, with the aim of adapting them to the digital age). In some cases, proposals have been put to parliament to amend copyright law so as to include new types of licenses (Slovakia, 2011). Also mentioned is the need to include a certain amount of local/regional content: the EU, for instance, stresses the importance of European broadcasters, including on-demand services, transmitting mostly European works and at least 10% of independent productions.

Some of these regulations had been proposed previously in a variety of research papers. These studies are cited in the reports from the EU ("Digital Agenda for Europe" and "The New Renaissance" report, both of 2010) and France ("Creation and Internet", delivered in 2009, and "Digital France 2012-2020", published in 2011).

D. Public awareness and civil society participation

Public awareness and the participation of civil society in promoting the diversity of cultural expressions can benefit from new technologies: indeed, the use of digital instruments enables more fluid communication between government and society (China). Parties do not indicate any specific challenges in this regard.

Different modalities of digital technology can be observed here. First of all, Parties allude to interactive communication tools, such as social networks (Armenia, Mexico), applications (Canada) or SMS (Armenia). Several countries have implemented online platforms or forums for consultations, discussions and communication in general (Austria, Canada, Dominican Republic, Ecuador, Germany, Luxemburg, Slovenia, Spain), as well as information newsletters (Dominican Republic). It is also worth noting the collaboration set up between the Parties and various civil society organizations working on disseminating digital art, in particular in Austria (Ars Electronica festival) and Latvia (Centre for New Media Culture in Riga and CultureLab). Lastly, some countries have organized specific events to promote public awareness about cultural diversity in the digital era: the most significant example is the Ibero-American Congress of Culture – "Digital culture, networked culture: Towards an Ibero-American digital cultural space", promoted by Spain.

E. Information and statistics

With regard to collecting information and producing statistics, the advantages of the digital era are mentioned only tangentially: the digitization and computerization of culture would make it possible to reduce the administrative burden of the statistical process (Latvia), and at the same time those entities linked to new technologies would be able to make a contribution in terms of preparing reports, as is the case with the Travelling Digital Cinema project in Burkina Faso.

In terms of obstacles, some of the Parties warn about the lack of data related to the cultural sector (Austria, Brazil, Ireland) and the inadequacy of current information when it comes to reflecting the behaviours typical of the digital age (Norway).

There are many countries that have developed statistics or mappings of cultural expressions in the digital era, particularly China (updated figures on video games and electronic publications), France (mapping of the digital space) and Latvia (Digital Culture Map). In addition, inter-ministerial groups have produced standards for digitizing content and generating statistics (Bulgaria). We must point out, finally, that very few countries include data on digital consumption in the Annexes.

F. International cooperation and capacity-building in developing countries

The reports place special emphasis on international cooperation. In this context, new technologies are associated with the ability to provide developing countries with access to culture – in line with what was stated in section I.A. In addition, the issue of digital can serve as a unifying focus for North/South relations (Canada).

With respect to obstacles, it can be observed that the production of digital content is unequal across the different regions of the world (France) and that local capacity-building via technology transfer is one aspect that needs to be studied in much greater detail (Côte d'Ivoire).

There are numerous international cooperation projects related to new technologies. Firstly, we find infrastructure donations – hardware and connectivity – made by international organizations, such as those given by the Bill and Melinda Gates Foundation to Lithuanian libraries in 2008. There is also North/South assistance with incorporating software (Portugal assisted other Lusophone countries in acquiring and managing the "MatrizPCI" system, specially designed to build inventories of intangible cultural expressions) and digitization support programmes (Portugal collaborated on a project involving Mozambican documents, while Slovenia contributed funds for the digitization of the Herat University library in Afghanistan, in 2010).

Another line of support involves setting up new portals and web platforms, for both exchange as well as e-learning. The Institut Français created the Culturessud.com site with the aim of supporting the literature of developing countries. Germany provides the Quantara.de portal (2004) and an online forum (2010) designed to strike up a dialog with the Arab and Persian-speaking worlds, respectively. In Poland, the Academy of Fine Arts in Warsaw and the Polish-Japanese Institute of Information Technology developed a platform for virtual education on cultural issues; the first country to benefit from the project was Viet Nam.

In fact, it is in the area of training that most cooperation projects have been developed. Brazil received the support of the UNDP and UNESCO in developing the National Program of Culture, Education and Citizenship – responsible, among other projects, for the Points of Culture. In addition, the Library and National Archives of Quebec held a digitization workshop in Port-au-Prince (2009) and in Dakar (2011), in collaboration with the National Library of France and the International Organization of La Francophonie. Along similar lines, Portugal offered training to Angolan professionals on archiving techniques. The EU also mentions knowledge exchange with Mauritania, for new technology-based creation and expressions. Another project, led by Denmark, enabled photography students and teachers from Mali to better understand the functioning of the market of global image banks. In the framework of the UNESCO/ROK FIT project, Mongolia benefitted between 2008 and 2010 from assistance in promoting cultural diversity using new technologies.

The International Fund for Cultural Diversity (IFCD) has supported numerous training and networking initiatives in countries of the global South. The beneficiaries of these initiatives include: Kër Thiossane, ¹³ a Senegalese hub that fosters multimedia creation; IncreaLABS, a centre offering digital training to indigenous youngsters from Guatemala; Thydêwá, ¹⁴ a Brazilian NGO that encourages the use of electronic publishing tools, also with indigenous populations in mind; and the Togolese Coalition for Cultural Diversity, which has promoted a variety of digital workshops for artists from Togo and Burkina Faso.

II. Recent trends arising from the digital age

A. The new giants of the cultural market

As indicated in some of the Parties' reports, ¹⁵ the current cultural scene is threatened by the advance of a number of actors from the world of technology. ¹⁶ But just what are the distinguishing features of these players?

The new giants display their own styles – resulting from each company's particular origin¹⁷ – but they have a number of similar features in common. Firstly, as is often pointed out in the literature on the subject, these tend to be North American companies.¹⁸ In addition, their strategy is based on two fundamental pillars: 1) cloud computing;¹⁹ 2) remote connection and exchange of data via multimedia devices located in the hands of users.

This particular configuration gives rise to three main business models: 1) sale of copies;²⁰ 2) subscription to a catalogue that is usually accessed by streaming;²¹ 3) free access funded by advertising.²² The stronger the two pillars mentioned above, the more lucrative business will prove to be, since the increasing dominance of cloud computing enables platforms to offer millions of digital items at almost zero marginal cost, at the same time that the widespread use of devices provides them with a market of gigantic proportions.

This situation led Chris Anderson to put forward his Long Tail theory, according to which in the digital era, cultural industries will be able to deal not only in items that sell well – the head of the

¹³ http://www.ker-thiossane.org/.

http://www.thydewa.org/.

For example in France.

¹⁶ The observation is also reiterated in many studies on the diversity of cultural expressions in the digital era, in particular in Beaudoin (2014: 6ff) and Guèvremont (2013: 10ff).

¹⁷ These origins include online searches (Google), e-commerce (Amazon), social networks (Facebook) or the sale of devices (Apple), among others

sale of devices (Apple), among others.

18 Beaudoin (2014: 7ff). As we shall see in section II.D, the digital colossi are not just North-American, or even Western.

¹⁹ Mel & Le Grance (2011).

²⁰ A classic example is that of iTunes songs.

²¹ As is the case with Netflix or Spotify. It must be stressed that in the case of music, subscription services increased 51.3 % in 2013 (IFPI 2014: 7). This modality is not only observed in the music and video market but also in the book sector (Leonard, 2014).

²² As in the case of Google.

curve – but also to offer the long tail of products that sell less, but that will always find a willing customer. Anderson's hypothesis has been called into question on numerous occasions, particularly because the *remote cloud / local devices* model in reality tends to reinforce sales of hits – or best-sellers – and concentrate business in the hands of a few.

Broadly speaking, this process of market concentration follows a recurrent logic: a platform begins by occupying a space, ²⁶ which thanks to digital convergence is common to all the cultural industries, and then invariably goes on to expand and take the place of other links in the chain. ²⁷ So, Amazon no longer operates as just an online bookstore, but also as a publisher, ²⁸ a seller of devices such as the Kindle, a social network for recommending books ²⁹ and a printer, ³⁰ as well as a provider of cloud-computing services. ³¹ Thus, far from being mere actors in the cultural chain, the new giants tend to become the entire chain themselves. ³² As a result, they are transformed into closed ecosystems whose data and internal functioning tend to be completely unknown to the outside world.

This process has been identified by many as being extremely harmful to the health of the cultural industries. Firstly, economic concentration represents a risk for independent actors and, so to speak, for the whole creative "middle class", which competes with the Web giants.³³ In addition, since these are closed ecosystems, the innovation that takes place within any of these large companies has little knock-on effect on the rest of the industrial fabric.³⁴ The fact that the processing of data and metadata is carried out in the country of origin³⁵ also ultimately means that few skilled jobs are created in the end market. Lastly, the bargaining strength of the big players may put the neutrality of the Web at risk, to the detriment of smaller actors.³⁶

There are also challenges for users. The permanent monitoring of consumer data first of all raises the issue of privacy. The second, due to their closed structure, these platforms usually develop their own formats, which weakens interoperability and results in greater dependency on the part of the user, who has limited options when it comes to changing devices. Moreover, in line with the criticism of the long tail, although the platforms provide a wide range of cultural offerings, the fact that they control not only sales but also the communication and algorithms of recommendation raises the problem of discoverability: what processes lead the user to stumble on certain products and not others?

²³ Anderson (2004).

²⁴ Cf. for example Wu (2006), "Statement" (2013: 3) and Vena (2014).

²⁵ The aggregation of millions of items tends to be great business for the platform, but not for artists and producers, particularly under the subscription-based model via streaming. Cf. Pritchard (2014).

Hardware, software, communication, online searches, e-commerce, etc.

This explains why there are so many clashes between digital platforms and traditional cultural companies. Amazon, for example, has come into conflict with Hachette (Yuhas, 2014), with Warner (Bensinger, 2014), and with German publishers (Eddy, 2014), among many others. Google, for its part, maintains a tense relationship with independent labels regarding the distribution of music via YouTube (Miller, 2014) and with the publishing industry, due to the mass digitization of books (Roberts, 2012).

²⁸ With both its KDP service as well as its Amazon Publishing branch.

²⁹ Since Amazon bought Goodreads in 2013 (Olanoff, 2013).

³⁰ With its Createspace service.

³¹ Thanks to its AWS unit.

³² Thus, in the digital era, strictly speaking there is no pure disintermediation but rather re-intermediation – the displacement, usually of analogue actors, by other digital players.

³³ Wu (2014).

³⁴ Not to mention the fact that the tax advantages granted to those firms do not help the local economy (Ebrahimi, 2012).

³⁵ Sonnac (2014).

³⁶ Ball (2014).

³⁷ Gartside (2014).

³⁸ Mims (2013).

³⁹ This proves to be a critical issue for accessibility and sustainable development. Cf. Guèvremont (2013: 24).

⁴⁰ The distribution model based on the pillars of *remote cloud / local devices* no doubt breaks the linearity of traditional media and leads – in theory – to more of a "pull" than "push" model of consumption (Burri, 2010:

The solution to the difficulties described above is far from simple. The implementation of quotas is a recurring suggestion, for example to guarantee the supply of content in certain languages, 41 although its effectiveness is the subject of debate. 42 Another proposal is the implementation of a tax on all connected devices, in order to set up a fund to contribute to the migration of the cultural industries. 43 At any rate, the issue of the Web giants is of crucial importance for cultural diversity.

B. Experimentation, digital arts and entrepreneurship

We saw in section I.C that digital tends to be interpreted as a phenomenon of "dematerialization" or "migration", which is usually applied to the publishing, music and cinema industries. 44 Although it is clear that these traditional sectors are passing through a conversion stage, it should be noted that the new era also produces creations of a richness that goes beyond the simple migration from analogue.45

In fact, digital culture inherits the same power as the Web, and creations thus acquire a logic that is increasingly hyperlinked, multimedia-based and interactive. A work can be readapted for different media - crossmedia narrative - or even take place in diverse channels - transmedia storytelling. 46 The possibility of remixing with other creations is almost unlimited and results in autonomous narrative forms with enormous flexibility. 47 The impact not only affects publishing, music and cinema but virtually all forms of expression, including those more often associated with analogue, such as the performing arts, where indeed we are witnessing a proliferation of resources such as live-streaming theatre, choreography for robots, 3D stage sets, videomapping, augmented reality and real-time interaction via social networks. 48

Hand in hand with digital, a new type of creator has emerged: users that do not just consume but also produce. 49 Large-scale works are being carried out thanks to crowd-sourcing, that is to say the collaboration of a mass public scattered across many countries.⁵⁰ Furthermore, new technologies open up the way for crowd-funding: the financing of projects by hundreds or thousands of individuals connected via the Web.

Of course, these trends are not exempt from new challenges. In fact, there are still only a few countries that are equipped with an electronic legal deposit system, meaning that the diversity of expressions generated by millions of people through their blogs, online videos and other multimedia materials are not always safeguarded in public archives and thus run the risk of being lost if the host platform decides to delete them. In addition, there are heated debates taking place around the legal implications of remixing and other digital techniques.⁵¹

Be that as it may, it must be recognized that future cultural vitality will circulate to a large extent via digital media and will be increasingly permeated by these new logics. For this reason, it is essential to pay more attention to what is happening in the field of digital creation. The seeds of tomorrow's

^{16),} but what is certain is that platforms have considerable clout when it comes to highlighting certain content, offering recommendations and even removing articles. Ultimately, the algorithms used in the customization of results can create a veritable bubble around the user (Parisier, 2011).

⁴¹ Jaabouti & Pool (2013: 7). ⁴² Burri (2010: 18).

⁴³ Carnegy (2013).

⁴⁴ This description is repeated in the reports from France and Switzerland, and is also recurrent in the literature. Cf. Creative Content (2009: 2) and Guèvremont (2013).

⁴⁵ In truth, content can never be enjoyed without a physical medium – for example, an electronic book always requires a device on which to be read -, so rather than witnessing a one-way process of "dematerialization", what we are confronted with are "rematerializations" and new ways to link the virtual and the physical. ⁴⁶ Moloney (2014).

⁴⁷ Strictly speaking, some of these resources were already present in analogue culture, but new technologies have increased their scope exponentially.

⁴⁸ A good compendium of these practices can be found in Celaya et al. (2014).

⁴⁹ Burri (2011: 192ff).

⁵⁰ Celaya et al. (2014: 20ff).

⁵¹ Dobusch (2014).

creativity can be found at festivals and R&D centres such as Ars Electronica (Austria),⁵² The Literary Platform (UK),⁵³ Gaité Lyrique (France),⁵⁴ Ludicious (Switzerland),⁵⁵ ProHelvetia/Mobile (Switzerland),⁵⁶ SyncTank (UK),⁵⁷ among numerous others.

Digital entrepreneurship is another source of innovation with regard to the production and distribution of cultural content. There are a number of institutions that support experimentation, R&D and networking in this field. An excellent example is the Publishing Laboratory in the city of Paris, ⁵⁸ which is an incubator for projects related to the future of the book. It is also worth highlighting the British Council's Young Creative Entrepreneur Programme, ⁵⁹ which since 2004 has organized an active international network of innovators from various industries, such as Digital Publishing or Screen & Multimedia. The British Council also produces a mapping of creative hubs at the global level: ⁶⁰ the next generation of digital pioneers will no doubt emerge from such centres.

C. Cultural policies in the age of Big Data and social media

In the processing of statistics on the diversity of cultural expressions, we observed that few countries had included information relating to digital consumption and creations in the Annexes, and that the scarcity of data was a problem repeatedly pointed out by the Parties.

These drawbacks can be explained to some extent by the aspects that we explored in sections II.A and II.B. Indeed, the enormous volume of information handled by global platforms (II.A), as well as the dynamism of digital innovators (II.B), are usually not captured by national statistics. In the first case, the handling of data and metadata remains in the hands of large private actors whose business model depends precisely on the control of this information – number of users, traffic source, pages visited, etc. –, meaning that they only disclose what they consider it to be useful. In the second scenario, due to the very logic of professional acclaim, young digital creators and pioneers frequently go unnoticed by the press, traditional cultural circuits and public institutions for quite some time. Explain the second scenario in the second s

Now, if we bear in mind that digital goods and services play an increasingly significant role for users, ⁶³ it becomes clear that the methods for obtaining statistics on the new cultural reality must be updated post-haste. A good strategy would be to incorporate tools from the digital arena itself, taking advantage in particular of the power of Big Data, ⁶⁴ as applied to culture. ⁶⁵ In recent years, the mass of data has grown exponentially, both in terms of volume as well as velocity and variety. ⁶⁶ These quantitative leaps are rapidly transformed into qualitative progress: those who are in possession of a Big Data strategy will be able to understand what is happening around them, while those who aren't will not be able to discern the most basic developments. Failure to update the methods used for measuring thus represents a serious obstacle for countries. ⁶⁷ The weak linkage between the different nodes that produce cultural data – public ministries, cultural institutions, industry associations, online stores, telecommunications operators, etc. – constitutes an additional challenge.

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<sup>52</sup> http://www.aec.at/.
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http://www.theliteraryplatform.com/.

http://gaite-lyrique.net/.

http://www.ludicious.ch/.

http://www.prohelvetia.ch/mobile/.

http://www.welcometosync.com/.

http://www.labodeledition.com/.

⁵⁹ http://creativeconomy.britishcouncil.org/projects/young-creative-entrepreneur-programme/.

http://creativeconomy.britishcouncil.org/projects/hubs/.

⁶¹ Cf. for example Hazard Owen (2012).

⁶² Grosu (2011).

⁶³ Jaabouti & Pool (2013: 16).

⁶⁴ Arthur (2013).

⁶⁵ In fact, new technologies could help consolidate statistics not only on digital trends but also on traditional cultural consumption.

^{66 &}quot;Cultural behaviour" (2013: 8).

⁶⁷ Lilley & Moore (2013: 47f).

The use of new technologies proves vital not only for collecting data but also for promoting user participation. And when it comes to interaction, social networks play a key role. Here, public awareness and civil society participation initiatives have much to learn from cultural institutions which are experimenting with digital tools in a creative manner.⁶⁸

D. The digital South⁶⁹

The technological situation of developing countries is usually described in terms of backwardness, lack of resources, dependency and the shortage of dynamic players. This determines a whole programme of cooperation, based mainly on the idea of transfer – of know-how, hardware, software, etc. –, the explicit goal of which is to reduce the digital divide. However, this approach is problematic.

For a start, the term "digital divide" refers to a binary situation⁷⁰ – advanced countries vs. backward countries –, which does not take into account the complexity of current fragmentations. Now, the "divide" is not a neutral formula but rather a programme in itself, which calls for a supposedly equalizing intervention:⁷¹ an intervention that usually takes the form of donations, following a "top-down" model. The fact is that this perspective has not always been shown to be effective when it comes to improving the lot of the stakeholders.⁷² Some authors also suggest that simply handing out technology not only does not help but sometimes makes the original situation worse.⁷³

Moreover, the idea of the developing world as a passive and unproductive space is completely erroneous; indeed, in these regions – in particular in emerging countries – we encounter a myriad of innovative projects, some of considerable size. China, as is well known, is currently home to digital companies that exceed their Western counterparts in scale and dynamism – we need only look at the strength of players such as Alibaba, Tencent, Baidu and Xiaomi in order to be convinced. India, with around 1 million new engineering graduates per year, ⁷⁴ has also produced home-grown technological giants: Flipkart, Infibeam, Micromax, among many more. Other countries that possess a large domestic market – Brazil, Indonesia, the Philippines or Viet Nam – are producing equally active and original local actors.

In the case of Africa, the pace of innovation has been particularly noteworthy in recent years. Some of the most remarkable technological initiatives rely on flexible tools that are already available on the ground – as is the case with mobile phones.⁷⁵ This has resulted in unprecedented

⁶⁸ As noted by Hasan Bakhshi, the co-author of the report entitled *Digital Culture: How arts and cultural organizations in England use technology* (2013), "In summer 2013 we surveyed 891 arts and cultural organizations in England on the different ways digital technologies were impacting their business. We found that the 10% of organizations who had embraced technology most enthusiastically were reporting the biggest impacts. Strikingly, these same organizations were more likely to report that they had an experimental attitude towards technology and that digital expertise was embedded throughout their organizations." (personal interview, 2014).

In this section we once again examine issues such as creativity, entrepreneurship, Big Data, etc., but specifically in reference to the South. From our point of view, the reality of emerging/developing countries has its own particular features that merit a separate study.

⁷⁰ Gunkel (2003: 506).

⁷¹ Kiyindou (2013: 7).

⁷² Cf. for example Warschauer (2008: 147).

⁷³ As Paul Murphy (2014) warns, "Slogans like 'one laptop per child' and 'one-to-one computing' evoke an appealingly egalitarian vision: If every child has a computer, every child is starting off on an equal footing. But though the sameness of the hardware may feel satisfyingly fair, it is superficial. A computer in the hands of a disadvantaged child is in an important sense not the same thing as a computer in the hands of a child of privilege." The reflection refers to social inequalities within the same country, but is also applicable to international disparities.

⁷⁴ Chaturvedi & Sachitanand (2013).

⁷⁵ Indeed, mobile phones play an undeniably central role in the countries of the South in general. The data in this regard are revealing: the growth of mobile broadband in developing countries is double the rate for developed countries; in addition, developing countries account for three quarters of mobile connections in the world ("ICT figures", 2014). As Ganesh Ram, the founder of MobileVeda/eMahatva Technologie (India) observes, "Digital, especially with mobile phones, is creating wonders here in India. There are hundreds of

technological ecosystems: cell phones, for example, now constitute a platform for making electronic payments (Kenya), ⁷⁶ interacting on mobile social networks (South Africa), ⁷⁷ watching Nollywood films (Nigeria) ⁷⁸ and reading comic books based on African legends (Ghana). ⁷⁹ Another interesting trend is the growing intersection between technologies and artistic expressions, as can be seen in the phenomenal range of projects presented by the African Digital Art portal. ⁸⁰

This wide variety of actors and uses may show that the different nations are adapting technology to meet their own needs, rather than following a single pattern. ⁸¹ In fact, given that historically the South has experienced difficulties with regard to analogue-based infrastructure, it would not be too farfetched to assume that many countries in this group will raise the digital stakes and popularize the uses of technology even faster than Europe or North America. ⁸²

From this perspective, it becomes essential to modernize the approach to cooperation, in order to adapt it to a general scenario of great dynamism and heterogeneity⁸³ centred on local players. In this regard, it is worth highlighting the program to support digital projects in developing countries promoted by the Prince Claus Fund (Netherlands).⁸⁴ We could also single out the "Digital Culture" program run by the International Organisation of La Francophonie, which promotes collaborative practices and various lines of training, with a clear focus on the diversity of expressions.⁸⁵ Another case worthy of mention is that of the International Alliance of Independent Publishers:⁸⁶ this association has set up its own digital laboratory offering training and tools specially designed for publishers from the South.

Lastly, the updating of statistics on cultural consumption in developing countries is particularly vital, not only for internal purposes – as stated in section II.C – but also for cooperation. The fact is that in many regions of the South, exchanges tend to be carried out in an informal manner. Consequently, the application of measurement methods designed for the reality of the North leads to distortions in the figures and, therefore, in any resulting projects. Working with Big Data, especially on the basis of mobile information, could prove particularly useful in this field.

millions of people that have never seen a computer in their lifetime who now have smartphones in their hands. Computational power is now accessible to hundreds of millions of people, even at the rural level. Within a matter of years, we will see so much change taking place, right from mGovernance to mLearning... mobility is shaping up and breaking barriers." (personal interview, 2014).

⁷⁶ Cf. M-Pesa: http://www.safaricom.co.ke/personal/m-pesa.

⁷⁷ Cf. MXIT: http://get.mxit.com/.

⁷⁸ Cf. Afrinolly: <u>www.afrinolly.com</u>.

⁷⁹ Cf. LetiArts: http://letiarts.com/portfolio/digital-comics/africas-legends/.

⁸⁰ http://africandigitalart.com/.

Interesting in this regard are the thoughts expressed in Clayton Powell (2012: 24) concerning the uses of mobile phones in Africa: "Africans are listening to their phones for 20-minute programs. No one in America would do this. You really have to walk away from your American media experience".

The digitization of cinemas in India, for example, could take place earlier than expected ("All cinemas to go digital", 2013). Another interesting case: in Germany, it is estimated that 75% of music consumption is still analogue ("Florian Drücke", 2014), while in India exactly the reverse is true: 75% is already reported to be digital ("Mandar Thakur", 2014). Moreover, a number of analysts forewarn that digital convergence will take place in Africa much faster than in Europe ("Aménagement", 2013). As shown by the Parties' reports, many developing countries have started to invest heavily in digital infrastructure, a trend that has been reinforced in recent years: India, for example, has launched its ambitious "Digital India" programme ("Government mulls Digital India programme", 2014); Colombia, for its part, has renewed its four-year "Vive Digital" plan (www.vivedigital.gov.co/2014-2018/); while Mexico has introduced its "National Digital Strategy" (http://www.presidencia.gob.mx/edn/).

⁸³ Burri (2013: 6).

⁸⁴ Some of these projects are: Bus Cultura Digital (Bolivia), Turix (Mexico), Centro cultura digital (Mexico), African Digital Art, Augmented Dance in Rio de Janeiro (Brazil), Microcircuitos (Colombia), Mayan Sound Art And Experimental Radio (Mexico), Art Base Africa (Nigeria). Cf. Prince Claus Fund (2013).

⁸⁵ http://www.francophonie.org/-Culture-numerique-.html.

⁸⁶ http://www.alliance-editeurs.org/.

⁸⁷ Douglas (2014).

⁸⁸ Here it is useful to consult the examples provided by Clayton Powell (2012: 9).

Conclusion: assessment and suggestions

In light of the above, it is clear that the discussion on the diversity of cultural expressions cannot ignore the question of digital. Issues such as access, creativity, the cultural industries, statistics, civil society participation and international cooperation, among many others, are deeply interrelated with new technologies.

The initiatives and reflections included in the Parties' reports, complemented by an analysis of the latest trends, can provide guidance on the steps to follow. Below we propose a compendium of special measures and suggestions that can serve as a basis for future initiatives.

- 1) Among the measures taken by Parties in the area of **access to culture**, we can highlight the following:
 - Modernization of communications infrastructure;
 - Provision of equipment for institutions and individuals;
 - · Assistance for users with disabilities;
 - Digital literacy;
 - Digitization;
 - Creation of digital libraries.

It is interesting to note that behind these measures it is possible to identify regional trends. Indeed, the digital inclusion plans implemented by South American nations – for example Argentina, Brazil, Peru, Uruguay – display similar features. Likewise, European countries are working on digitization in a coordinated manner, with their focus placed on the Europeana project.

It should also be recognized that the measures discussed by Parties tend to address the opportunities and obstacles associated with digital, but less so the new threats – be it those referred to in the reports or those we have added in part II. When developing access policies, infrastructure projects should be preceded by a thorough study of the real needs of the local communities, which may vary from region to region.

- 2) With regard to creativity, we can emphasize the following actions:
 - Awards for creation:
 - Training for artists;
 - Visibility;
 - Experimentation residencies;
 - Digital creation laboratories.

It must be acknowledged that the amount of assistance provided in this regard is relatively small and it would be worthwhile increasing such initiatives. In addition, in accordance with what was discussed in section II.B, it would be advisable to:

- Promote spaces related to digital art and innovation;
- Launch initiatives to promote digital expressions;
- Establish training, networking and R&D programmes designed for digital artists and entrepreneurs.⁸⁹
- 3) In the field of cultural industries, the projects presented by Parties consist predominantly of:
 - Support in the modernization of various creative sectors;
 - Modernization of the legal framework updating of regulations, intellectual property protection, the fight against piracy, etc.;
 - Research.

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⁸⁹ Jaabouti & Pool (2013: 11) provide a complete inventory of this type of proposals.

These initiatives should be intensified. In the specific case of the traditional cultural industries, it is clear that they need to be actively accompanied in their digital explorations, for example in terms of training, R&D⁹⁰ and networking with the Internet world. Nevertheless, as is the case with the issue of access, the initiatives detailed in the reports tend to be designed only on the basis of the opportunities available and the obstacles to taking advantage of them, but not the new challenges or threats – in particular those arising from the big platforms. These specific challenges and the aspects identified in section II.A could lead to new lines of action:

- Investigating in greater detail the complex functioning of the Web giants and their practical impact on the cultural ecosystem;⁹¹ this research should study cases from different countries and analyze legal, technical and financial aspects;
- Implementing measures to ensure alternatives home-grown wherever possible to
 the big platforms. The above may indicate that the diversity of cultural expressions is
 not only achieved with a variety of content, but that it also requires a multiplicity of
 suppliers: without this second pillar, diversity runs the risk of not being sustainable in
 the long term;
- In harmony with the measures to promote access, guaranteeing users interoperability and compatibility of formats, so that they do not get trapped in specific platforms or systems:⁹²
- Consolidating the development of local digital markets, encouraging the implementation of new means of electronic payment, simplifying processes, etc.;
- Helping to ensure the survival of cultural ecosystems that have no place in the digital world.
- 4) In terms of public awareness and civil society participation, the reports highlight the following points:
 - Use of online forums, social networks, newsletters, apps, SMS;
 - Collaboration with digital centres and festivals;
 - Organization of events.

All three aspects should be fostered. In particular, social networks would achieve a mass effect with a limited budget.

- 5) Information and statistics are without doubt an area that must be thoroughly reconsidered. Indeed, it is essential to obtain more data on all these phenomena. It would therefore be useful to:
 - Produce mappings on uses, practices and markets for digital culture, by collaborating with institutions already working in the field;
 - Use Big Data, in particular to measure trends in consumption;
 - Involve the UNESCO Institute for Statistics and the International Telecommunication Union in these actions:
 - Ask the Parties to provide specific information on measures, opportunities and challenges related to digital;⁹³ on the basis of this input it will be possible to make further suggestions, updated lists of good practices, etc.
- 6) In the field of international cooperation, the initiatives carried out by the Parties include:
 - Donation of hardware and software;
 - Technical assistance for digitization;

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⁹⁰ Guèvremont (2013: 13).

⁹¹ "UKCCD" (2013: 5) and Jaabouti & Pool (2013: 10). In this regard, it is worth consulting the comprehensive study *Neutralité des plateformes* (2014).

⁹² Here we could also include the need for greater standardization in metadata. Cf. Jaabouti & Pool (2013: 14)

⁹³ Guèvremont et al. (2013: 72). A good model can be found in "Canada and Quebec's Reflexions" (2013).

- Creation of websites;
- Training.

Here we must emphasize two main points. Firstly, there was no mention of South-South cooperation initiatives. Secondly, the characterization of developing countries offered by the reports does not take into account the original evolution of the technology industry that has taken place in many of these regions. 94 On the basis of what was discussed in section II.D, we therefore recommend:

- Undertaking new studies on the relationship between digital and culture in the global
- In future development cooperation initiatives, avoiding "top-down" logic and promoting a "bottom-up" approach, focusing on existing actors and technologies: if the aim is to help consolidate viable cultural markets at the local level, 95 mere donations – of hardware, software or content – may be irrelevant or even harmful;
- Strengthening South-South projects, in particular between countries that share common features:
- Exploring new ways of financing cooperation projects, as in the case of crowd-funding; 96
- Implementing measurement methods adapted to the context of developing countries, for example utilizing Big Data based on mobile uses and consumption.

In addition to the lines of action mentioned above, we should emphasize certain aspects that are common to all the main areas of consideration:

- Everything relating to the digital age requires a holistic approach, and any program should therefore be linked into a network: this applies both to the work of different ministries as well as the relationship between governments and civil society;
- In this same line, the measures relating to access, cooperation, etc. cannot be limited to a single component - infrastructure, equipment, platforms or content -, but should instead take into account all the variables involved;
- The classic approach to digital, which is seen as something that impacts culture "from outside", does not account for the vast range of current phenomena, and for this reason should be reappraised. Digital is not merely a distribution channel or a culturally neutral element: since digital practices vary according to local characteristics, digital can be understood to be part of culture in itself. The diversity of uses to which it is put should thus be considered as an additional form of expression to be protected and promoted within the framework of the Convention.

⁹⁴ In this regard, the lack of information on India, South Africa or Indonesia, for example, is a drawback.

⁹⁵ Soyemi (2010).

⁹⁶ Guèvremont et al. (2013: 15) and García Leiva (2013: 30).

Bibliography

"All cinemas to go digital within a year, say industry experts" (2013), *LiveMint*. URL: http://www.livemint.com/Consumer/PQrJUwoJRwkMSTSkDLiKYM/wdigitaldistframes.html. "Amazon Launches Brazil Kindle Store" (2012). *Amazon Press Releases*. URL: http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=1764878&highlight. "Amazon es Launches Spanish Kindle Store and First Spanish Language Kindle" (2011). *Amazon* es Launches Spanish Kindle Store and First Spanish Language Kindle" (2011).

"Amazon.es Launches Spanish Kindle Store and First Spanish-Language Kindle" (2011). *Amazon Press Releases*. URL: http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=1635060&highlight.

"Aménagement numérique des territoires en Afrique : l'Etat veut offrir une bonne connectivité aux territoires" (2013). *Africatime*. URL: http://fr.africatime.com/articles/amenagement-numerique-des-territoires-en-afrique-letat-veut-offrir-une-bonne-connectivite#sthash.9Lzedfbj.dpuf Anderson, C. (2004). "The Long Tail", *Wired*. URL:

http://archive.wired.com/wired/archive/12.10/tail.html.

Arthur, L. (2013). "What Is Big Data?", Forbes. URL:

http://www.forbes.com/sites/lisaarthur/2013/08/15/what-is-big-data/.

Ball, J. (2014). "Net neutrality: what is it and why does it matter?", Guardian. URL:

http://www.theguardian.com/technology/2014/may/14/net-neutrality-fcc-what-is-it.

Bensinger, G. (2014). "Amid Dispute with Publisher, Amazon Halts Pre-Orders from Warner Studio", *Blogs/WSJ*. URL: http://blogs.wsj.com/digits/2014/06/11/amid-dispute-with-publisher-amazon-halts-pre-orders-from-warner-studio/.

Burri, M. (2010). "Keeping Promises: Implementing the UNESCO Convention on Cultural Diversity into EU's Internal Policies". NCCR Trade Regulation Working Paper No. 2010/17. Available at SSRN, URL: http://ssrn.com/abstract=1675290.

Burri, M. (2011). "Cultural protectionism 2.0: updating cultural policy tools for the digital age", in Adam Candeub and Sean Pager (eds.), *Transnational Culture in the Internet Age*, Cheltenham, UK.

Burri, M. (2013). "Advancing the goals of the 2005 UNESCO Convention on the Diversity of Cultural Expressions in the fields of education, participation of civil society and sustainable development", Report presented to the Intergovernmental Committee of the Convention on the Protection and Promotion of the Diversity of Cultural Expressions Seventh Ordinary Session, Paris, December 10-13, 2013. URL: http://www.nccr-trade.org/fileadmin/user_upload/nccr-trade.ch/wp3/3.1/Rapport_du_RIJDEC_-Version_anglaise_-_4_decembre_2013_.pdf. "Canada and Quebec's Reflexions on the Diversity of Cultural Expressions in the Digital Age" (2013). Paper presented at Seventh Ordinary Session Paris, UNESCO. URL: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/pdf/Contribution_Canada_Qebec_Fin_al-EN.pdf.

Carnegy, H. (2013). "France set to tax smartphones to protect culture in digital age", Financial Times. URL: http://www.ft.com/cms/s/0/eb6f49f8-bbd1-11e2-a4b4-00144feab7de.html. Celaya et al. (2014). *Anuario AC/E de Cultura Digital. Uso de las nuevas tecnologías en las artes escénicas*. Acción Cultural Española.

Chaturvedi, A. & Sachitanand, R. (2013) "A million engineers in India struggling to get placed in an extremely challenging market", *Economic Times (India Times)*. URL:

http://articles.economictimes.indiatimes.com/2013-06-18/news/40049243_1_engineers-iit-bombay-batch-size.

Clayton Powell, A. (2012). "Bigger Cities, Smaller Screens: Urbanization, Mobile Phones, and Digital Media Trends in Africa". Center for International Media Assistance. URL: http://cima.ned.org/sites/default/files/CIMA-Africa%20Digital%20Media%20-%2009-18-12.pdf. "Creative Content in a European Digital Single Market: Challenges for the Future" (2009) DG INFSO, URL:

http://ec.europa.eu/archives/information_society/avpolicy/docs/other_actions/col_2009/reflection_paper.pdf.

"Cultural behaviour and personal data at the heart of the Big data industry" (2013) EY / Forum d'Avignon. URL: http://www.ey.com/Publication/vwLUAssets/EY-Cultural-behaviour-and-personal-data-at-the-heart-of-the-Big-data-industry.pdf.

Digital Culture: How arts and cultural organisations in England use technology (2013). NESTA (UK). URL: http://artsdigitalrnd.org.uk/wp-content/uploads/2013/11/DigitalCulture_FullReport.pdf.

Dobusch, L. (2014). "Need for New Regulation to Enhance Creativity in the Digital Age: The Cases of User-generated Content and Cultural Heritage Institutions", paper presented at *Creating an enabling environment for digital culture and for empowering citizens* (Baku, Azerbaijan). URL: http://www.coe.int/t/dg4/culture/enitage/culture/digitisation/Input-paper-Dobusch_en.pdf.

Douglas, K. (2014) "Don't ignore what Africa does best – the informal sector", How we made it in Africa. URL: http://www.howwemadeitinafrica.com/dont-ignore-what-africa-does-best-the-informal-sector/41592/.

Ebrahimi, H. (2014). "Starbucks, Amazon and Google accused of being 'immoral", *Telegraph*. URL: http://www.telegraph.co.uk/finance/personalfinance/tax/9673358/Starbucks-Amazon-and-Google-accused-of-being-immoral.html.

Eddy, M. (2014). "German Publishers Seek Amazon Inquiry", *New York Times*. URL: http://www.nytimes.com/2014/06/25/business/international/amazon-accused-in-Germany-of-antitrust-violation.html?_r=0.

"Florian Drücke: 'In Germany, 75% of the music market is physical" (2014). *The Media Shaker*. URL: http://themediashaker.com/en/list-of-articles/florian-drucke-in-germany-75-of-the-music-market-is-physical/.

García Leiva, T. (2013) "La cooperación cultural para el futuro digital", Fundación Alternativas. URL:

http://www.falternativas.org/content/download/21386/538642/version/2/file/OOC13_2013R.pdf. Garside, J. (2014). "From Google to Amazon: EU goes to war against power of US digital giants", *Guardian*. URL: http://www.theguardian.com/technology/2014/jul/06/google-amazon-europe-goes-to-war-power-digital-giants.

"Government mulls Digital India programme to connect all villages" (2014). *Economic Times (India Times)*. URL: http://articles.economictimes.indiatimes.com/2014-08-21/news/53072918_1_digital-india-deity-program-managers.

Grosu, L. (2011). "Digital Art Expands Opportunities for Young Artists in Romania", *Global Press Journal*. URL: http://www.globalpressjournal.com/eastern-europe/romania/digital-art-expands-opportunities-young.

Guèvremont, V. (2013). "Preliminary reflection on the implementation of the Convention on the Protection and Promotion of the Diversity of Cultural Expressions in the digital age". URL: http://www.cdc-ccd.org/IMG/pdf/Rapport_sur_la_DEC_et_le_numerique - Version_finale - Anglais.pdf

Guèvremont, V. et al. (2013). "La mise en oeuvre de la Convention sur la protection et la promotion de la diversité des expressions culturelles à l'ère numérique : enjeux, actions prioritaires et recommandations", Paper presented at *Seventh Ordinary Session Paris, UNESCO*. URL:

http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/pdf/Rapport_du_RIJDEC_Final.pdf. Gunkel, D. (2003). "Second thoughts: toward a critique of the digital divide", *New Media and Society*, Vol.5, No.4, pp.499-522.

"ICT figures" (2014). ITU. URL: http://www.itu.int/net/pressoffice/press_releases/2014/23.aspx Hazard Owen, L. (2012). "Amazon shares some factoids on Prime – but still no member numbers", *Gigaom*. URL: http://gigaom.com/2012/08/27/amazon-shares-some-factoids-on-prime-but-still-no-member-numbers/.

Hersman, E. (2012). "From Kenya to Madagascar: The African tech-hub boom", *BBC*. URL: http://www.bbc.com/news/business-18878585.

Jaabouti & Pool (2013). "Impact of the digital era on the implementation of the Convention on the diversity of cultural expressions" [powerpoint presentation]. URL: http://www.cdc-ccd.org/IMG/pdf/Impact_de_l_ere_numerique_Final.pdf.

Kiyindou, A. (2013). "De la diversité à la fracture créative : une autre approche de la fracture numérique", *Revue française des sciences de l'information et de la communication*. URL: http://rfsic.revues.org/288.

Leonard, A. (2014). "Amazon's new all-you-can-eat plan to devour the book business", *Salon*. URL:

http://www.salon.com/2014/07/18/amazons new all you can eat plan to devour the book bu siness/.

Lilley, A. & Moore, P (2014). Counting What Counts: What big data can do for the cultural sector, NESTA. URL: http://www.nesta.org.uk/sites/default/files/counting_what_counts.pdf.

Mel, P. & Grance, T. (2011). "The NIST Definition of Cloud Computing", *NIST*. URL: http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf.

"Mandar Thakur: 'The Main Contribution Of The Digital Is The Exposure Of Less Popular Music" (2014). *The Media Shaker*. URL: http://themediashaker.com/en/list-of-articles/best-of-mandar-thakur-the-main-contribution-of-the-digital-is-the-exposure-of-less-popular-music/.

Miller, J. (2014). "YouTube to block indie labels as subscription service launches", *BBC*. URL: http://www.bbc.com/news/technology-27891883.

Mims, C. (2013). "Apple, Google, Facebook and Amazon are all trying to turn into the same ubercompany", *QZ*. URL: http://qz.com/83243/amazon-apple-google-facebook-are-all-trying-to-turn-into-the-same-uber-company/.

Moloney, K. (2014). "Multimedia, Crossmedia, Transmedia... What's in a name?", *Transmedia Jounalism*. URL: http://transmediajournalism.org/2014/04/21/multimedia-crossmedia-transmedia-whats-in-a-name/.

Murphy Paul, A. (2014). "Educational Technology Isn't Leveling the Playing Field", *The Hechinger Report*. URL: http://hechingerreport.org/content/educational-technology-isnt-leveling-playing-field_16499/.

Neutralité des plateformes (2014). Conseil National du Numérique (France). URL: http://www.cnnumerique.fr/wp-

content/uploads/2014/06/CNNum_Rapport_Neutralite_des_plateformes.pdf.

Olanoff, D. (2013). "Amazon Acquires Social Reading Site Goodreads, Which Gives The Company A Social Advantage Over Apple", *TechCrunch*. URL:

http://techcrunch.com/2013/03/28/amazon-acquires-social-reading-site-goodreads/.

Parisier, E. (2011). The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think, London: Viking/Penguin Press.

Prince Claus Fund 2012 Call For Proposals Digital Culture and New Media (2013). Prince Claus Fund. URL:

http://www.princeclausfund.org/files/docs/20131220%202012%20DIGITAL%20CALL%20REVIEW_pdf.

Pritchard, C. (2014). "Call for major record labels to change for digital age", *BBC*. URL: http://www.bbc.com/news/business-25450130.

Riofrio, M. (2013). "The 5 biggest online privacy threats of 2013", PC World. URL:

http://www.pcworld.com/article/2031908/the-5-biggest-online-privacy-threats-of-2013.html

Roberts, J. J (2012). "Google and publishers settle book scanning lawsuit", *Gigaom*. URL:

http://gigaom.com/2012/10/04/google-and-publishers-settle-book-scanning-lawsuit/.

Saba, J. (2011). "Netflix expands online service to Latin America", Reuters. URL:

http://www.reuters.com/article/2011/07/05/us-netflix-idUSTRE7642VV20110705.

Sonnac, N. (2014). "Netflix, démolisseur de l'exception culturelle?", *Le Monde*. URL: http://www.lemonde.fr/idees/article/2014/05/21/netflix-demolisseur-de-l-exception-

Soyemi, E. (2010). "Africa needs trade, not aid", Guardian. URL:

http://www.theguardian.com/commentisfree/2010/apr/17/election-international-aid-policies.

"Statement about the protection and promotion of cultural diversity in the digital era" (2013).

Diversidad Audiovisual. URL: http://diversidadaudiovisual.org/wp-

content/uploads/2013/09/Statement_Workshop_English.pdf.

"UKCCD Submission to the International Federation, IFCCD" (2013). UKCCD. URL: http://www.cdc-ccd.org/IMG/pdf/UKCCD Digital Final.pdf.

Vena, M. (2014). "The Lost Tail: The Myth of Book Publishing's Long Tail (and the growing of the digital book market)" [white paper]. URL: http://www.broadband4europe.com/wp-content/uploads/2014/06/The-Lost-Tail_Vena.pdf.

Warschauer, M. (2008). "Whither the digital divide?", in D. L. Kleinman, K. A. Cloud-Hansen, C. Matta, and J. Handesman (Eds.) *Controversies in Science & Technology: From chromosomes to the cosmos*. New Rochelle, NY: Liebert.

Wu, T. (2006). "The Wrong Tail", Slate. URL:

culturelle 4422720 3232.html.

http://www.slate.com/articles/arts/books/2006/07/the_wrong_tail.html.

Wu, T. (2014). "Content and Its Discontents: 'The People's Platform', by Astra Taylor", *New York Times*. URL: http://www.nytimes.com/2014/07/20/books/review/the-peoples-platform-by-astrataylor.html.

Yuhas, A. (2014). "Amazon vs Hachette: readers and authors take sides in publishing dispute", *Guardian*. URL: http://www.theguardian.com/books/2014/aug/12/amazon-hachette-readers-authors-publishing-dispute.